ANALYTICAL REPORT

June 04, 2019

Cardno - Newark, DE

Sample Delivery Group:	L1101421
Samples Received:	05/22/2019
Project Number:	
Description:	Deer Park 002
Report To:	Art Saunders 121 Continental Drive Suite 308 Newark, DE 19713

Entire Report Reviewed By:

Craig Cothron
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.

90015945

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Collected by	Collected date/time	Received date/time
RN/VP	05/20/19 11:30	05/22/19 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1286272	1	05/24/19 21:03	05/24/19 21:03	JER	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG1285184	1	05/23/19 10:13	05/23/19 10:50	MMF	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 D-2011	WG1285409	1	05/23/19 15:39	05/23/19 20:23	MMF	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1286357	10	05/24/19 23:57	05/24/19 23:57	ELN	Mt. Juliet, TN
Wet Chemistry by Method 350.1	WG1286272	1	05/24/19 21:03	05/24/19 21:03	JER	Mt. Juliet, TN
Wet Chemistry by Method 351.2	WG1285419	1	05/23/19 07:54	05/23/19 15:58	SDL	Mt. Juliet, TN
Wet Chemistry by Method 365.4	WG1285790	1	05/23/19 07:54	05/24/19 10:14	SDL	Mt. Juliet, TN
Wet Chemistry by Method 410.4	WG1285902	1	05/29/19 13:32	05/29/19 16:45	MJA	Mt. Juliet, TN
Wet Chemistry by Method 4500S2 D-2011	WG1285424	1	05/24/19 16:30	05/24/19 16:30	MJA	Mt. Juliet, TN
Wet Chemistry by Method 5310 B-2011	WG1285456	1	05/23/19 13:51	05/23/19 13:51	EEM	Mt. Juliet, TN
Metals (ICPMS) by Method 200.8	WG1285446	1	05/23/19 12:11	05/26/19 23:23	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 624.1	WG1287157	1	05/28/19 12:41	05/28/19 12:41	BMB	Mt. Juliet, TN
EDB / DBCP by Method 504.1	WG1285476	1	05/23/19 09:01	05/24/19 00:30	HMH	Mt. Juliet, TN
SVOC-GC-GLYCOLS by Method 8015M	WG1285892	1	05/23/19 20:23	05/28/19 13:09	MTJ	Mt. Juliet, TN
Chlorinated Acid Herbicides (GC) by Method 8151	WG1286035	1	05/24/19 06:54	05/24/19 23:23	RP	Mt. Juliet, TN
OP Pesticides by Method 1657M	WG1284725	1	05/23/19 08:33	05/24/19 23:52	HMH	Mt. Juliet, TN

WW-20190520-002-DAY 18 L1101421-02 WW

Collected by	Collected date/time	Received date/time
RN/VP	05/20/19 11:30	05/22/19 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 1664A	WG1287268	1	05/28/19 13:03	05/28/19 19:29	MBP	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Su
7 Gl
8 Al
9 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.

Craig Cothron
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.

Craig Cothron
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 06/04/2019 09:11
Project Name: Deer Park 002	Laboratory Job Number: L1101421-01 and 02
Reviewer Name: Craig Cothron	Prep Batch Number(s): WG1285419, WG1285456, WG1285790, WG1285409, WG1285476, WG1285424, WG1285184, WG1286272, WG1286357, WG1286035, WG1285446, WG1284725, WG1287157, WG1285892, WG1287268 and WG1285902

#[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				
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			1
		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			2
		Were MS/MSD RPDs within laboratory QC limits?	X				
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			3
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: 06/04/2019 09:11
Project Name: Deer Park 002	Laboratory Job Number: L1101421-01 and 02
Reviewer Name: Craig Cothron	Prep Batch Number(s): WG1285419, WG1285456, WG1285790, WG1285409, WG1285476, WG1285424, WG1285184, WG1286272, WG1286357, WG1286035, WG1285446, WG1284725, WG1287157, WG1285892, WG1287268 and WG1285902

#[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				
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				

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.
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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: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 06/04/2019 09:11
Project Name: Deer Park 002	Laboratory Job Number: L1101421-01 and 02
Reviewer Name: Craig Cothron	Prep Batch Number(s): WG1285419, WG1285456, WG1285790, WG1285409, WG1285476, WG1285424, WG1285184, WG1286272, WG1286357, WG1286035, WG1285446, WG1284725, WG1287157, WG1285892, WG1287268 and WG1285902

ER #[1]	Description
1	200.8 WG1285446 Antimony: Percent Recovery is outside of established control limits.
2	351.2 WG1285902 COD: Percent Recovery is outside of established control limits.
3	350.1 WG1286272 Ammonia Nitrogen: Relative Percent Difference is outside of established control limits. 351.2 WG1285419 Kjeldahl Nitrogen, TKN: Relative Percent Difference is outside of established control limits. 351.2 WG1285790 Phosphorus,Total: Relative Percent Difference is outside of established control limits. 2540 C-2011 WG1285184 Dissolved Solids: Relative Percent Difference is outside of established control limits. 2540 C-2011 WG1285409 Suspended Solids: Relative Percent Difference is outside of established control limits.

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).

1657M OP Pesticides

2A-OR

SURROGATE RECOVERY

Analytical Method: 1657M **SDG:** L1101421
Matrix: WW

Sample ID	Lab Sample ID	Instrument	File ID	DMC-1 % Rec.	TOT Out
WW-20190520-002-DAY 18	L1101421-01	SVGC12	0524_19	79.2	0

Parm Abbreviation	Parameter	QC LIMITS
DMC-1	Triphenyl Phosphate	42.0 - 129

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

2A-OR

SURROGATE RECOVERY

Analytical Method: 1657M **SDG:** L1101421
Matrix: WW

Sample ID	Lab Sample ID	Instrument	File ID	DMC-1	TOT Out
				% Rec.	
BLANK	R3415275-1	SVGC12	0524_13	73.4	0
LCS	R3415275-2	SVGC12	0524_14	88.8	0
LCSD	R3415275-3	SVGC12	0524_15	93.6	0

Parm Abbreviation	Parameter	QC LIMITS
DMC-1	Triphenyl Phosphate	42.0 - 129

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

3B-OR

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY

L1101421-01

SAMPLE NO.:
R3415275-2
R3415275-3

LCS Sample / File ID:	R3415275-2 / 0524_14	**SDG:**	L1101421
LCSD Sample / File ID:	R3415275-3 / 0524_15	**Analytical Batch:**	WG1284725
Instrument ID:	SVGC12	**Dilution Factor:**	1
Analytical Method:	1657M	**Matrix:**	WW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limit
	mg/l	*mg/l*	*mg/l*	*%*	*%*	*%*	*%*	*%*
Azinphos-Methyl	0.00500	0.00349	0.00379	69.8	75.8	43.0 - 142	8.24	20
Chlorpyrifos	0.00500	0.00384	0.00392	76.8	78.4	50.0 - 126	2.06	20
Demeton,-O and -S	0.00250	0.00160	0.00194	64.0	77.6	22.0 - 150	19.2	24
Diazinon	0.00500	0.00392	0.00410	78.4	82.0	54.0 - 130	4.49	20
Malathion	0.00500	0.00366	0.00382	73.2	76.4	47.0 - 121	4.28	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

4A-OR

METHOD BLANK

SAMPLE NO.:
R3415275-1

Lab Sample ID:	R3415275-1	**SDG:**	L1101421
Lab File ID:	0524_13	**Preparation Date/Time:**	05/23/19 08:33
Instrument ID:	SVGC12	**Analysis Date/Time:**	05/24/19 20:43
Analytical Batch:	WG1284725	**Dilution Factor:**	1
Analytical Method:	1657M	**Matrix:**	WW

Sample ID	**Lab Sample ID**	**Instrument**	**File ID**	**Analysis** *date/time*
LCS	R3415275-2	SVGC12	0524_14	05/24/19 21:14
LCSD	R3415275-3	SVGC12	0524_15	05/24/19 21:46
WW-20190520-002-DAY 18	L1101421-01	SVGC12	0524_19	05/24/19 23:52

8A-OR

INTERNAL STANDARD AND RETENTION TIME

SDG:	L1101421	**Analytical Method:**	1657M
Instrument ID:	SVGC12	**Calibration Start Date:**	05/24/19 14:55
Std File:	AVG	**Calibration End Date:**	05/24/19 18:36
		Std Analysis Date:	AVG

Sample ID	File ID	TBP	
		Response	*RT*
STANDARD		1529830000	15.38
UPPER LIMIT		32880210	
LOWER LIMIT		10960070	
BLANK R3415275-1 WG1284725 1x	0524_13	1464265000	15.39
LCS R3415275-2 WG1284725 1x	0524_14	1481003000	15.38
LCSD R3415275-3 WG1284725 1x	0524_15	1510548000	15.37
L1101421-01 WG1284725 1x	0524_19	1582998000	15.37

TBP - TRIBUTYL PHOSPHATE

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
WW-20190520-002-DAY 18

Lab Sample ID:	L1101421-01	**SDG:**	L1101421
Client Sample ID:	WW-20190520-002-DAY 18	**Collected Date/Time:**	05/20/19 11:30
Lab File ID:	0524_19	**Received Date/Time:**	05/22/19 08:00
Instrument ID:	SVGC12	**Preparation Date/Time:**	05/23/19 08:33
Analytical Batch:	WG1284725	**Analysis Date/Time:**	05/24/19 23:52
Dilution Factor:	1	**Prep Method:**	3510C
Analytical Method:	1657M	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	100 mL
Total Solids (%):	_____	**Final Wt/Vol:**	1 mL

Analyte	**CAS**	**RT**	**Result** *mg/l*	**Qualifier**	**SDL** *mg/l*	**Unadj. MQL** *mg/l*	**MQL** *mg/l*
Azinphos-Methyl	86-50-0	0	U		0.000140	0.00100	0.00100
Chlorpyrifos	2921-88-2	0	U		0.000133	0.00100	0.00100
Diazinon	333-41-5	0	U		0.000377	0.00100	0.00100
Demeton,-O and -S	8065-48-3	0	U		0.0000680	0.00200	0.00200
Malathion	121-75-5	0	U		0.000116	0.00100	0.00100

6B-OR

RETENTION TIME
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	05/24/19 14:55
Instrument ID:	SVGC12 - 1	**Calibration (end) date/time:**	05/24/19 18:36
Analytical Method:	1657M		

Analyte	**CS: 100**	**CS: 200**	**CS: 500**	**CS: 1000**	**CS: 2000**	**CS: 5000**	**CS: 10000**	**CS: 20000**
DIAZINON	16.10	16.09	16.10	16.09	16.10	16.10	16.11	16.12
DEMETON,-O AND -S	17	16.99	16.99	16.98	16.99	17	17	17
CHLORPYRIFOS	20.44	20.44	20.44	20.43	20.44	20.44	20.45	20.45
MALATHION	22.36	22.36	22.36	22.35	22.36	22.36	22.37	22.38
AZINPHOS-METHYL	27.01	27.01	27.01	27	27	27	27.01	27.01
TRIPHENYL PHOSPHATE	26.16	26.16	26.16	26.15	26.15	26.16	26.16	26.16
File ID:	0524_02	0524_03	0524_04	0524_05	0524_06	0524_07	0524_08	0524_09

6B-OR

RETENTION TIME
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	05/24/19 14:55
Instrument ID:	SVGC12 - 2	**Calibration (end) date/time:**	05/24/19 18:36
Analytical Method:	1657M		

Analyte	**CS: 100**	**CS: 200**	**CS: 500**	**CS: 1000**	**CS: 2000**	**CS: 5000**	**CS: 10000**	**CS: 20000**
DIAZINON	18.41	18.40	18.41	18.40	18.41	18.41	18.42	18.43
DEMETON,-O AND -S	17.09	17.08	17.08	17.07	17.08	17.09	17.09	17.10
CHLORPYRIFOS	22.91	22.90	22.90	22.89	22.90	22.91	22.91	22.93
MALATHION	22.72	22.74	22.75	22.74	22.75	22.75	22.76	22.78
AZINPHOS-METHYL	27.43	27.43	27.43	27.42	27.42	27.42	27.43	27.43
TRIPHENYL PHOSPHATE	26.72	26.72	26.72	26.72	26.72	26.72	26.73	26.73
File ID:	0524_02	0524_03	0524_04	0524_05	0524_06	0524_07	0524_08	0524_09

6C-OR

CALIBRATION FACTOR
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	05/24/19 14:55
Instrument ID:	SVGC12 - 1	**Calibration (end) date/time:**	05/24/19 18:36
Analytical Method:	1657M		

Analyte	**RRF: 100**	**RRF: 200**	**RRF: 500**	**RRF: 1000**	**RRF: 2000**	**RRF: 5000**	**RRF: 10000**	**RRF: 20000**
DIAZINON	0.9980	0.8270	0.7550	0.8720	0.7930	0.7260	0.6740	0.6250
DEMETON,-O AND -S	1.4870	1.1980	1.2060	1.4310	1.3330	1.2350	1.3120	1.3110
CHLORPYRIFOS	0.9860	0.7760	0.7130	0.8310	0.7360	0.7010	0.6560	0.5840
MALATHION	0.7420	0.5990	0.5480	0.69	0.6650	0.6420	0.64	0.5750
AZINPHOS-METHYL	0.4510	0.4030	0.4340	0.5510	0.5330	0.5130	0.4850	0.4070
TRIPHENYL PHOSPHATE	0.8360	0.6860	0.6130	0.7460	0.6830	0.6490	0.6010	0.5320
File ID:	0524_02	0524_03	0524_04	0524_05	0524_06	0524_07	0524_08	0524_09

6C-OR

CALIBRATION FACTOR
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	05/24/19 14:55
Instrument ID:	SVGC12 - 1	**Calibration (end) date/time:**	05/24/19 18:36
Analytical Method:	1657M		

Analyte	RRF. Avg	%RSD	COD
DIAZINON	0.783828	15.03	
DEMETON,-O AND -S	1.314122	7.91	
CHLORPYRIFOS	0.747876	16.22	
MALATHION	0.637613	9.87	
AZINPHOS-METHYL	0.472235	12.04	
TRIPHENYL PHOSPHATE	0.668184	13.98	

6C-OR

CALIBRATION FACTOR
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	05/24/19 14:55
Instrument ID:	SVGC12 - 2	**Calibration (end) date/time:**	05/24/19 18:36
Analytical Method:	1657M		

Analyte	**RRF: 100**	**RRF: 200**	**RRF: 500**	**RRF: 1000**	**RRF: 2000**	**RRF: 5000**	**RRF: 10000**	**RRF: 20000**
DIAZINON	1.18	0.8830	0.8180	0.9840	0.8620	0.7940	0.8460	0.8460
DEMETON,-O AND -S	2.3750	1.5240	1.2020	1.3020	1.2970	1.3430	1.3340	1.3910
CHLORPYRIFOS	1.3490	0.9450	0.7590	0.8720	0.79	0.7720	0.8020	0.8230
MALATHION	0.94	0.6760	0.6120	0.7790	0.6790	0.6690	0.7030	0.7420
AZINPHOS-METHYL	1.2170	0.9020	0.7940	1.0870	1.0270	0.9810	0.9940	1.04
TRIPHENYL PHOSPHATE	1.7320	1.3690	1.2010	1.4690	1.3170	1.29	1.32	1.3740
File ID:	0524_02	0524_03	0524_04	0524_05	0524_06	0524_07	0524_08	0524_09

6C-OR

CALIBRATION FACTOR
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	05/24/19 14:55
Instrument ID:	SVGC12 - 2	**Calibration (end) date/time:**	05/24/19 18:36
Analytical Method:	1657M		

Analyte	RRF. Avg	%RSD	COD
DIAZINON	0.901582	13.98	
DEMETON,-O AND -S	1.470828	25.6	0.998
CHLORPYRIFOS	0.889119	21.99	0.999
MALATHION	0.725114	13.83	
AZINPHOS-METHYL	1.005289	12.43	
TRIPHENYL PHOSPHATE	1.384118	11.57	

7D-OR

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	05/24/19 14:55
Instrument ID:	SVGC12 - 1	**Calibration (end) date/time:**	05/24/19 18:36
Lab File ID:	0524_11-1	**Analysis date/time:**	05/24/19 19:39
Analytical Method:	1657M	**Sample ID:**	SSCV

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
AZINPHOS-METHYL	2	2.385	119	70 - 130
CHLORPYRIFOS	2	2.056	103	70 - 130
DEMETON,-O AND -S	1	1.120	112	70 - 130
DIAZINON	2	2.016	101	70 - 130
MALATHION	2	2.144	107	70 - 130

7D-OR

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	05/24/19 14:55
Instrument ID:	SVGC12 - 2	**Calibration (end) date/time:**	05/24/19 18:36
Lab File ID:	0524_11-1	**Analysis date/time:**	05/24/19 19:39
Analytical Method:	1657M	**Sample ID:**	SSCV

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
AZINPHOS-METHYL	2	1.968	98.40	70 - 130
CHLORPYRIFOS	2	2.106	105	70 - 130
DEMETON,-O AND -S	1	1.089	109	70 - 130
DIAZINON	2	1.952	97.60	70 - 130
MALATHION	2	2.018	101	70 - 130

8B-OR

ANALYTICAL SEQUENCE

SDG:	L1101421	**Analytical Method:**	1657M
Instrument ID:	SVGC12	**Calibration Start Date:**	05/24/19 14:55
		Calibration End Date:	05/24/19 18:36

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
CAL	100	0524_02	05/24/19 14:55	1	
CAL	200	0524_03	05/24/19 15:26	1	
CAL	500	0524_04	05/24/19 15:58	1	
CAL	1000	0524_05	05/24/19 16:30	1	
CAL	2000	0524_06	05/24/19 17:01	1	
CAL	5000	0524_07	05/24/19 17:33	1	
CAL	10000	0524_08	05/24/19 18:04	1	
CAL	20000	0524_09	05/24/19 18:36	1	
SSCV	SVGC120524190524_11-1472713	0524_11-1	05/24/19 19:39	1	
BLANK	R3415275-1	0524_13	05/24/19 20:43	1	WG1284725
LCS	R3415275-2	0524_14	05/24/19 21:14	1	WG1284725
LCSD	R3415275-3	0524_15	05/24/19 21:46	1	WG1284725
WW-20190520-002-DAY 18	L1101421-01	0524_19	05/24/19 23:52	1	WG1284725

10A-OR

SINGLE COMPONENT ANALYSIS IDENTIFICATION

SAMPLE NO.:
R3415275-1

Lab Sample ID:	R3415275-1	**SDG:**	L1101421
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	0524_13	**Received Date/Time:**	_____
Instrument ID:	SVGC12	**Preparation Date/Time:**	05/23/19 08:33
Analytical Batch:	WG1284725	**Analysis Date/Time:**	05/24/19 20:43
Dilution Factor:	1	**Prep Method:**	3510C
Analytical Method:	1657M	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	100 mL
Total Solids (%):	_____	**Final Wt/Vol:**	1 mL

Analyte	**Column**	**RT**	**Concentration** *mg/l*	**% Diff.**
Azinphos-Methyl	1	0	U	0
Chlorpyrifos	1	0	U	0
Demeton,-O and -S	1	0	U	0
Diazinon	1	0	U	0
Malathion	1	0	U	0

10A-OR

SINGLE COMPONENT ANALYSIS IDENTIFICATION

SAMPLE NO.:
R3415275-2

Lab Sample ID:	R3415275-2	**SDG:**	L1101421
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	0524_14	**Received Date/Time:**	_____
Instrument ID:	SVGC12	**Preparation Date/Time:**	05/23/19 08:33
Analytical Batch:	WG1284725	**Analysis Date/Time:**	05/24/19 21:14
Dilution Factor:	1	**Prep Method:**	3510C
Analytical Method:	1657M	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	100 mL
Total Solids (%):	_____	**Final Wt/Vol:**	1 mL

Analyte	**Column**	**RT**	**Concentration** *mg/l*	**% Diff.**
Azinphos-Methyl	1	27.01	0.00349	10.2
Chlorpyrifos	1	20.44	0.00384	4.71
Demeton,-O and -S	1	16.99	0.00160	13.2
Diazinon	1	16.10	0.00392	5.94
Malathion	1	22.36	0.00366	17.4

10A-OR

SINGLE COMPONENT ANALYSIS IDENTIFICATION

SAMPLE NO.:
R3415275-3

Lab Sample ID:	R3415275-3	**SDG:**	L1101421
Client Sample ID:	LCSD	**Collected Date/Time:**	_____
Lab File ID:	0524_15	**Received Date/Time:**	_____
Instrument ID:	SVGC12	**Preparation Date/Time:**	05/23/19 08:33
Analytical Batch:	WG1284725	**Analysis Date/Time:**	05/24/19 21:46
Dilution Factor:	1	**Prep Method:**	3510C
Analytical Method:	1657M	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	100 mL
Total Solids (%):	_____	**Final Wt/Vol:**	1 mL

Analyte	**Column**	**RT**	**Concentration** *mg/l*	**% Diff.**
Azinphos-Methyl	1	27	0.00379	6.2
Chlorpyrifos	1	20.43	0.00392	13.6
Demeton,-O and -S	1	16.98	0.00194	30.7
Diazinon	1	16.09	0.00410	6.86
Malathion	1	22.35	0.00382	4.5

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415275-1

Lab Sample ID:	R3415275-1	**SDG:**	L1101421
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	0524_13	**Received Date/Time:**	_____
Instrument ID:	SVGC12	**Preparation Date/Time:**	05/23/19 08:33
Analytical Batch:	WG1284725	**Analysis Date/Time:**	05/24/19 20:43
Dilution Factor:	1	**Prep Method:**	3510C
Analytical Method:	1657M	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	100 mL
Total Solids (%):	_____	**Final Wt/Vol:**	1 mL

Analyte	**CAS**	**RT**	**Result** *mg/l*	**Qualifier**	**SDL** *mg/l*	**Unadj. MQL** *mg/l*	**MQL** *mg/l*
Azinphos-Methyl	86-50-0	0	U		0.000140	0.0010	0.00100
Chlorpyrifos	2921-88-2	0	U		0.000133	0.0010	0.00100
Demeton,-O and -S	8065-48-3	0	U		0.0000680	0.0020	0.00200
Diazinon	333-41-5	0	U		0.000377	0.0010	0.00100
Malathion	121-75-5	0	U		0.000116	0.0010	0.00100

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415275-2

Lab Sample ID:	R3415275-2	**SDG:**	L1101421
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	0524_14	**Received Date/Time:**	_____
Instrument ID:	SVGC12	**Preparation Date/Time:**	05/23/19 08:33
Analytical Batch:	WG1284725	**Analysis Date/Time:**	05/24/19 21:14
Dilution Factor:	1	**Prep Method:**	3510C
Analytical Method:	1657M	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	100 mL
Total Solids (%):	_____	**Final Wt/Vol:**	1 mL

Analyte	**CAS**	**RT**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
			mg/l		*mg/l*	*mg/l*	*mg/l*
Azinphos-Methyl	86-50-0	27.01	0.00349		0.000140	0.0010	0.00100
Chlorpyrifos	2921-88-2	20.44	0.00384		0.000133	0.0010	0.00100
Demeton,-O and -S	8065-48-3	16.99	0.00160		0.0000680	0.0020	0.00200
Diazinon	333-41-5	16.10	0.00392		0.000377	0.0010	0.00100
Malathion	121-75-5	22.36	0.00366		0.000116	0.0010	0.00100

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415275-3

Lab Sample ID:	R3415275-3	**SDG:**	L1101421
Client Sample ID:	LCSD	**Collected Date/Time:**	_____
Lab File ID:	0524_15	**Received Date/Time:**	_____
Instrument ID:	SVGC12	**Preparation Date/Time:**	05/23/19 08:33
Analytical Batch:	WG1284725	**Analysis Date/Time:**	05/24/19 21:46
Dilution Factor:	1	**Prep Method:**	3510C
Analytical Method:	1657M	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	100 mL
Total Solids (%):	_____	**Final Wt/Vol:**	1 mL

Analyte	**CAS**	**RT**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
			mg/l		*mg/l*	*mg/l*	*mg/l*
Azinphos-Methyl	86-50-0	27	0.00379		0.000140	0.0010	0.00100
Chlorpyrifos	2921-88-2	20.43	0.00392		0.000133	0.0010	0.00100
Demeton,-O and -S	8065-48-3	16.98	0.00194		0.0000680	0.0020	0.00200
Diazinon	333-41-5	16.09	0.00410		0.000377	0.0010	0.00100
Malathion	121-75-5	22.35	0.00382		0.000116	0.0010	0.00100

1664A Wet Chemistry

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
WW-20190520-002-DAY 18

Lab Sample ID:	L1101421-02	**SDG:**	L1101421
Client Sample ID:	WW-20190520-002-DAY 18	**Collected Date/Time:**	05/20/19 11:30
Lab File ID:	17	**Received Date/Time:**	05/22/19 08:00
Instrument ID:	OGBAL1	**Preparation Date/Time:**	05/28/19 13:03
Analytical Batch:	WG1287268	**Analysis Date/Time:**	05/28/19 19:29
Dilution Factor:	1	**Prep Method:**	1664A
Analytical Method:	1664A	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	920 ml
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
Oil & Grease (Hexane Extr)		1.30	J	1.26	5.44	5.44

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415564-1

Lab Sample ID:	R3415564-1	**SDG:**	L1101421
Client Sample ID:	BLANK	**Collected Date/Time:**	
Lab File ID:	01	**Received Date/Time:**	
Instrument ID:	OGBAL1	**Preparation Date/Time:**	05/28/19 13:00
Analytical Batch:	WG1287268	**Analysis Date/Time:**	05/28/19 19:29
Dilution Factor:	1	**Prep Method:**	1664A
Analytical Method:	1664A	**Sample Vol Used:**	
Matrix:	WW	**Initial Wt/Vol:**	1000 ml
Total Solids (%):		**Final Wt/Vol:**	

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
Oil & Grease (Hexane Extr)		U		1.16	5	5.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415564-2

Lab Sample ID:	R3415564-2	**SDG:**	L1101421
Client Sample ID:	LCS	**Collected Date/Time:**	
Lab File ID:	04	**Received Date/Time:**	
Instrument ID:	OGBAL1	**Preparation Date/Time:**	05/28/19 13:00
Analytical Batch:	WG1287268	**Analysis Date/Time:**	05/28/19 16:45
Dilution Factor:	1	**Prep Method:**	1664A
Analytical Method:	1664A	**Sample Vol Used:**	
Matrix:	WW	**Initial Wt/Vol:**	1000 ml
Total Solids (%):		**Final Wt/Vol:**	

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
Oil & Grease (Hexane Extr)		34.0		1.16	5	5.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415564-3

Lab Sample ID:	R3415564-3	**SDG:**	L1101421
Client Sample ID:	LCSD	**Collected Date/Time:**	
Lab File ID:	05	**Received Date/Time:**	
Instrument ID:	OGBAL1	**Preparation Date/Time:**	05/28/19 13:00
Analytical Batch:	WG1287268	**Analysis Date/Time:**	05/28/19 16:45
Dilution Factor:	1	**Prep Method:**	1664A
Analytical Method:	1664A	**Sample Vol Used:**	
Matrix:	WW	**Initial Wt/Vol:**	1000 ml
Total Solids (%):		**Final Wt/Vol:**	

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
Oil & Grease (Hexane Extr)		38.7		1.16	5	5.00

3-IN BLANKS

SDG:	L1101421	**Calibration (begin) date/time:**	_____
Instrument ID:	OGBAL1	**Calibration (end) date/time:**	_____
Analytical Method:	1664A	**Analytical Run:**	WG1287268

Sample ID:	**BLANK Result**	**BLANK Qual**
File ID:	01	
Analyte	mg/l	
OIL & GREASE (HEXANE EXTR)	U	

7-IN

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY

L1101421-02

SAMPLE NO.:
R3415564-2
R3415564-3

LCS Sample / File ID:	R3415564-2 / 04	**SDG:**	L1101421
LCSD Sample / File ID:	R3415564-3 / 05	**Analytical Batch:**	WG1287268
Instrument ID:	OGBAL1	**Dilution Factor:**	1
Analytical Method:	1664A	**Matrix:**	WW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	mg/l	*mg/l*	*mg/l*	*%*	*%*	*%*	*%*	*%*
Oil & Grease (Hexane Extr)	40.0	34.0	38.7	85.0	96.8	78.0 - 114	12.9	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

12-IN

ANALYSIS LOG

SDG:	L1101421	**Analytical Method:**	1664A
Instrument ID:	OGBAL1	**Calibration Start Date:**	_____
Analytical Run:	WG1287268	**Calibration End Date:**	_____

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
LCS	R3415564-2	04	05/28/19 16:45	1	WG1287268
LCSD	R3415564-3	05	05/28/19 16:45	1	WG1287268
BLANK	R3415564-1	01	05/28/19 19:29	1	WG1287268
WW-20190520-002-DAY 18	L1101421-02	17	05/28/19 19:29	1	WG1287268

200.8 Metals (ICPMS)

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
WW-20190520-002-DAY 18

Lab Sample ID:	L1101421-01	**SDG:**	L1101421
Client Sample ID:	WW-20190520-002-DAY 18	**Collected Date/Time:**	05/20/19 11:30
Lab File ID:	20190526232326	**Received Date/Time:**	05/22/19 08:00
Instrument ID:	ICPMS10	**Preparation Date/Time:**	05/23/19 12:11
Analytical Batch:	WG1285446	**Analysis Date/Time:**	05/26/19 23:23
Dilution Factor:	1	**Prep Method:**	200.8
Analytical Method:	200.8	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	25 mL
Total Solids (%):	_____	**Final Wt/Vol:**	25 mL

Analyte	**CAS**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
		mg/l		*mg/l*	*mg/l*	*mg/l*
Antimony	7440-36-0	0.00180	J J4	0.000754	0.00200	0.00200
Arsenic	7440-38-2	0.00162		0.000170	0.00100	0.00100
Cadmium	7440-43-9	U		0.000220	0.00100	0.00100
Chromium	7440-47-3	U		0.000320	0.00100	0.00100
Cobalt	7440-48-4	0.000709	J	0.000270	0.00200	0.00200
Copper	7440-50-8	0.000520	J	0.000270	0.00100	0.00100
Lead	7439-92-1	U		0.000260	0.00100	0.00100
Nickel	7440-02-0	0.00190		0.000320	0.00100	0.00100
Selenium	7782-49-2	0.00109	J	0.000320	0.00200	0.00200
Silver	7440-22-4	U		0.000180	0.00100	0.00100
Thallium	7440-28-0	U		0.000280	0.00100	0.00100
Tin	7440-31-5	0.000389	J	0.000240	0.00100	0.00100
Zinc	7440-66-6	0.0183	B	0.00191	0.0100	0.0100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415109-1

Lab Sample ID:	R3415109-1	**SDG:**	L1101421
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	20190526225126	**Received Date/Time:**	_____
Instrument ID:	ICPMS10	**Preparation Date/Time:**	05/23/19 12:10
Analytical Batch:	WG1285446	**Analysis Date/Time:**	05/26/19 22:51
Dilution Factor:	1	**Prep Method:**	200.8
Analytical Method:	200.8	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	25 mL
Total Solids (%):	_____	**Final Wt/Vol:**	25 mL

Analyte	**CAS**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
		mg/l		*mg/l*	*mg/l*	*mg/l*
Antimony	7440-36-0	U		0.000754	0.0020	0.00200
Arsenic	7440-38-2	U		0.000170	0.0010	0.00100
Cadmium	7440-43-9	U		0.000220	0.0010	0.00100
Chromium	7440-47-3	U		0.000320	0.0010	0.00100
Cobalt	7440-48-4	U		0.000270	0.0020	0.00200
Copper	7440-50-8	U		0.000270	0.0010	0.00100
Lead	7439-92-1	U		0.000260	0.0010	0.00100
Nickel	7440-02-0	U		0.000320	0.0010	0.00100
Selenium	7782-49-2	U		0.000320	0.0020	0.00200
Silver	7440-22-4	U		0.000180	0.0010	0.00100
Thallium	7440-28-0	U		0.000280	0.0010	0.00100
Tin	7440-31-5	U		0.000240	0.0010	0.00100
Zinc	7440-66-6	0.00225	J	0.00191	0.01	0.0100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415109-2

Lab Sample ID:	R3415109-2	**SDG:**	L1101421
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	20190526225600	**Received Date/Time:**	_____
Instrument ID:	ICPMS10	**Preparation Date/Time:**	05/23/19 12:10
Analytical Batch:	WG1285446	**Analysis Date/Time:**	05/26/19 22:56
Dilution Factor:	1	**Prep Method:**	200.8
Analytical Method:	200.8	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	25 mL
Total Solids (%):	_____	**Final Wt/Vol:**	25 mL

Analyte	**CAS**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
		mg/l		*mg/l*	*mg/l*	*mg/l*
Antimony	7440-36-0	0.0594	J4	0.000754	0.0020	0.00200
Arsenic	7440-38-2	0.0454		0.000170	0.0010	0.00100
Cadmium	7440-43-9	0.0477		0.000220	0.0010	0.00100
Chromium	7440-47-3	0.0458		0.000320	0.0010	0.00100
Cobalt	7440-48-4	0.0461		0.000270	0.0020	0.00200
Copper	7440-50-8	0.0462		0.000270	0.0010	0.00100
Lead	7439-92-1	0.0482		0.000260	0.0010	0.00100
Nickel	7440-02-0	0.0466		0.000320	0.0010	0.00100
Selenium	7782-49-2	0.0468		0.000320	0.0020	0.00200
Silver	7440-22-4	0.0491		0.000180	0.0010	0.00100
Thallium	7440-28-0	0.0483		0.000280	0.0010	0.00100
Tin	7440-31-5	0.0474		0.000240	0.0010	0.00100
Zinc	7440-66-6	0.0471		0.00191	0.01	0.0100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415109-3

Lab Sample ID:	R3415109-3	**SDG:**	L1101421
Client Sample ID:	LCSD	**Collected Date/Time:**	_____
Lab File ID:	20190526230034	**Received Date/Time:**	_____
Instrument ID:	ICPMS10	**Preparation Date/Time:**	05/23/19 12:10
Analytical Batch:	WG1285446	**Analysis Date/Time:**	05/26/19 23:00
Dilution Factor:	1	**Prep Method:**	200.8
Analytical Method:	200.8	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	25 mL
Total Solids (%):	_____	**Final Wt/Vol:**	25 mL

Analyte	**CAS**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
		mg/l		*mg/l*	*mg/l*	*mg/l*
Antimony	7440-36-0	0.0614	J4	0.000754	0.0020	0.00200
Arsenic	7440-38-2	0.0460		0.000170	0.0010	0.00100
Cadmium	7440-43-9	0.0498		0.000220	0.0010	0.00100
Chromium	7440-47-3	0.0464		0.000320	0.0010	0.00100
Cobalt	7440-48-4	0.0475		0.000270	0.0020	0.00200
Copper	7440-50-8	0.0477		0.000270	0.0010	0.00100
Lead	7439-92-1	0.0494		0.000260	0.0010	0.00100
Nickel	7440-02-0	0.0480		0.000320	0.0010	0.00100
Selenium	7782-49-2	0.0485		0.000320	0.0020	0.00200
Silver	7440-22-4	0.0506		0.000180	0.0010	0.00100
Thallium	7440-28-0	0.0502		0.000280	0.0010	0.00100
Tin	7440-31-5	0.0482		0.000240	0.0010	0.00100
Zinc	7440-66-6	0.0488		0.00191	0.01	0.0100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415109-5

Lab Sample ID:	R3415109-5	**SDG:**	L1101421
Client Sample ID:	MS	**Collected Date/Time:**	05/21/19 06:20
Lab File ID:	20190526231417	**Received Date/Time:**	05/22/19 08:45
Instrument ID:	ICPMS10	**Preparation Date/Time:**	05/23/19 12:11
Analytical Batch:	WG1285446	**Analysis Date/Time:**	05/26/19 23:14
Dilution Factor:	1	**Prep Method:**	200.8
Analytical Method:	200.8	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	25 mL
Total Solids (%):	_____	**Final Wt/Vol:**	25 mL

Analyte	**CAS**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
		mg/l		*mg/l*	*mg/l*	*mg/l*
Antimony	7440-36-0	0.0652		0.000754	0.0020	0.00200
Arsenic	7440-38-2	0.0478		0.000170	0.0010	0.00100
Cadmium	7440-43-9	0.0516		0.000220	0.0010	0.00100
Chromium	7440-47-3	0.0457		0.000320	0.0010	0.00100
Cobalt	7440-48-4	0.0469		0.000270	0.0020	0.00200
Copper	7440-50-8	0.0474		0.000270	0.0010	0.00100
Lead	7439-92-1	0.0517		0.000260	0.0010	0.00100
Nickel	7440-02-0	0.0485		0.000320	0.0010	0.00100
Selenium	7782-49-2	0.0504		0.000320	0.0020	0.00200
Silver	7440-22-4	0.0523		0.000180	0.0010	0.00100
Thallium	7440-28-0	0.0510		0.000280	0.0010	0.00100
Tin	7440-31-5	0.0521		0.000240	0.0010	0.00100
Zinc	7440-66-6	0.0490		0.00191	0.01	0.0100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415109-6

Lab Sample ID:	R3415109-6	**SDG:**	L1101421
Client Sample ID:	MSD	**Collected Date/Time:**	05/21/19 06:20
Lab File ID:	20190526231852	**Received Date/Time:**	05/22/19 08:45
Instrument ID:	ICPMS10	**Preparation Date/Time:**	05/23/19 12:11
Analytical Batch:	WG1285446	**Analysis Date/Time:**	05/26/19 23:18
Dilution Factor:	1	**Prep Method:**	200.8
Analytical Method:	200.8	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	25 mL
Total Solids (%):	_____	**Final Wt/Vol:**	25 mL

Analyte	**CAS**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
		mg/l		*mg/l*	*mg/l*	*mg/l*
Antimony	7440-36-0	0.0664		0.000754	0.0020	0.00200
Arsenic	7440-38-2	0.0459		0.000170	0.0010	0.00100
Cadmium	7440-43-9	0.0511		0.000220	0.0010	0.00100
Chromium	7440-47-3	0.0443		0.000320	0.0010	0.00100
Cobalt	7440-48-4	0.0453		0.000270	0.0020	0.00200
Copper	7440-50-8	0.0456		0.000270	0.0010	0.00100
Lead	7439-92-1	0.0505		0.000260	0.0010	0.00100
Nickel	7440-02-0	0.0456		0.000320	0.0010	0.00100
Selenium	7782-49-2	0.0516		0.000320	0.0020	0.00200
Silver	7440-22-4	0.0520		0.000180	0.0010	0.00100
Thallium	7440-28-0	0.0510		0.000280	0.0010	0.00100
Tin	7440-31-5	0.0507		0.000240	0.0010	0.00100
Zinc	7440-66-6	0.0463		0.00191	0.01	0.0100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415109-4

Lab Sample ID:	R3415109-4	**SDG:**	L1101421
Client Sample ID:	SD	**Collected Date/Time:**	05/21/19 06:20
Lab File ID:	20190526230943	**Received Date/Time:**	05/22/19 08:45
Instrument ID:	ICPMS10	**Preparation Date/Time:**	05/23/19 12:11
Analytical Batch:	WG1285446	**Analysis Date/Time:**	05/26/19 23:09
Dilution Factor:	5	**Prep Method:**	200.8
Analytical Method:	200.8	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	25 mL
Total Solids (%):	_____	**Final Wt/Vol:**	25 mL

Analyte	**CAS**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
		mg/l		*mg/l*	*mg/l*	*mg/l*
Antimony	7440-36-0	ND		0.00377	0.0020	0.0100
Arsenic	7440-38-2	0.00148		0.000850	0.0010	0.00500
Cadmium	7440-43-9	ND		0.00110	0.0010	0.00500
Chromium	7440-47-3	ND		0.00160	0.0010	0.00500
Cobalt	7440-48-4	ND		0.00135	0.0020	0.0100
Copper	7440-50-8	ND		0.00135	0.0010	0.00500
Lead	7439-92-1	ND		0.00130	0.0010	0.00500
Nickel	7440-02-0	ND		0.00160	0.0010	0.00500
Selenium	7782-49-2	ND		0.00160	0.0020	0.0100
Silver	7440-22-4	ND		0.000900	0.0010	0.00500
Thallium	7440-28-0	ND		0.00140	0.0010	0.00500
Tin	7440-31-5	ND		0.00120	0.0010	0.00500
Zinc	7440-66-6	ND		0.00955	0.01	0.0500

2-IN

CALIBRATION VERIFICATION

SDG:	L1101421	**Calibration (begin) date/time:**	05/26/19 21:03
Instrument ID:	ICPMS10	**Calibration (end) date/time:**	05/26/19 21:26
Analytical Method:	200.8	**Analytical Run:**	052619ICPMS10A
Concentration Units:	mg/l		

	ICV				**CCV**				**ICVLL**			
Sample ID:	ICPMS100526192131				ICPMS100526192146				ICPMS100526192217			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
ANTIMONY	0.10	0.1041191	104	0.750000	0.10	0.1023199	102	1.080000	0.0010	0.00166059	166	11.900000
ARSENIC	0.10	0.0984282	98.40	1.870000	0.10	0.09846738	98.50	1.990000	0.0010	0.000954858	95.50	3.900000
CADMIUM	0.10	0.1006322	101	1.000000	0.10	0.09900802	99	0.970000	0.0010	0.000972941	97.30	3.550000
CHROMIUM	0.10	0.0987653	98.80	1.990000	0.10	0.09878939	98.80	1.830000	0.0010	0.000767523	76.80	23.500000
COBALT	0.10	0.09843173	98.40	1.700000	0.10	0.09791844	97.90	1.470000	0.0010	0.000965709	96.60	4.070000
COPPER	0.10	0.09840337	98.40	2.310000	0.10	0.09965792	99.70	1.720000	0.0010	0.000919138	91.90	3.440000
LEAD	0.10	0.1007532	101	0.340000	0.10	0.1025178	103	0.880000	0.0010	0.000987305	98.70	3.230000
NICKEL	0.10	0.09956524	99.60	1.730000	0.10	0.09955616	99.60	1.080000	0.0010	0.000820502	82.10	24.200000
SELENIUM	0.10	0.09780223	97.80	0.980000	0.10	0.09942983	99.40	1.580000	0.0010	0.001038139	104	14.400000
SILVER	0.10	0.1007253	101	1.270000	0.10	0.1001613	100	1.870000	0.0010	0.00098228	98.20	3.440000
THALLIUM	0.10	0.1010758	101	1.210000	0.10	0.101619	102	1.250000	0.0010	0.000994193	99.40	3.280000
TIN	0.10	0.1011034	101	1.160000	0.10	0.1001678	100	1.000000	0.0010	0.001117908	112	11.400000
ZINC	0.10	0.09593865	95.90	3.840000	0.10	0.09765178	97.70	2.130000	0.01	0.0092036	92	6.240000

ICV Limits: 95 - 105 CCV Limits: 90 - 110 ICVLL Limits: 50 - 150

2-IN

CALIBRATION VERIFICATION

SDG:	L1101421	**Calibration (begin) date/time:**	05/26/19 21:03
Instrument ID:	ICPMS10	**Calibration (end) date/time:**	05/26/19 21:26
Analytical Method:	200.8	**Analytical Run:**	052619ICPMS10A
Concentration Units:	mg/l		

CCV

Sample ID: ICPMS100526192332

Analyte	True	Found	%R	%RSD
ANTIMONY	0.10	0.1003422	100	0.390000
ARSENIC	0.10	0.101062	101	1.420000
CADMIUM	0.10	0.09899491	99	1.790000
CHROMIUM	0.10	0.1005391	101	2.290000
COBALT	0.10	0.1010877	101	2.280000
COPPER	0.10	0.09900173	99	2.480000
LEAD	0.10	0.1022581	102	1.260000
NICKEL	0.10	0.1009177	101	2.470000
SELENIUM	0.10	0.09608845	96.10	2.950000
SILVER	0.10	0.09978977	99.80	0.120000
THALLIUM	0.10	0.1023318	102	0.980000
TIN	0.10	0.0997181	99.70	0.890000
ZINC	0.10	0.1001943	100	1.540000

ICV Limits: 95 - 105 CCV Limits: 90 - 110 ICVLL Limits: 50 - 150

3-IN BLANKS

SDG:	L1101421	**Calibration (begin) date/time:**	05/26/19 21:03
Instrument ID:	ICPMS10	**Calibration (end) date/time:**	05/26/19 21:26
Analytical Method:	200.8	**Analytical Run:**	052619ICPMS10A

Sample ID:	**ICB Result**	**ICB Qual**	**CCB Result**	**CCB Qual**	**BLANK Result**	**BLANK Qual**	**CCB Result**	**CCB Qual**
File ID:	20190526214151		20190526215100		20190526225126		20190526233710	
Analyte	mg/l		mg/l		mg/l		mg/l	
ANTIMONY	0.000763168	U	0.001931283		U		0.001366423	
ARSENIC	0.000008718	U	0.000009136	U	U		0.000047325	U
CADMIUM	-0.000005617	U	0.00001095	U	U		0.000002540	U
CHROMIUM	-0.000132962	U	0.000090948	U	U		0.000139257	U
COBALT	0.000012322	U	0.000014369	U	U		0.000006120	U
COPPER	0.000061803	U	-0.000032807	U	U		0.000024539	U
LEAD	0.000014078	U	0.000009276	U	U		-0.000011965	U
NICKEL	0.000055445	U	-0.000115039	U	U		-0.000066239	U
SELENIUM	-0.000025533	U	-0.0000001900	U	U		0.000115389	U
SILVER	0.000009332	U	0.000023309	U	U		0.000011607	U
THALLIUM	0.000010797	U	0.000034912	U	U		0.000022958	U
TIN	0.000053672	U	0.000222019	U	U		0.000123918	U
ZINC	0.000052247	U	-0.000196398	U	0.00225	J	-0.000233758	U

4-IN

INTERFERENCE CHECK SAMPLE

SDG:	L1101421	**Analytical Method:**	200.8
Instrument ID:	ICPMS10	**Date:**	05/26/19 22:23
Instrument Run:	052619ICPMS10A		

Analyte	True	Found		True	Found	
	ICSA	*ICSA*	*ICSA*	*ICSAB*	*ICSAB*	*ICSAB*
	mg/l	*mg/l*	*% Rec.*	*mg/l*	*mg/l*	*% Rec.*
ALUMINUM	100	98.91499	98.90	100	97.33825	97.30
ANTIMONY	0	0.000533032		0.02	0.02734581	137
ARSENIC	0	0.000044847		0.02	0.01870921	93.50
BARIUM	0	0.000189797		0.02	0.0207797	104
BERYLLIUM	0	-0.000010836		0.02	0.01966115	98.30
BISMUTH (NO HE)		602424.1	105		615111.8	107
BORON	0	0.005043564		0.02	0.02514348	126
CADMIUM	0	0.000191083		0.02	0.02062548	103
CALCIUM	100	98.48405	98.50	100	97.52633	97.50
CHROMIUM	0	-0.000069041		0.02	0.0188101	94.10
COBALT	0	0.000286972		0.02	0.01964853	98.20
COPPER	0	0.001183235		0.02	0.02008491	100
GERMANIUM		4201.083	105		4201.75	105
GERMANIUM (NO HE)		16735.96	109		16585.8	108
IRON	100	96.07654	96.10	100	96.55522	96.60
LEAD	0	0.000040388		0.02	0.01953435	97.70
LITHIUM	0	0.000518278		0	0.000830196	
MAGNESIUM	100	100.2248	100	100	100.3272	100
MANGANESE	0	-0.000212486		0.02	0.01903735	95.20
MOLYBDENUM	2	2.052757	103	2	2.055687	103
NICKEL	0	0.000186356		0.02	0.01953055	97.70
POTASSIUM	100	99.77942	99.80	100	99.38227	99.40
RHODIUM		93829.97	99.60		94470.99	100
SCANDIUM		56643.28	101		56649.98	101
SCANDIUM (NO HE)		652222.6	111		606949.7	103
SELENIUM	0	0.000072567		0.02	0.02049519	102
SILVER	0	0.000007057		0.02	0.01971992	98.60
SODIUM	100	97.25874	97.30	100	95.61362	95.60
STRONTIUM	0	0.000877032		0.02	0.02061308	103
TELLURIUM		20171.1	101		20282.25	101
TELLURIUM (HIGH HE)		41754.25	100		42486.84	102
TELLURIUM (NO HE)		81697.07	106		81587.77	105
THALLIUM	0	0.000006663		0.02	0.02004291	100
THORIUM	0	0.00013463		0.02	0.01946521	97.30
TIN	0	0.000279506		0.02	0.02022859	101
TITANIUM	2	2.037794	102	2	2.040367	102
URANIUM	0	0.000001410		0.02	0.01972869	98.60
VANADIUM	0	-0.000002145		0.02	0.01876412	93.80
ZINC	0	0.000238305		0.02	0.01911742	95.60

ICSA Limits: 80 - 120 ICSAB Limits: 80 - 120

4-IN

INTERFERENCE CHECK SAMPLE

SDG:	L1101421	**Analytical Method:**	200.8
Instrument ID:	ICPMS10	**Date:**	05/27/19 00:55
Instrument Run:	052619ICPMS10A		

Analyte	**True**	**Found**		**True**	**Found**	
	ICSA	*ICSA*	*ICSA*	*ICSAB*	*ICSAB*	*ICSAB*
	mg/l	*mg/l*	*% Rec.*	*mg/l*	*mg/l*	*% Rec.*
ALUMINUM	100	99.11935	99.10	100	98.47286	98.50
ANTIMONY	0	0.000518749		0.02	0.02774702	139
ARSENIC	0	0.000036067		0.02	0.01882711	94.10
BARIUM	0	0.000134291		0.02	0.02106881	105
BISMUTH (NO HE)		595551.1	104		609772.4	106
CADMIUM	0	0.000183686		0.02	0.02068049	103
CALCIUM	100	98.45726	98.50	100	98.77258	98.80
CHROMIUM	0	-0.00033435		0.02	0.01870738	93.50
COBALT	0	0.000291494		0.02	0.01991303	99.60
COPPER	0	0.001211764		0.02	0.02037203	102
GERMANIUM		4237.753	106		4299.09	107
GERMANIUM (NO HE)		18633.73	121		18205.46	119
IRON	100	97.8301	97.80	100	96.02589	96
LEAD	0	0.000038058		0.02	0.0198713	99.40
MAGNESIUM	100	101.1995	101	100	98.71838	98.70
MANGANESE	0	-0.000528252		0.02	0.01862992	93.10
MOLYBDENUM	2	2.085754	104	2	2.078735	104
NICKEL	0	0.000177678		0.02	0.01929407	96.50
POTASSIUM	100	98.04737	98	100	98.94868	98.90
RHODIUM		97484.6	103		97093.2	103
SCANDIUM		58241.61	104		57642.15	103
SELENIUM	0	0.000137961		0.02	0.01926182	96.30
SILVER	0	-0.000008042		0.02	0.01980777	99
SODIUM	100	97.67374	97.70	100	95.24821	95.20
STRONTIUM	0	0.000701948		0.02	0.02107475	105
TELLURIUM		21284.96	106		21072.16	105
TELLURIUM (HIGH HE)		43171.3	103		43297.33	104
TELLURIUM (NO HE)		83140.93	107		84326.65	109
THALLIUM	0	0.000006766		0.02	0.02020397	101
THORIUM	0	0.000241198		0.02	0.01943029	97.20
TIN	0	0.000282351		0.02	0.0214645	107
TITANIUM	2	2.051145	103	2	2.041833	102
URANIUM	0	0.000008544		0.02	0.01988003	99.40
VANADIUM	0	0.000042184		0.02	0.0187671	93.80
ZINC	0	0.000294179		0.02	0.01883411	94.20
BERYLLIUM				0.02	0.01995307	99.80
BORON				0.02	0.03551418	178
LITHIUM				0	0.001327683	
SCANDIUM (NO HE)					712387.3	121

ICSA Limits: 80 - 120 ICSAB Limits: 80 - 120

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1101421-01

SAMPLE NO.:
R3415109-5
R3415109-6

MS Sample / File ID:	R3415109-5 / 20190526231417	**SDG:**	L1101421
MSD Sample / File ID:	R3415109-6 / 20190526231852	**Analytical Batch:**	WG1285446
OS Sample / File ID:	L1101259-01 / 20190526230509	**Matrix:**	WW
Instrument ID:	ICPMS10		
Analytical Method:	200.8		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limits
	mg/l	*mg/l*	*mg/l*	*mg/l*	*%*	*%*		*%*	*%*	*%*
Antimony	0.0500	0.00241	0.0652	0.0664	126	128	1	70.0 - 130	1.76	20
Arsenic	0.0500	0.00128	0.0478	0.0459	93.0	89.1	1	70.0 - 130	4.09	20
Cadmium	0.0500	ND	0.0516	0.0511	103	102	1	70.0 - 130	1.06	20
Chromium	0.0500	ND	0.0457	0.0443	91.4	88.5	1	70.0 - 130	3.17	20
Cobalt	0.0500	ND	0.0469	0.0453	93.8	90.6	1	70.0 - 130	3.46	20
Copper	0.0500	ND	0.0474	0.0456	93.5	89.9	1	70.0 - 130	3.84	20
Lead	0.0500	ND	0.0517	0.0505	103	101	1	70.0 - 130	2.45	20
Nickel	0.0500	ND	0.0485	0.0456	95.6	89.7	1	70.0 - 130	6.23	20
Selenium	0.0500	ND	0.0504	0.0516	99.5	102	1	70.0 - 130	2.42	20
Silver	0.0500	ND	0.0523	0.0520	105	104	1	70.0 - 130	0.587	20
Thallium	0.0500	ND	0.0510	0.0510	102	102	1	70.0 - 130	0.0201	20
Tin	0.0500	ND	0.0521	0.0507	103	100	1	70.0 - 130	2.70	20
Zinc	0.0500	ND	0.0490	0.0463	91.0	85.6	1	70.0 - 130	5.58	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

7-IN

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY

L1101421-01

SAMPLE NO.:
R3415109-2
R3415109-3

LCS Sample / File ID:	R3415109-2 / 20190526225600	**SDG:**	L1101421
LCSD Sample / File ID:	R3415109-3 / 20190526230034	**Analytical Batch:**	WG1285446
Instrument ID:	ICPMS10	**Dilution Factor:**	1
Analytical Method:	200.8	**Matrix:**	WW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	mg/l	*mg/l*	*mg/l*	*%*	*%*	*%*	*%*	*%*
Antimony	0.0500	0.0594	0.0614	119*	123*	85.0 - 115	3.30	20
Arsenic	0.0500	0.0454	0.0460	90.8	92.0	85.0 - 115	1.27	20
Cadmium	0.0500	0.0477	0.0498	95.4	99.5	85.0 - 115	4.29	20
Chromium	0.0500	0.0458	0.0464	91.6	92.8	85.0 - 115	1.28	20
Cobalt	0.0500	0.0461	0.0475	92.2	94.9	85.0 - 115	2.94	20
Copper	0.0500	0.0462	0.0477	92.5	95.4	85.0 - 115	3.11	20
Lead	0.0500	0.0482	0.0494	96.4	98.8	85.0 - 115	2.47	20
Nickel	0.0500	0.0466	0.0480	93.3	96.1	85.0 - 115	2.97	20
Selenium	0.0500	0.0468	0.0485	93.5	96.9	85.0 - 115	3.53	20
Silver	0.0500	0.0491	0.0506	98.3	101	85.0 - 115	2.97	20
Thallium	0.0500	0.0483	0.0502	96.5	100	85.0 - 115	3.90	20
Tin	0.0500	0.0474	0.0482	94.7	96.5	85.0 - 115	1.87	20
Zinc	0.0500	0.0471	0.0488	94.2	97.6	85.0 - 115	3.55	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

8-IN

ICP AND ICP/MS SERIAL DILUTIONS

L1101421-01

SAMPLE NO.:
R3415109-4

SD Sample / File ID:	R3415109-4 / 20190526230943	**SDG:**	L1101421
OS Sample / File ID:	L1101259-01 / 20190526230509	**Analytical Batch:**	WG1285446
Lab File ID:	20190526230943	**Dilution Factor:**	5
Instrument ID:	ICPMS10	**Matrix:**	WW
Analytical Method:	200.8		

Analyte	**OS Result** *mg/l*	**SD Result** *mg/l*	**RPD** *%*	**RPD Limits** *%*
Antimony	0.00241	ND	0.000	10
Arsenic	0.00128	0.00148	15.3	10
Cadmium	ND	ND	0.000	10
Chromium	ND	ND	0.000	10
Cobalt	ND	ND	0.000	10
Copper	ND	ND	0.000	10
Lead	ND	ND	0.000	10
Nickel	ND	ND	0.000	10
Selenium	ND	ND	0.000	10
Silver	ND	ND	0.000	10
Thallium	ND	ND	0.000	10
Tin	ND	ND	0.000	10
Zinc	ND	ND	0.000	10

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

10C-IN

LINEAR DYNAMIC RANGE

SDG:	L1101421	**Analytical Method:**	200.8
Instrument ID:	ICPMS10	**Date:**	02/22/19 17:31

Analyte	LDR *ppm*
ALUMINUM	500
ANTIMONY	10
ARSENIC	10
BARIUM	10
BERYLLIUM	5
BORON	5
CADMIUM	10
CALCIUM	1000
CHROMIUM	10
COBALT	10
COPPER	0.20
IRON	500
LEAD	10
MAGNESIUM	1000
MANGANESE	10
MOLYBDENUM	10
NICKEL	2
POTASSIUM	1000
SELENIUM	10
SILVER	0.20
SODIUM	1000
STRONTIUM	10
THALLIUM	10
THORIUM	10
TIN	10
TITANIUM	10
URANIUM	10
VANADIUM	10
ZINC	10

11-IN

INTERNAL STANDARD ASSOCIATION

SDG:	L1101421	**Analytical Method:**	200.8
Instrument ID:	ICPMS10	**Analysis Date:**	05/26/19 19:50
Instrument Run:	052619ICPMS10A		

Analyte	Assoc. Internal Standard 1
CHROMIUM - 52	GERMANIUM - 72
COBALT - 59	GERMANIUM - 72
NICKEL - 60	GERMANIUM - 72
COPPER - 63	GERMANIUM (NO HE) - 72
ZINC - 66	GERMANIUM - 72
ARSENIC - 75	GERMANIUM - 72
SELENIUM - 78	TELLURIUM (HIGH HE) - 125
SILVER - 107	RHODIUM - 103
CADMIUM - 111	RHODIUM - 103
TIN - 118	RHODIUM - 103
ANTIMONY - 121	RHODIUM - 103
THALLIUM - 205	BISMUTH (NO HE) - 209
LEAD - 208	BISMUTH (NO HE) - 209

12-IN

ANALYSIS LOG

SDG:	L1101421	**Analytical Method:**	200.8
Instrument ID:	ICPMS10	**Calibration Start Date:**	05/26/19 21:03
Analytical Run:	052619ICPMS10A	**Calibration End Date:**	05/26/19 21:26

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
TUNE	ICPMS10tn052620191950	20190526195019	05/26/19 19:50	1	
CALBLK	ICPMS100526192059	20190526205919	05/26/19 20:59	1	
CAL	STD1	20190526210355	05/26/19 21:03	1	
CAL	STD2	20190526210831	05/26/19 21:08	1	
CAL	STD3	20190526211307	05/26/19 21:13	1	
CAL	STD4	20190526211742	05/26/19 21:17	1	
CAL	STD5	20190526212218	05/26/19 21:22	1	
CAL	STD6	20190526212653	05/26/19 21:26	1	
ICV	ICPMS100526192131	20190526213128	05/26/19 21:31	1	
ICB	ICPMS100526192141	20190526214151	05/26/19 21:41	1	
CCV	ICPMS100526192146	20190526214626	05/26/19 21:46	1	
CCB	ICPMS100526192151	20190526215100	05/26/19 21:51	1	
ICVLL	ICPMS100526192217	20190526221731	05/26/19 22:17	1	
ICSA	ICPMS100526192223	20190526222333	05/26/19 22:23	1	
ICSAB	ICPMS100526192228	20190526222808	05/26/19 22:28	1	
BLANK	R3415109-1	20190526225126	05/26/19 22:51	1	WG1285446
LCS	R3415109-2	20190526225600	05/26/19 22:56	1	WG1285446
LCSD	R3415109-3	20190526230034	05/26/19 23:00	1	WG1285446
OS	L1101259-01	20190526230509	05/26/19 23:05	1	WG1285446
SD	R3415109-4	20190526230943	05/26/19 23:09	5	WG1285446
MS	R3415109-5	20190526231417	05/26/19 23:14	1	WG1285446
MSD	R3415109-6	20190526231852	05/26/19 23:18	1	WG1285446
WW-20190520-002-DAY 18	L1101421-01	20190526232326	05/26/19 23:23	1	WG1285446
CCV	ICPMS100526192332	20190526233236	05/26/19 23:32	1	
CCB	ICPMS100526192337	20190526233710	05/26/19 23:37	1	
ICSA	ICPMS100527190055	20190527005506	05/27/19 00:55	1	
ICSAB	ICPMS100527190059	20190527005941	05/27/19 00:59	1	

13-IN

ICP/MS TUNE

Lab File ID:	20190526195019	**SDG:**	L1101421
Instrument ID:	ICPMS10	**Analysis Date/Time**	05/26/19 19:50
Analytical Method:	200.8		

Element - Mass	Avg. Measured Mass	Avg. Peak Width	Height	RSD
	u	u	%	%
IN - 115	115.05	0.46220670	5	0.68461020
PB - 206	206	0.48755370	5	0.81760480
PB - 207	207	0.522324	5	0.86130960
PB - 208	208	0.52194750	5	1.042249
MG - 24	24	0.52338620	5	1.244877
MG - 25	24.95	0.492692	5	1.269085
MG - 26	25.95	0.48978020	5	1.901342
CO - 59	59	0.485846	5	0.83526980
BE - 9	9	0.477588	5	0.97967960

14-IN

ICP/MS INTERNAL STANDARDS RELATIVE INTENSITY

SDG:	L1101421	**Analytical Method:**	200.8
Instrument ID:	ICPMS10	**Start Date:**	05/26/19 21:31
Instrument Run:	052619ICPMS10A	**End Date:**	05/27/19 00:59

Client Sample ID	Lab Sample ID	Analysis Date Time	BISMUTH (NO HE)		GERMANIUM		GERMANIUM (NO HE)	
			% Rec.	Q	% Rec.	Q	% Rec.	Q
ICV	ICPMS100526192131	05/26/19 21:31	103		105		107	
ICB	ICPMS100526192141	05/26/19 21:41	103		102		104	
CCV	ICPMS100526192146	05/26/19 21:46	103		105		107	
CCB	ICPMS100526192151	05/26/19 21:51	105		98.70		107	
ICVLL	ICPMS100526192217	05/26/19 22:17	102		101		106	
ICSA	ICPMS100526192223	05/26/19 22:23	105		105		109	
ICSAB	ICPMS100526192228	05/26/19 22:28	107		105		108	
CCV	ICPMS100526192332	05/26/19 23:32	103		99.10		94.80	
CCB	ICPMS100526192337	05/26/19 23:37	106		101		101	
OS	L1101259-01	05/26/19 23:05	108		110		110	
WW-20190520-002-DAY 18	L1101421-01	05/26/19 23:23	106		112		111	
BLANK	R3415109-1	05/26/19 22:51	108		104		103	
LCS	R3415109-2	05/26/19 22:56	107		103		105	
LCSD	R3415109-3	05/26/19 23:00	109		105		106	
SD	R3415109-4	05/26/19 23:09	111		104		109	
MS	R3415109-5	05/26/19 23:14	108		111		112	
MSD	R3415109-6	05/26/19 23:18	107		111		114	
ICSA	ICPMS100527190055	05/27/19 00:55	104		106		121	
ICSAB	ICPMS100527190059	05/27/19 00:59	106		107		119	

14-IN

ICP/MS INTERNAL STANDARDS RELATIVE INTENSITY

SDG:	L1101421	**Analytical Method:**	200.8
Instrument ID:	ICPMS10	**Start Date:**	05/26/19 21:31
Instrument Run:	052619ICPMS10A	**End Date:**	05/27/19 00:59

Client Sample ID	Lab Sample ID	Analysis Date Time	RHODIUM		SCANDIUM		SCANDIUM (NO HE)	
			% Rec.	Q	% Rec.	Q	% Rec.	Q
ICV	ICPMS100526192131	05/26/19 21:31	104		104		108	
ICB	ICPMS100526192141	05/26/19 21:41	101		101		106	
CCV	ICPMS100526192146	05/26/19 21:46	103		104		109	
CCB	ICPMS100526192151	05/26/19 21:51	102		102		107	
ICVLL	ICPMS100526192217	05/26/19 22:17	102		102		110	
ICSA	ICPMS100526192223	05/26/19 22:23	99.60		101		111	
ICSAB	ICPMS100526192228	05/26/19 22:28	100		101		103	
CCV	ICPMS100526192332	05/26/19 23:32	101		98.40		90.20	
CCB	ICPMS100526192337	05/26/19 23:37	102		100		96.60	
OS	L1101259-01	05/26/19 23:05	99.20		96.10		95.80	
WW-20190520-002-DAY 18	L1101421-01	05/26/19 23:23	96.30		95.30		94.20	
BLANK	R3415109-1	05/26/19 22:51	99		95.30		93.20	
LCS	R3415109-2	05/26/19 22:56	99.50		96		97.10	
LCSD	R3415109-3	05/26/19 23:00	101		96.40		98.40	
SD	R3415109-4	05/26/19 23:09	104		99.50		102	
MS	R3415109-5	05/26/19 23:14	100		98.20		99.80	
MSD	R3415109-6	05/26/19 23:18	97.90		95.10		99.10	
ICSA	ICPMS100527190055	05/27/19 00:55	103		104			
ICSAB	ICPMS100527190059	05/27/19 00:59	103		103		121	

14-IN

ICP/MS INTERNAL STANDARDS RELATIVE INTENSITY

SDG:	L1101421	**Analytical Method:**	200.8
Instrument ID:	ICPMS10	**Start Date:**	05/26/19 21:31
Instrument Run:	052619ICPMS10A	**End Date:**	05/27/19 00:59

Client Sample ID	Lab Sample ID	Analysis Date Time	TELLURIUM		TELLURIUM (HIGH HE)		TELLURIUM (NO HE)	
			% Rec.	Q	% Rec.	Q	% Rec.	Q
ICV	ICPMS100526192131	05/26/19 21:31	107		105		107	
ICB	ICPMS100526192141	05/26/19 21:41	103		101		105	
CCV	ICPMS100526192146	05/26/19 21:46	107		105		108	
CCB	ICPMS100526192151	05/26/19 21:51	103		100		106	
ICVLL	ICPMS100526192217	05/26/19 22:17	105		105		109	
ICSA	ICPMS100526192223	05/26/19 22:23	101		100		106	
ICSAB	ICPMS100526192228	05/26/19 22:28	101		102		105	
CCV	ICPMS100526192332	05/26/19 23:32	103		106		105	
CCB	ICPMS100526192337	05/26/19 23:37	103		103		106	
OS	L1101259-01	05/26/19 23:05	100		104		106	
WW-20190520-002-DAY 18	L1101421-01	05/26/19 23:23	94.50		96.10		101	
BLANK	R3415109-1	05/26/19 22:51	98.10		102		104	
LCS	R3415109-2	05/26/19 22:56	101		104		108	
LCSD	R3415109-3	05/26/19 23:00	102		105		109	
SD	R3415109-4	05/26/19 23:09	105		106		111	
MS	R3415109-5	05/26/19 23:14	102		105		108	
MSD	R3415109-6	05/26/19 23:18	99.90		103		108	
ICSA	ICPMS100527190055	05/27/19 00:55	106		103		107	
ICSAB	ICPMS100527190059	05/27/19 00:59	105		104		109	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1101421	**Calibration (begin) date/time:**	05/26/19 21:03
Instrument ID:	ICPMS10	**Calibration (end) date/time:**	05/26/19 21:26
Analytical Method:	200.8	**Analytical Run:**	052619ICPMS10A

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
CHROMIUM	0.0010	.000976563	97.70	0.0020	.001908385	95.40
COBALT	0.0010	.001023909	102	0.0020	.002040219	102
NICKEL	0.0010	.001009003	101	0.0020	.001914534	95.70
COPPER	0.0010	.001008009	101	0.0020	.001963661	98.20
ZINC	0.0010	.001020394	102	0.0020	.002180324	109
ARSENIC	0.0010	.000941004	94.10	0.0020	.001919572	96
SILVER	0.0010	.001007885	101	0.0020	.00192489	96.20
CADMIUM	0.0010	.001046146	105	0.0020	.001929813	96.50
TIN	0.0010	.001012022	101	0.0020	.002032953	102
ANTIMONY	0.0010	.000943113	94.30	0.0020	.002107321	105
THALLIUM	0.0010	.001001559	100	0.0020	.001996955	99.80
LEAD	0.0010	.000973449	97.30	0.0020	.002019072	101
File ID:		20190526210355			20190526210831	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1101421	**Calibration (begin) date/time:**	05/26/19 21:03
Instrument ID:	ICPMS10	**Calibration (end) date/time:**	05/26/19 21:26
Analytical Method:	200.8	**Analytical Run:**	052619ICPMS10A

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
CHROMIUM	0.01	.009548131	95.50	0.05	.04976606	99.50
COBALT	0.01	.009814991	98.10	0.05	.05019496	100
NICKEL	0.01	.009459252	94.60	0.05	.0506565	101
COPPER	0.01	.01012005	101	0.05	.04970956	99.40
ZINC	0.01	.01025804	103	0.05	.05002645	100
ARSENIC	0.01	.009636325	96.40	0.05	.04889284	97.80
SILVER	0.01	.009924141	99.20	0.05	.05017239	100
CADMIUM	0.01	.009865066	98.70	0.05	.0503997	101
TIN	0.01	.009583603	95.80	0.05	.05003256	100
ANTIMONY	0.01	.01025824	103	0.05	.04920694	98.40
THALLIUM	0.01	.009967881	99.70	0.05	.0496338	99.30
LEAD	0.01	.0100998	101	0.05	.05029239	101
File ID:		20190526211307			20190526211742	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1101421	**Calibration (begin) date/time:**	05/26/19 21:03
Instrument ID:	ICPMS10	**Calibration (end) date/time:**	05/26/19 21:26
Analytical Method:	200.8	**Analytical Run:**	052619ICPMS10A

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
CHROMIUM	0.10	.09999564	100	0.20	.2000843	100
COBALT	0.10	.1008686	101	0.20	.1995257	99.80
NICKEL	0.10	.1010921	101	0.20	.1993177	99.70
COPPER	0.10	.09995274	100	0.20	.2000906	100
ZINC	0.10	.1012963	101	0.20	.1993304	99.70
ARSENIC	0.10	.1001808	100	0.20	.2002057	100
SILVER	0.10	.1015731	102	0.20	.1991749	99.60
CADMIUM	0.10	.09994496	99.90	0.20	.1999348	100
TIN	0.10	.1001368	100	0.20	.1999439	100
ANTIMONY	0.10	.1015913	102	0.20	.1993889	99.70
THALLIUM	0.10	.09975476	99.80	0.20	.2002158	100
LEAD	0.10	.1001972	100	0.20	.1998233	99.90
File ID:		20190526212218			20190526212653	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1101421	**Calibration (begin) date/time:**	05/26/19 21:03
Instrument ID:	ICPMS10	**Calibration (end) date/time:**	05/26/19 21:26
Analytical Method:	200.8	**Analytical Run:**	052619ICPMS10A

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
SELENIUM	0.0010	.000965364	96.50	0.0020	.001874722	93.70
File ID:		20190526210355			20190526210831	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1101421	**Calibration (begin) date/time:**	05/26/19 21:03
Instrument ID:	ICPMS10	**Calibration (end) date/time:**	05/26/19 21:26
Analytical Method:	200.8	**Analytical Run:**	052619ICPMS10A

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
SELENIUM	0.01	.01006164	101	0.05	.04948342	99
File ID:		20190526211307			20190526211742	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1101421	**Calibration (begin) date/time:**	05/26/19 21:03
Instrument ID:	ICPMS10	**Calibration (end) date/time:**	05/26/19 21:26
Analytical Method:	200.8	**Analytical Run:**	052619ICPMS10A

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
SELENIUM	0.10	.09953104	99.50	0.20	.200362	100
File ID:		20190526212218			20190526212653	

16B-IN

ICP/MS INITIAL CALIBRATION

SDG:	L1101421	**Calibration (begin) date/time:**	05/26/19 21:03
Instrument ID:	ICPMS10	**Calibration (end) date/time:**	05/26/19 21:26
Analytical Method:	200.8	**Analytical Run:**	052619ICPMS10A

Analyte	Mass	Cal. Type	Weightage	Corr.	Slope	Incpt
CHROMIUM	52	8	5	0.999998	125.6466	0.380083
COBALT	59	8	5	0.999985	194.0263	0.007487
NICKEL	60	8	5	0.999965	51.42231	0.038429
COPPER	63	8	5	0.999998	42.49982	0.014861
ZINC	66	8	5	0.999971	23.37023	0.021124
ARSENIC	75	8	5	0.999984	20.43208	0.000956
SILVER	107	8	5	0.999955	9.305234	0.000389
CADMIUM	111	8	5	0.999997	1.264375	0.000011
TIN	118	8	5	0.999997	2.54754	0.000306
ANTIMONY	121	8	5	0.999947	2.915108	0.000484
THALLIUM	205	8	5	0.999997	1.886958	0.000008
LEAD	208	8	5	0.999998	1.372618	0.000155

Calibration Type

8 = Linear Regression Forced through Blank

Weightage

5 = None

16B-IN

ICP/MS INITIAL CALIBRATION

SDG:	L1101421	**Calibration (begin) date/time:**	05/26/19 21:03
Instrument ID:	ICPMS10	**Calibration (end) date/time:**	05/26/19 21:26
Analytical Method:	200.8	**Analytical Run:**	052619ICPMS10A

Analyte	Mass	Cal. Type	Weightage	Corr.	Slope	Incpt
SELENIUM	78	8	5	0.999992	0.164612	0.00002

Calibration Type

8 = Linear Regression Forced through Blank

Weightage

5 = None

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1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
WW-20190520-002-DAY 18

Lab Sample ID:	L1101421-01	**SDG:**	L1101421
Client Sample ID:	WW-20190520-002-DAY 18	**Collected Date/Time:**	05/20/19 11:30
Lab File ID:	09	**Received Date/Time:**	05/22/19 08:00
Instrument ID:	WETBAL10	**Preparation Date/Time:**	05/23/19 10:13
Analytical Batch:	WG1285184	**Analysis Date/Time:**	05/23/19 10:50
Dilution Factor:	1	**Prep Method:**	SM 2540 C
Analytical Method:	2540 C-2011	**Sample Vol Used:**	20 ml
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
Dissolved Solids	DSOLIDS	2090		14.1	50.0	50.0

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414840-1

Lab Sample ID:	R3414840-1	**SDG:**	L1101421
Client Sample ID:	BLANK	**Collected Date/Time:**	
Lab File ID:	01	**Received Date/Time:**	
Instrument ID:	WETBAL10	**Preparation Date/Time:**	05/23/19 10:13
Analytical Batch:	WG1285184	**Analysis Date/Time:**	05/23/19 10:50
Dilution Factor:	1	**Prep Method:**	SM 2540 C
Analytical Method:	2540 C-2011	**Sample Vol Used:**	100 ml
Matrix:	WW	**Initial Wt/Vol:**	
Total Solids (%):		**Final Wt/Vol:**	

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
Dissolved Solids	DSOLIDS	U		2.82	10	10.0

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414840-3

Lab Sample ID:	R3414840-3	**SDG:**	L1101421
Client Sample ID:	DUP	**Collected Date/Time:**	05/14/19 06:55
Lab File ID:	02	**Received Date/Time:**	05/15/19 08:45
Instrument ID:	WETBAL10	**Preparation Date/Time:**	05/23/19 10:13
Analytical Batch:	WG1285184	**Analysis Date/Time:**	05/23/19 10:50
Dilution Factor:	1	**Prep Method:**	SM 2540 C
Analytical Method:	2540 C-2011	**Sample Vol Used:**	1 ml
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
Dissolved Solids	DSOLIDS	66300	J3	282	1000	1000

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414840-2

Lab Sample ID:	R3414840-2	**SDG:**	L1101421
Client Sample ID:	LCS	**Collected Date/Time:**	
Lab File ID:	03	**Received Date/Time:**	
Instrument ID:	WETBAL10	**Preparation Date/Time:**	05/23/19 10:13
Analytical Batch:	WG1285184	**Analysis Date/Time:**	05/23/19 10:50
Dilution Factor:	1	**Prep Method:**	SM 2540 C
Analytical Method:	2540 C-2011	**Sample Vol Used:**	10 ml
Matrix:	WW	**Initial Wt/Vol:**	
Total Solids (%):		**Final Wt/Vol:**	

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
Dissolved Solids	DSOLIDS	8760		28.2	100	100

3-IN BLANKS

SDG:	L1101421	**Calibration (begin) date/time:**	_____
Instrument ID:	WETBAL10	**Calibration (end) date/time:**	_____
Analytical Method:	2540 C-2011	**Analytical Run:**	WG1285184

Sample ID:	**BLANK Result**	**BLANK Qual**
File ID:	01	
Analyte	mg/l	
DISSOLVED SOLIDS	U	

6-IN

DUPLICATES

L1101421-01

SAMPLE NO.:
R3414840-3

DUP Sample / File ID:	R3414840-3 / 02	**SDG:**	L1101421
OS Sample / File ID:	L1099257-02 / 04	**Analytical Batch:**	WG1285184
Instrument ID:	WETBAL10	**Dilution Factor:**	1
Analytical Method:	2540 C-2011	**Matrix:**	WW

Analyte	**OS Result**	**DUP Result**	**RPD**	**RPD Limits**
	mg/l	*mg/l*	*mg/l*	*mg/l*
Dissolved Solids	40300	66300	48.8*	5

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

7-IN

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY

L1101421-01

SAMPLE NO.:
R3414840-2

LCS Sample / File ID:	R3414840-2 / 03	**SDG:**	L1101421
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1285184
Instrument ID:	WETBAL10	**Dilution Factor:**	1
Analytical Method:	2540 C-2011	**Matrix:**	WW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	mg/l	*mg/l*		*%*	*%*	*%*	*%*	*%*
Dissolved Solids	8800	8760		99.5		85.0 - 115		

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

12-IN

ANALYSIS LOG

SDG:	L1101421	**Analytical Method:**	2540 C-2011
Instrument ID:	WETBAL10	**Calibration Start Date:**	_____
Analytical Run:	WG1285184	**Calibration End Date:**	_____

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
BLANK	R3414840-1	01	05/23/19 10:50	1	WG1285184
DUP	R3414840-3	02	05/23/19 10:50	1	WG1285184
LCS	R3414840-2	03	05/23/19 10:50	1	WG1285184
OS	L1099257-02	04	05/23/19 10:50	1	WG1285184
WW-20190520-002-DAY 18	L1101421-01	09	05/23/19 10:50	1	WG1285184

2540 D-2011 Gravimetric Analysis

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
WW-20190520-002-DAY 18

Lab Sample ID:	L1101421-01	**SDG:**	L1101421
Client Sample ID:	WW-20190520-002-DAY 18	**Collected Date/Time:**	05/20/19 11:30
Lab File ID:	16	**Received Date/Time:**	05/22/19 08:00
Instrument ID:	WETBAL10	**Preparation Date/Time:**	05/23/19 15:39
Analytical Batch:	WG1285409	**Analysis Date/Time:**	05/23/19 20:23
Dilution Factor:	1	**Prep Method:**	SM 2540 D
Analytical Method:	2540 D-2011	**Sample Vol Used:**	1000 ml
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	**CAS**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
		mg/l		*mg/l*	*mg/l*	*mg/l*
Suspended Solids	SSOLIDS	0.500	J	0.350	2.50	2.50

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414724-1

Lab Sample ID:	R3414724-1	**SDG:**	L1101421
Client Sample ID:	BLANK	**Collected Date/Time:**	
Lab File ID:	01	**Received Date/Time:**	
Instrument ID:	WETBAL10	**Preparation Date/Time:**	05/23/19 15:39
Analytical Batch:	WG1285409	**Analysis Date/Time:**	05/23/19 20:23
Dilution Factor:	1	**Prep Method:**	SM 2540 D
Analytical Method:	2540 D-2011	**Sample Vol Used:**	1000 ml
Matrix:	WW	**Initial Wt/Vol:**	
Total Solids (%):		**Final Wt/Vol:**	

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
Suspended Solids	SSOLIDS	U		0.350	2.50	2.50

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414724-3

Lab Sample ID:	R3414724-3	**SDG:**	L1101421
Client Sample ID:	DUP	**Collected Date/Time:**	05/16/19 08:45
Lab File ID:	02	**Received Date/Time:**	05/16/19 14:45
Instrument ID:	WETBAL10	**Preparation Date/Time:**	05/23/19 15:39
Analytical Batch:	WG1285409	**Analysis Date/Time:**	05/23/19 20:23
Dilution Factor:	1	**Prep Method:**	SM 2540 D
Analytical Method:	2540 D-2011	**Sample Vol Used:**	275 ml
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
Suspended Solids	SSOLIDS	31.3		1.27	9.10	9.10

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414724-4

Lab Sample ID:	R3414724-4	**SDG:**	L1101421
Client Sample ID:	DUP	**Collected Date/Time:**	05/18/19 00:00
Lab File ID:	03	**Received Date/Time:**	05/21/19 08:45
Instrument ID:	WETBAL10	**Preparation Date/Time:**	05/23/19 15:39
Analytical Batch:	WG1285409	**Analysis Date/Time:**	05/23/19 20:23
Dilution Factor:	1	**Prep Method:**	SM 2540 D
Analytical Method:	2540 D-2011	**Sample Vol Used:**	500 ml
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	**CAS**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
		mg/l		*mg/l*	*mg/l*	*mg/l*
Suspended Solids	SSOLIDS	10.6	P1	0.700	5	5.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414724-2

Lab Sample ID:	R3414724-2	**SDG:**	L1101421
Client Sample ID:	LCS	**Collected Date/Time:**	
Lab File ID:	04	**Received Date/Time:**	
Instrument ID:	WETBAL10	**Preparation Date/Time:**	05/23/19 15:39
Analytical Batch:	WG1285409	**Analysis Date/Time:**	05/23/19 20:23
Dilution Factor:	1	**Prep Method:**	SM 2540 D
Analytical Method:	2540 D-2011	**Sample Vol Used:**	25 ml
Matrix:	WW	**Initial Wt/Vol:**	
Total Solids (%):		**Final Wt/Vol:**	

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
Suspended Solids	SSOLIDS	808		14.0	100	100

3-IN BLANKS

SDG:	L1101421	**Calibration (begin) date/time:**	_____
Instrument ID:	WETBAL10	**Calibration (end) date/time:**	_____
Analytical Method:	2540 D-2011	**Analytical Run:**	WG1285409

Sample ID:	**BLANK Result**	**BLANK Qual**
File ID:	01	
Analyte	mg/l	
SUSPENDED SOLIDS	U	

6-IN

DUPLICATES

L1101421-01

SAMPLE NO.:
R3414724-3

DUP Sample / File ID:	R3414724-3 / 02	**SDG:**	L1101421
OS Sample / File ID:	L1099707-01 / 07	**Analytical Batch:**	WG1285409
Instrument ID:	WETBAL10	**Dilution Factor:**	1
Analytical Method:	2540 D-2011	**Matrix:**	WW

Analyte	**OS Result**	**DUP Result**	**RPD**	**RPD Limits**
	mg/l	*mg/l*	*mg/l*	*mg/l*
Suspended Solids	30.6	31.3	2.33	5

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

6-IN

DUPLICATES

L1101421-01

SAMPLE NO.:
R3414724-4

DUP Sample / File ID:	R3414724-4 / 03	**SDG:**	L1101421
OS Sample / File ID:	L1101136-04 / 15	**Analytical Batch:**	WG1285409
Instrument ID:	WETBAL10	**Dilution Factor:**	1
Analytical Method:	2540 D-2011	**Matrix:**	WW

Analyte	**OS Result**	**DUP Result**	**RPD**	**RPD Limits**
	mg/l	*mg/l*	*mg/l*	*mg/l*
Suspended Solids	11.2	10.6	5.50*	5

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

7-IN

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY

L1101421-01

SAMPLE NO.:
R3414724-2

LCS Sample / File ID:	R3414724-2 / 04	**SDG:**	L1101421
LCSD Sample / File ID:		**Analytical Batch:**	WG1285409
Instrument ID:	WETBAL10	**Dilution Factor:**	1
Analytical Method:	2540 D-2011	**Matrix:**	WW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	mg/l	*mg/l*		*%*	*%*	*%*	*%*	*%*
Suspended Solids	773	808		105		85.0 - 115		

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

12-IN

ANALYSIS LOG

SDG:	L1101421	**Analytical Method:**	2540 D-2011
Instrument ID:	WETBAL10	**Calibration Start Date:**	_____
Analytical Run:	WG1285409	**Calibration End Date:**	_____

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
BLANK	R3414724-1	01	05/23/19 20:23	1	WG1285409
DUP	R3414724-3	02	05/23/19 20:23	1	WG1285409
DUP	R3414724-4	03	05/23/19 20:23	1	WG1285409
LCS	R3414724-2	04	05/23/19 20:23	1	WG1285409
OS	L1099707-01	07	05/23/19 20:23	1	WG1285409
OS	L1101136-04	15	05/23/19 20:23	1	WG1285409
WW-20190520-002-DAY 18	L1101421-01	16	05/23/19 20:23	1	WG1285409

300.0 Wet Chemistry

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
WW-20190520-002-DAY 18

Lab Sample ID:	L1101421-01	**SDG:**	L1101421
Client Sample ID:	WW-20190520-002-DAY 18	**Collected Date/Time:**	05/20/19 11:30
Lab File ID:	39.0000.TXT	**Received Date/Time:**	05/22/19 08:00
Instrument ID:	IC-8	**Preparation Date/Time:**	05/24/19 23:57
Analytical Batch:	WG1286357	**Analysis Date/Time:**	05/24/19 23:57
Dilution Factor:	10	**Prep Method:**	300.0
Analytical Method:	300.0	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
Chloride	16887-00-6	423		0.519	1.00	10.0

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414892-1

Lab Sample ID:	R3414892-1	**SDG:**	L1101421
Client Sample ID:	BLANK	**Collected Date/Time:**	
Lab File ID:	10.0000.TXT	**Received Date/Time:**	
Instrument ID:	IC-8	**Preparation Date/Time:**	05/24/19 14:56
Analytical Batch:	WG1286357	**Analysis Date/Time:**	05/24/19 14:56
Dilution Factor:	1	**Prep Method:**	300.0
Analytical Method:	300.0	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	
Total Solids (%):		**Final Wt/Vol:**	

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
Chloride	16887-00-6	U		0.0519	1	1.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414892-2

Lab Sample ID:	R3414892-2	**SDG:**	L1101421
Client Sample ID:	LCS	**Collected Date/Time:**	
Lab File ID:	11.0000.TXT	**Received Date/Time:**	
Instrument ID:	IC-8	**Preparation Date/Time:**	05/24/19 15:14
Analytical Batch:	WG1286357	**Analysis Date/Time:**	05/24/19 15:14
Dilution Factor:	1	**Prep Method:**	300.0
Analytical Method:	300.0	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	
Total Solids (%):		**Final Wt/Vol:**	

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
Chloride	16887-00-6	40.3		0.0519	1	1.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414892-3

Lab Sample ID:	R3414892-3	**SDG:**	L1101421
Client Sample ID:	DUP	**Collected Date/Time:**	05/23/19 09:00
Lab File ID:	14.0000.TXT	**Received Date/Time:**	05/24/19 08:45
Instrument ID:	IC-8	**Preparation Date/Time:**	05/24/19 16:37
Analytical Batch:	WG1286357	**Analysis Date/Time:**	05/24/19 16:37
Dilution Factor:	1	**Prep Method:**	300.0
Analytical Method:	300.0	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
Chloride	16887-00-6	9.09		0.0519	1	1.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414892-6

Lab Sample ID:	R3414892-6	**SDG:**	L1101421
Client Sample ID:	DUP	**Collected Date/Time:**	05/16/19 06:51
Lab File ID:	31.0000.TXT	**Received Date/Time:**	05/17/19 08:45
Instrument ID:	IC-8	**Preparation Date/Time:**	05/24/19 21:36
Analytical Batch:	WG1286357	**Analysis Date/Time:**	05/24/19 21:36
Dilution Factor:	1	**Prep Method:**	300.0
Analytical Method:	300.0	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
Chloride	16887-00-6	31.9		0.0519	1	1.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414892-4

Lab Sample ID:	R3414892-4	**SDG:**	L1101421
Client Sample ID:	MS	**Collected Date/Time:**	05/23/19 09:00
Lab File ID:	15.0000.TXT	**Received Date/Time:**	05/24/19 08:45
Instrument ID:	IC-8	**Preparation Date/Time:**	05/24/19 16:54
Analytical Batch:	WG1286357	**Analysis Date/Time:**	05/24/19 16:54
Dilution Factor:	1	**Prep Method:**	300.0
Analytical Method:	300.0	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
Chloride	16887-00-6	58.4		0.0519	1	1.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414892-7

Lab Sample ID:	R3414892-7	**SDG:**	L1101421
Client Sample ID:	MS	**Collected Date/Time:**	05/16/19 06:51
Lab File ID:	32.0000.TXT	**Received Date/Time:**	05/17/19 08:45
Instrument ID:	IC-8	**Preparation Date/Time:**	05/24/19 21:54
Analytical Batch:	WG1286357	**Analysis Date/Time:**	05/24/19 21:54
Dilution Factor:	1	**Prep Method:**	300.0
Analytical Method:	300.0	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
Chloride	16887-00-6	80.8		0.0519	1	1.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414892-5

Lab Sample ID:	R3414892-5	**SDG:**	L1101421
Client Sample ID:	MSD	**Collected Date/Time:**	05/23/19 09:00
Lab File ID:	16.0000.TXT	**Received Date/Time:**	05/24/19 08:45
Instrument ID:	IC-8	**Preparation Date/Time:**	05/24/19 17:12
Analytical Batch:	WG1286357	**Analysis Date/Time:**	05/24/19 17:12
Dilution Factor:	1	**Prep Method:**	300.0
Analytical Method:	300.0	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
Chloride	16887-00-6	58.6		0.0519	1	1.00

2-IN

CALIBRATION VERIFICATION

SDG:	L1101421	**Calibration (begin) date/time:**	05/08/19 17:16
Instrument ID:	IC-8	**Calibration (end) date/time:**	05/08/19 18:45
Analytical Method:	300.0	**Analytical Run:**	052419
Concentration Units:	mg/l		

	ICV				**CCV**				**CCV**			
Sample ID:	IC-80524191438				IC-80524191840				IC-80524192211			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
CHLORIDE	50	51.3845	103		50	49.6565	99.30		50	49.6632	99.30	

ICV Limits: 90 - 110 CCV Limits: 90 - 110

2-IN

CALIBRATION VERIFICATION

SDG:	L1101421	**Calibration (begin) date/time:**	05/08/19 17:16
Instrument ID:	IC-8	**Calibration (end) date/time:**	05/08/19 18:45
Analytical Method:	300.0	**Analytical Run:**	052419
Concentration Units:	mg/l		

CCV

Sample ID: IC-80525190125

Analyte	True	Found	%R	%RSD
CHLORIDE	50	49.7511	99.50	

ICV Limits: 90 - 110 CCV Limits: 90 - 110

3-IN BLANKS

SDG:	L1101421	**Calibration (begin) date/time:**	05/08/19 17:16
Instrument ID:	IC-8	**Calibration (end) date/time:**	05/08/19 18:45
Analytical Method:	300.0	**Analytical Run:**	052419

Sample ID:	**BLANK Result**	**BLANK Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**
File ID:	10.0000.TXT		22.0000.TXT		34.0000.TXT		45.0000.TXT	
Analyte	mg/l		mg/l		mg/l		mg/l	
CHLORIDE	U		0.0000	U	0.0000	U	0.0000	U

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1101421-01

SAMPLE NO.:
R3414892-4
R3414892-5

MS Sample / File ID:	R3414892-4 / 15.0000.TXT	**SDG:**	L1101421
MSD Sample / File ID:	R3414892-5 / 16.0000.TXT	**Analytical Batch:**	WG1286357
OS Sample / File ID:	L1102190-01 / 13.0000.TXT	**Matrix:**	WW
Instrument ID:	IC-8		
Analytical Method:	300.0		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limits
	mg/l	*mg/l*	*mg/l*	*mg/l*	*%*	*%*		*%*	*%*	*%*
Chloride	50.0	9.07	58.4	58.6	98.6	99.1	1	80.0 - 120	0.437	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1101421-01

SAMPLE NO.:
R3414892-7

MS Sample / File ID:	R3414892-7 / 32.0000.TXT	**SDG:**	L1101421
MSD Sample / File ID:	_____	**Analytical Batch:**	WG1286357
OS Sample / File ID:	L1099817-03 / 30.0000.TXT	**Matrix:**	WW
Instrument ID:	IC-8		
Analytical Method:	300.0		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limits
	mg/l	*mg/l*	*mg/l*		*%*	*%*		*%*	*%*	*%*
Chloride	50.0	31.8	80.8		98.0		1	80.0 - 120		

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

6-IN

DUPLICATES

L1101421-01

SAMPLE NO.:
R3414892-3

DUP Sample / File ID:	R3414892-3 / 14.0000.TXT	**SDG:**	L1101421
OS Sample / File ID:	L1102190-01 / 13.0000.TXT	**Analytical Batch:**	WG1286357
Instrument ID:	IC-8	**Dilution Factor:**	1
Analytical Method:	300.0	**Matrix:**	WW

Analyte	**OS Result**	**DUP Result**	**RPD**	**RPD Limits**
	mg/l	*mg/l*	*mg/l*	*mg/l*
Chloride	9.07	9.09	0.176	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

6-IN

DUPLICATES

L1101421-01

SAMPLE NO.:
R3414892-6

DUP Sample / File ID:	R3414892-6 / 31.0000.TXT	**SDG:**	L1101421
OS Sample / File ID:	L1099817-03 / 30.0000.TXT	**Analytical Batch:**	WG1286357
Instrument ID:	IC-8	**Dilution Factor:**	1
Analytical Method:	300.0	**Matrix:**	WW

Analyte	**OS Result**	**DUP Result**	**RPD**	**RPD Limits**
	mg/l	*mg/l*	*mg/l*	*mg/l*
Chloride	31.8	31.9	0.380	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

7-IN

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY

L1101421-01

SAMPLE NO.:
R3414892-2

LCS Sample / File ID:	R3414892-2 / 11.0000.TXT	**SDG:**	L1101421
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1286357
Instrument ID:	IC-8	**Dilution Factor:**	1
Analytical Method:	300.0	**Matrix:**	WW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	mg/l	*mg/l*		*%*	*%*	*%*	*%*	*%*
Chloride	40.0	40.3		101		90.0 - 110		

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

12-IN

ANALYSIS LOG

SDG:	L1101421	**Analytical Method:**	300.0
Instrument ID:	IC-8	**Calibration Start Date:**	05/08/19 17:16
Analytical Run:	050819_2	**Calibration End Date:**	05/08/19 18:45

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
CAL	STD 1	02.0000.TXT	05/08/19 17:16	1	
CAL	STD 2	03.0000.TXT	05/08/19 17:34	1	
CAL	STD 3	04.0000.TXT	05/08/19 17:52	1	
CAL	STD 4	05.0000.TXT	05/08/19 18:10	1	
CAL	STD 5	06.0000.TXT	05/08/19 18:27	1	
CAL	STD 6	07.0000.TXT	05/08/19 18:45	1	

12-IN

ANALYSIS LOG

SDG:	L1101421	**Analytical Method:**	300.0
Instrument ID:	IC-8	**Calibration Start Date:**	05/08/19 17:16
Analytical Run:	052419	**Calibration End Date:**	05/08/19 18:45

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
ICV	IC-80524191438	09.0000.TXT	05/24/19 14:38	1	
BLANK	R3414892-1	10.0000.TXT	05/24/19 14:56	1	WG1286357
LCS	R3414892-2	11.0000.TXT	05/24/19 15:14	1	WG1286357
RL	IC-80524191531	12.0000.TXT	05/24/19 15:31	1	
OS	L1102190-01	13.0000.TXT	05/24/19 16:20	1	WG1286357
DUP	R3414892-3	14.0000.TXT	05/24/19 16:37	1	WG1286357
MS	R3414892-4	15.0000.TXT	05/24/19 16:54	1	WG1286357
MSD	R3414892-5	16.0000.TXT	05/24/19 17:12	1	WG1286357
CCV	IC-80524191840	21.0000.TXT	05/24/19 18:40	1	
CCB	IC-80524191858	22.0000.TXT	05/24/19 18:58	1	
OS	L1099817-03	30.0000.TXT	05/24/19 21:18	1	WG1286357
DUP	R3414892-6	31.0000.TXT	05/24/19 21:36	1	WG1286357
MS	R3414892-7	32.0000.TXT	05/24/19 21:54	1	WG1286357
CCV	IC-80524192211	33.0000.TXT	05/24/19 22:11	1	
CCB	IC-80524192229	34.0000.TXT	05/24/19 22:29	1	
WW-20190520-002-DAY 18	L1101421-01	39.0000.TXT	05/24/19 23:57	10	WG1286357
CCV	IC-80525190125	44.0000.TXT	05/25/19 01:25	1	
CCB	IC-80525190143	45.0000.TXT	05/25/19 01:43	1	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1101421	**Calibration (begin) date/time:**	05/08/19 17:16
Instrument ID:	IC-8	**Calibration (end) date/time:**	05/08/19 18:45
Analytical Method:	300.0	**Analytical Run:**	052419

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
CHLORIDE	1	1.0189	102	5	4.9298	98.60
File ID:		02.0000.TXT			03.0000.TXT	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1101421	**Calibration (begin) date/time:**	05/08/19 17:16
Instrument ID:	IC-8	**Calibration (end) date/time:**	05/08/19 18:45
Analytical Method:	300.0	**Analytical Run:**	052419

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
CHLORIDE	10	9.9177	99.20	25	25.3326	101
File ID:		04.0000.TXT			05.0000.TXT	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1101421	**Calibration (begin) date/time:**	05/08/19 17:16
Instrument ID:	IC-8	**Calibration (end) date/time:**	05/08/19 18:45
Analytical Method:	300.0	**Analytical Run:**	052419

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
CHLORIDE	50	49.2021	98.40	100	100.5989	101
File ID:		06.0000.TXT			07.0000.TXT	

16C-IN

GENERAL CHEMISTRY
INITIAL CALIBRATION

SDG:	L1101421	**Calibration (begin) date/time:**	05/08/19 17:16
Instrument ID:	IC-8	**Calibration (end) date/time:**	05/08/19 18:45
Analytical Method:	300.0	**Analytical Run:**	052419

Analyte	Cal. Type	Weightage	Corr.	Coef1	Coef2	Slope	Incpt	% RSD
CHLORIDE	5	1	0.99993			0.075	0.001	3.596

Calibration Type

5 = Weighted Linear Regression

Weightage

1 = Inverse Concentration

350.1 Wet Chemistry

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
WW-20190520-002-DAY 18

Lab Sample ID:	L1101421-01	**SDG:**	L1101421
Client Sample ID:	WW-20190520-002-DAY 18	**Collected Date/Time:**	05/20/19 11:30
Lab File ID:	20190524210300	**Received Date/Time:**	05/22/19 08:00
Instrument ID:	FS3100-01	**Preparation Date/Time:**	05/24/19 21:03
Analytical Batch:	WG1286272	**Analysis Date/Time:**	05/24/19 21:03
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	**CAS**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
		mg/l		*mg/l*	*mg/l*	*mg/l*
Ammonia Nitrogen	7664-41-7	0.0620	B J P1	0.0317	0.100	0.100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414870-1

Lab Sample ID:	R3414870-1	**SDG:**	L1101421
Client Sample ID:	BLANK	**Collected Date/Time:**	
Lab File ID:	20190524201700	**Received Date/Time:**	
Instrument ID:	FS3100-01	**Preparation Date/Time:**	05/24/19 20:17
Analytical Batch:	WG1286272	**Analysis Date/Time:**	05/24/19 20:17
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	
Total Solids (%):		**Final Wt/Vol:**	

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
Ammonia Nitrogen	7664-41-7	0.0650	J	0.0317	0.10	0.100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414870-2

Lab Sample ID:	R3414870-2	**SDG:**	L1101421
Client Sample ID:	LCS	**Collected Date/Time:**	
Lab File ID:	20190524201900	**Received Date/Time:**	
Instrument ID:	FS3100-01	**Preparation Date/Time:**	05/24/19 20:19
Analytical Batch:	WG1286272	**Analysis Date/Time:**	05/24/19 20:19
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	
Total Solids (%):		**Final Wt/Vol:**	

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
Ammonia Nitrogen	7664-41-7	7.17		0.0317	0.10	0.100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414870-3

Lab Sample ID:	R3414870-3	**SDG:**	L1101421
Client Sample ID:	DUP	**Collected Date/Time:**	05/17/19 07:15
Lab File ID:	20190524202500	**Received Date/Time:**	05/17/19 12:30
Instrument ID:	FS3100-01	**Preparation Date/Time:**	05/24/19 20:25
Analytical Batch:	WG1286272	**Analysis Date/Time:**	05/24/19 20:25
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	
Total Solids (%):		**Final Wt/Vol:**	

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
Ammonia Nitrogen	7664-41-7	0.167	P1	0.0317	0.10	0.100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414870-6

Lab Sample ID:	R3414870-6	**SDG:**	L1101421
Client Sample ID:	DUP	**Collected Date/Time:**	05/20/19 11:30
Lab File ID:	20190524210500	**Received Date/Time:**	05/22/19 08:00
Instrument ID:	FS3100-01	**Preparation Date/Time:**	05/24/19 21:05
Analytical Batch:	WG1286272	**Analysis Date/Time:**	05/24/19 21:05
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	**CAS**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
		mg/l		*mg/l*	*mg/l*	*mg/l*
Ammonia Nitrogen	7664-41-7	0.0770	J P1	0.0317	0.10	0.100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414870-4

Lab Sample ID:	R3414870-4	**SDG:**	L1101421
Client Sample ID:	MS	**Collected Date/Time:**	05/17/19 07:00
Lab File ID:	20190524202800	**Received Date/Time:**	05/17/19 12:30
Instrument ID:	FS3100-01	**Preparation Date/Time:**	05/24/19 20:28
Analytical Batch:	WG1286272	**Analysis Date/Time:**	05/24/19 20:28
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
Ammonia Nitrogen	7664-41-7	5.16		0.0317	0.10	0.100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414870-7

Lab Sample ID:	R3414870-7	**SDG:**	L1101421
Client Sample ID:	MS	**Collected Date/Time:**	05/21/19 11:30
Lab File ID:	20190524210800	**Received Date/Time:**	05/23/19 08:00
Instrument ID:	FS3100-01	**Preparation Date/Time:**	05/24/19 21:08
Analytical Batch:	WG1286272	**Analysis Date/Time:**	05/24/19 21:08
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	**CAS**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
		mg/l		*mg/l*	*mg/l*	*mg/l*
Ammonia Nitrogen	7664-41-7	5.17		0.0317	0.10	0.100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414870-5

Lab Sample ID:	R3414870-5	**SDG:**	L1101421
Client Sample ID:	MSD	**Collected Date/Time:**	05/17/19 07:00
Lab File ID:	20190524203000	**Received Date/Time:**	05/17/19 12:30
Instrument ID:	FS3100-01	**Preparation Date/Time:**	05/24/19 20:30
Analytical Batch:	WG1286272	**Analysis Date/Time:**	05/24/19 20:30
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
Ammonia Nitrogen	7664-41-7	5.17		0.0317	0.10	0.100

2-IN

CALIBRATION VERIFICATION

SDG:	L1101421	**Calibration (begin) date/time:**	05/24/19 13:25
Instrument ID:	FS3100-01	**Calibration (end) date/time:**	05/24/19 13:33
Analytical Method:	350.1	**Analytical Run:**	052419_3
Concentration Units:	mg/l		

	ICV				**ICV**				**CCV**			
Sample ID:	FS3100-010524192014				FS3100-010524192016				FS3100-010524192033			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
AMMONIA NITROGEN	5	5.133	103		5	5.142	103		5	5.162	103	

ICV Limits: 90 - 110 CCV Limits: 90 - 110

2-IN

CALIBRATION VERIFICATION

SDG:	L1101421	**Calibration (begin) date/time:**	05/24/19 13:25
Instrument ID:	FS3100-01	**Calibration (end) date/time:**	05/24/19 13:33
Analytical Method:	350.1	**Analytical Run:**	052419_3
Concentration Units:	mg/l		

	CCV				CCV			
Sample ID:	FS3100-010524192054				FS3100-010524192110			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD
AMMONIA NITROGEN	5	5.158	103		5	5.140	103	

ICV Limits: 90 - 110 CCV Limits: 90 - 110

3-IN BLANKS

SDG:	L1101421	**Calibration (begin) date/time:**	05/24/19 13:25
Instrument ID:	FS3100-01	**Calibration (end) date/time:**	05/24/19 13:33
Analytical Method:	350.1	**Analytical Run:**	052419_3

Sample ID:	**BLANK Result**	**BLANK Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**
File ID:	20190524201700		20190524203500		20190524205500		20190524211100	
Analyte	mg/l		mg/l		mg/l		mg/l	
AMMONIA NITROGEN	0.0650	J	-0.09400		-0.09800		-0.09500	

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1101421-01

SAMPLE NO.:
R3414870-4
R3414870-5

MS Sample / File ID:	R3414870-4 / 20190524202800	**SDG:**	L1101421
MSD Sample / File ID:	R3414870-5 / 20190524203000	**Analytical Batch:**	WG1286272
OS Sample / File ID:	L1100126-01 / 20190524202700	**Matrix:**	WW
Instrument ID:	FS3100-01		
Analytical Method:	350.1		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limits
	mg/l	*mg/l*	*mg/l*	*mg/l*	*%*	*%*		*%*	*%*	*%*
Ammonia Nitrogen	5.00	ND	5.16	5.17	103	103	1	90.0 - 110	0.174	10

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1101421-01

SAMPLE NO.:
R3414870-7

MS Sample / File ID:	R3414870-7 / 20190524210800	**SDG:**	L1101421
MSD Sample / File ID:	_____	**Analytical Batch:**	WG1286272
OS Sample / File ID:	L1101774-01 / 20190524210600	**Matrix:**	WW
Instrument ID:	FS3100-01		
Analytical Method:	350.1		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limits
	mg/l	*mg/l*	*mg/l*		*%*	*%*		*%*	*%*	*%*
Ammonia Nitrogen	5.00	0.0910	5.17		102		1	90.0 - 110		

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

6-IN

DUPLICATES

L1101421-01

SAMPLE NO.:
R3414870-3

DUP Sample / File ID:	R3414870-3 / 20190524202500	**SDG:**	L1101421
OS Sample / File ID:	L1100125-01 / 20190524202400	**Analytical Batch:**	WG1286272
Instrument ID:	FS3100-01	**Dilution Factor:**	1
Analytical Method:	350.1	**Matrix:**	WW

Analyte	**OS Result**	**DUP Result**	**RPD**	**RPD Limits**
	mg/l	*mg/l*	*mg/l*	*mg/l*
Ammonia Nitrogen	ND	0.167	200*	10

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

6-IN

DUPLICATES

L1101421-01

SAMPLE NO.:
R3414870-6

DUP Sample / File ID:	R3414870-6 / 20190524210500	**SDG:**	L1101421
OS Sample / File ID:	L1101421-01 / 20190524210300	**Analytical Batch:**	WG1286272
Instrument ID:	FS3100-01	**Dilution Factor:**	1
Analytical Method:	350.1	**Matrix:**	WW

Analyte	**OS Result**	**DUP Result**	**RPD**	**RPD Limits**
	mg/l	*mg/l*	*mg/l*	*mg/l*
Ammonia Nitrogen	0.0620	0.0770	21.6*	10

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

7-IN

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY

L1101421-01

SAMPLE NO.:
R3414870-2

LCS Sample / File ID:	R3414870-2 / 20190524201900	**SDG:**	L1101421
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1286272
Instrument ID:	FS3100-01	**Dilution Factor:**	1
Analytical Method:	350.1	**Matrix:**	WW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	mg/l	*mg/l*		*%*	*%*	*%*	*%*	*%*
Ammonia Nitrogen	7.50	7.17		95.5		90.0 - 110		

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

12-IN

ANALYSIS LOG

SDG:	L1101421	**Analytical Method:**	350.1
Instrument ID:	FS3100-01	**Calibration Start Date:**	05/24/19 13:25
Analytical Run:	052419_2	**Calibration End Date:**	05/24/19 13:33

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
CAL	10.0	20190524132500	05/24/19 13:25	1	
CAL	5.00	20190524132700	05/24/19 13:27	1	
CAL	2.50	20190524132900	05/24/19 13:29	1	
CAL	1.00	20190524133000	05/24/19 13:30	1	
CAL	0.10	20190524133200	05/24/19 13:32	1	
CAL	0.00	20190524133300	05/24/19 13:33	1	

12-IN

ANALYSIS LOG

SDG:	L1101421	**Analytical Method:**	350.1
Instrument ID:	FS3100-01	**Calibration Start Date:**	05/24/19 13:25
Analytical Run:	052419_3	**Calibration End Date:**	05/24/19 13:33

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
ICV	FS3100-010524192014	20190524201400	05/24/19 20:14	1	
ICV	FS3100-010524192016	20190524201600	05/24/19 20:16	1	
BLANK	R3414870-1	20190524201700	05/24/19 20:17	1	WG1286272
LCS	R3414870-2	20190524201900	05/24/19 20:19	1	WG1286272
OS	L1100125-01	20190524202400	05/24/19 20:24	1	WG1286272
DUP	R3414870-3	20190524202500	05/24/19 20:25	1	WG1286272
OS	L1100126-01	20190524202700	05/24/19 20:27	1	WG1286272
MS	R3414870-4	20190524202800	05/24/19 20:28	1	WG1286272
MSD	R3414870-5	20190524203000	05/24/19 20:30	1	WG1286272
CCV	FS3100-010524192033	20190524203300	05/24/19 20:33	1	
CCB	FS3100-010524192035	20190524203500	05/24/19 20:35	1	
CCV	FS3100-010524192054	20190524205400	05/24/19 20:54	1	
CCB	FS3100-010524192055	20190524205500	05/24/19 20:55	1	
WW-20190520-002-DAY 18	L1101421-01	20190524210300	05/24/19 21:03	1	WG1286272
DUP	R3414870-6	20190524210500	05/24/19 21:05	1	WG1286272
OS	L1101774-01	20190524210600	05/24/19 21:06	1	WG1286272
MS	R3414870-7	20190524210800	05/24/19 21:08	1	WG1286272
CCV	FS3100-010524192110	20190524211000	05/24/19 21:10	1	
CCB	FS3100-010524192111	20190524211100	05/24/19 21:11	1	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1101421	**Calibration (begin) date/time:**	05/24/19 13:25
Instrument ID:	FS3100-01	**Calibration (end) date/time:**	05/24/19 13:33
Analytical Method:	350.1	**Analytical Run:**	052419_3

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
AMMONIA NITROGEN	10	9.909	99.10	5	5.16	103
File ID:		20190524132500			20190524132700	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1101421	**Calibration (begin) date/time:**	05/24/19 13:25
Instrument ID:	FS3100-01	**Calibration (end) date/time:**	05/24/19 13:33
Analytical Method:	350.1	**Analytical Run:**	052419_3

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
AMMONIA NITROGEN	2.50	2.56	102	1	.958	95.80
File ID:		20190524132900			20190524133000	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1101421	**Calibration (begin) date/time:**	05/24/19 13:25
Instrument ID:	FS3100-01	**Calibration (end) date/time:**	05/24/19 13:33
Analytical Method:	350.1	**Analytical Run:**	052419_3

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
AMMONIA NITROGEN	0.10	.11	110	0	-.098	
File ID:		20190524133200			20190524133300	

16C-IN

GENERAL CHEMISTRY
INITIAL CALIBRATION

SDG:	L1101421	**Calibration (begin) date/time:**	05/24/19 13:25
Instrument ID:	FS3100-01	**Calibration (end) date/time:**	05/24/19 13:33
Analytical Method:	350.1	**Analytical Run:**	052419_3

Analyte	Cal. Type	Weightage	Corr.	Coef1	Coef2	Slope	Incpt	% RSD
AMMONIA NITROGEN	0	5	0.999671			87374	8644.8	

Calibration Type

0 = Linear Regression

Weightage

5 = None

351.2 Wet Chemistry

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
WW-20190520-002-DAY 18

Lab Sample ID:	L1101421-01	**SDG:**	L1101421
Client Sample ID:	WW-20190520-002-DAY 18	**Collected Date/Time:**	05/20/19 11:30
Lab File ID:	20190523155835	**Received Date/Time:**	05/22/19 08:00
Instrument ID:	LACHAT6	**Preparation Date/Time:**	05/23/19 07:54
Analytical Batch:	WG1285419	**Analysis Date/Time:**	05/23/19 15:58
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	**CAS**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
		mg/l		*mg/l*	*mg/l*	*mg/l*
Kjeldahl Nitrogen, TKN	7727-37-9	0.554	B P1	0.0350	0.250	0.250

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414315-1

Lab Sample ID:	R3414315-1	**SDG:**	L1101421
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	20190523153106	**Received Date/Time:**	_____
Instrument ID:	LACHAT6	**Preparation Date/Time:**	05/23/19 07:52
Analytical Batch:	WG1285419	**Analysis Date/Time:**	05/23/19 15:31
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	**CAS**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
		mg/l		*mg/l*	*mg/l*	*mg/l*
Kjeldahl Nitrogen, TKN	7727-37-9	0.0897	J	0.0350	0.25	0.250

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414315-2

Lab Sample ID:	R3414315-2	**SDG:**	L1101421
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	20190523153219	**Received Date/Time:**	_____
Instrument ID:	LACHAT6	**Preparation Date/Time:**	05/23/19 07:52
Analytical Batch:	WG1285419	**Analysis Date/Time:**	05/23/19 15:32
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	**CAS**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
		mg/l		*mg/l*	*mg/l*	*mg/l*
Kjeldahl Nitrogen, TKN	7727-37-9	10.5		0.0350	0.25	0.250

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414315-5

Lab Sample ID:	R3414315-5	**SDG:**	L1101421
Client Sample ID:	DUP	**Collected Date/Time:**	05/20/19 08:06
Lab File ID:	20190523155123	**Received Date/Time:**	05/21/19 08:45
Instrument ID:	LACHAT6	**Preparation Date/Time:**	05/23/19 07:54
Analytical Batch:	WG1285419	**Analysis Date/Time:**	05/23/19 15:51
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
Kjeldahl Nitrogen, TKN	7727-37-9	0.655		0.0350	0.25	0.250

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414315-6

Lab Sample ID:	R3414315-6	**SDG:**	L1101421
Client Sample ID:	DUP	**Collected Date/Time:**	05/20/19 11:30
Lab File ID:	20190523155946	**Received Date/Time:**	05/22/19 08:00
Instrument ID:	LACHAT6	**Preparation Date/Time:**	05/23/19 07:54
Analytical Batch:	WG1285419	**Analysis Date/Time:**	05/23/19 15:59
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	**CAS**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
		mg/l		*mg/l*	*mg/l*	*mg/l*
Kjeldahl Nitrogen, TKN	7727-37-9	0.447	P1	0.0350	0.25	0.250

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414315-3

Lab Sample ID:	R3414315-3	**SDG:**	L1101421
Client Sample ID:	MS	**Collected Date/Time:**	05/20/19 07:47
Lab File ID:	20190523154747	**Received Date/Time:**	05/21/19 08:45
Instrument ID:	LACHAT6	**Preparation Date/Time:**	05/23/19 07:54
Analytical Batch:	WG1285419	**Analysis Date/Time:**	05/23/19 15:47
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	**CAS**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
		mg/l		*mg/l*	*mg/l*	*mg/l*
Kjeldahl Nitrogen, TKN	7727-37-9	18.3		0.0350	0.25	0.250

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414315-7

Lab Sample ID:	R3414315-7	**SDG:**	L1101421
Client Sample ID:	MS	**Collected Date/Time:**	05/20/19 11:30
Lab File ID:	20190523160057	**Received Date/Time:**	05/22/19 08:00
Instrument ID:	LACHAT6	**Preparation Date/Time:**	05/23/19 07:54
Analytical Batch:	WG1285419	**Analysis Date/Time:**	05/23/19 16:00
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	**CAS**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
		mg/l		*mg/l*	*mg/l*	*mg/l*
Kjeldahl Nitrogen, TKN	7727-37-9	5.85		0.0350	0.25	0.250

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414315-4

Lab Sample ID:	R3414315-4	**SDG:**	L1101421
Client Sample ID:	MSD	**Collected Date/Time:**	05/20/19 07:47
Lab File ID:	20190523154900	**Received Date/Time:**	05/21/19 08:45
Instrument ID:	LACHAT6	**Preparation Date/Time:**	05/23/19 07:54
Analytical Batch:	WG1285419	**Analysis Date/Time:**	05/23/19 15:49
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
Kjeldahl Nitrogen, TKN	7727-37-9	18.2		0.0350	0.25	0.250

2-IN

CALIBRATION VERIFICATION

SDG:	L1101421	**Calibration (begin) date/time:**	04/08/19 13:21
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	04/08/19 13:30
Analytical Method:	351.2	**Analytical Run:**	R052319_2
Concentration Units:	mg/L		

	ICV				**CCV**				**CCV**			
Sample ID:	LACHAT6052319152956				LACHAT6052319154302				LACHAT6052319155459			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
KJELDAHL NITROGEN, TKN	10	10.60	106		10	10.60	106		10	10.60	106	

ICV Limits: 90 - 110 CCV Limits: 90 - 110

2-IN

CALIBRATION VERIFICATION

SDG:	L1101421	**Calibration (begin) date/time:**	04/08/19 13:21
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	04/08/19 13:30
Analytical Method:	351.2	**Analytical Run:**	R052319_2
Concentration Units:	mg/L		

CCV

Sample ID: LACHAT6052319160542

Analyte	True	Found	%R	%RSD
KJELDAHL NITROGEN, TKN	10	10.60	106	

ICV Limits: 90 - 110 CCV Limits: 90 - 110

3-IN BLANKS

SDG:	L1101421	**Calibration (begin) date/time:**	04/08/19 13:21
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	04/08/19 13:30
Analytical Method:	351.2	**Analytical Run:**	R052319_2

Sample ID:	**BLANK Result**	**BLANK Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**
File ID:	20190523153106		20190523154414		20190523155612		20190523160654	
Analyte	mg/l		mg/L		mg/L		mg/L	
KJELDAHL NITROGEN, TKN	0.0897	J	0.2010		0.1090		0.04240	

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1101421-01

SAMPLE NO.:
R3414315-3
R3414315-4

MS Sample / File ID:	R3414315-3 / 20190523154747	**SDG:**	L1101421
MSD Sample / File ID:	R3414315-4 / 20190523154900	**Analytical Batch:**	WG1285419
OS Sample / File ID:	L1100907-03 / 20190523154635	**Matrix:**	WW
Instrument ID:	LACHAT6		
Analytical Method:	351.2		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limits
	mg/l	*mg/l*	*mg/l*	*mg/l*	*%*	*%*		*%*	*%*	*%*
Kjeldahl Nitrogen, TKN	5.00	13.1	18.3	18.2	104	102	1	90.0 - 110	0.548	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1101421-01

SAMPLE NO.:
R3414315-7

MS Sample / File ID:	R3414315-7 / 20190523160057	**SDG:**	L1101421
MSD Sample / File ID:	_____	**Analytical Batch:**	WG1285419
OS Sample / File ID:	L1101421-01 / 20190523155835	**Matrix:**	WW
Instrument ID:	LACHAT6		
Analytical Method:	351.2		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limits
	mg/l	*mg/l*	*mg/l*		*%*	*%*		*%*	*%*	*%*
Kjeldahl Nitrogen, TKN	5.00	0.554	5.85		106		1	90.0 - 110		

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

6-IN

DUPLICATES

L1101421-01

SAMPLE NO.:
R3414315-5

DUP Sample / File ID:	R3414315-5 / 20190523155123	**SDG:**	L1101421
OS Sample / File ID:	L1100907-04 / 20190523155011	**Analytical Batch:**	WG1285419
Instrument ID:	LACHAT6	**Dilution Factor:**	1
Analytical Method:	351.2	**Matrix:**	WW

Analyte	**OS Result**	**DUP Result**	**RPD**	**RPD Limits**
	mg/l	*mg/l*	*mg/l*	*mg/l*
Kjeldahl Nitrogen, TKN	0.723	0.655	9.87	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

6-IN

DUPLICATES

L1101421-01

SAMPLE NO.:
R3414315-6

DUP Sample / File ID:	R3414315-6 / 20190523155946	**SDG:**	L1101421
OS Sample / File ID:	L1101421-01 / 20190523155835	**Analytical Batch:**	WG1285419
Instrument ID:	LACHAT6	**Dilution Factor:**	1
Analytical Method:	351.2	**Matrix:**	WW

Analyte	**OS Result**	**DUP Result**	**RPD**	**RPD Limits**
	mg/l	*mg/l*	*mg/l*	*mg/l*
Kjeldahl Nitrogen, TKN	0.554	0.447	21.4*	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

7-IN

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY

L1101421-01

SAMPLE NO.:
R3414315-2

LCS Sample / File ID:	R3414315-2 / 20190523153219	**SDG:**	L1101421
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1285419
Instrument ID:	LACHAT6	**Dilution Factor:**	1
Analytical Method:	351.2	**Matrix:**	WW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	mg/l	*mg/l*		*%*	*%*	*%*	*%*	*%*
Kjeldahl Nitrogen, TKN	10.0	10.5		105		90.0 - 110		

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

12-IN

ANALYSIS LOG

SDG:	L1101421	**Analytical Method:**	351.2
Instrument ID:	LACHAT6	**Calibration Start Date:**	04/08/19 13:21
Analytical Run:	CAL040819_1	**Calibration End Date:**	04/08/19 13:30

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
CAL	20.0	20190408132143	04/08/19 13:21	1	
CAL	10.0	20190408132256	04/08/19 13:22	1	
CAL	5.0	20190408132408	04/08/19 13:24	1	
CAL	2.5	20190408132519	04/08/19 13:25	1	
CAL	1.0	20190408132632	04/08/19 13:26	1	
CAL	0.5	20190408132743	04/08/19 13:27	1	
CAL	0.25	20190408132855	04/08/19 13:28	1	
CAL	0.0	20190408133007	04/08/19 13:30	1	

12-IN

ANALYSIS LOG

SDG:	L1101421	**Analytical Method:**	351.2
Instrument ID:	LACHAT6	**Calibration Start Date:**	04/08/19 13:21
Analytical Run:	R052319_2	**Calibration End Date:**	04/08/19 13:30

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
ICV	LACHAT6052319152956	20190523152956	05/23/19 15:29	1	
BLANK	R3414315-1	20190523153106	05/23/19 15:31	1	WG1285419
LCS	R3414315-2	20190523153219	05/23/19 15:32	1	WG1285419
CCV	LACHAT6052319154302	20190523154302	05/23/19 15:43	1	
CCB	LACHAT6052319154414	20190523154414	05/23/19 15:44	1	
OS	L1100907-03	20190523154635	05/23/19 15:46	1	WG1285419
MS	R3414315-3	20190523154747	05/23/19 15:47	1	WG1285419
MSD	R3414315-4	20190523154900	05/23/19 15:49	1	WG1285419
OS	L1100907-04	20190523155011	05/23/19 15:50	1	WG1285419
DUP	R3414315-5	20190523155123	05/23/19 15:51	1	WG1285419
CCV	LACHAT6052319155459	20190523155459	05/23/19 15:54	1	
CCB	LACHAT6052319155612	20190523155612	05/23/19 15:56	1	
WW-20190520-002-DAY 18	L1101421-01	20190523155835	05/23/19 15:58	1	WG1285419
DUP	R3414315-6	20190523155946	05/23/19 15:59	1	WG1285419
MS	R3414315-7	20190523160057	05/23/19 16:00	1	WG1285419
CCV	LACHAT6052319160542	20190523160542	05/23/19 16:05	1	
CCB	LACHAT6052319160654	20190523160654	05/23/19 16:06	1	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1101421	**Calibration (begin) date/time:**	04/08/19 13:21
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	04/08/19 13:30
Analytical Method:	351.2	**Analytical Run:**	R052319_2

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/L	mg/L	%	mg/L	mg/L	%
KJELDAHL NITROGEN, TKN	20	19.5988	98	10	10.3378	103
File ID:		20190408132143			20190408132256	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1101421	**Calibration (begin) date/time:**	04/08/19 13:21
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	04/08/19 13:30
Analytical Method:	351.2	**Analytical Run:**	R052319_2

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/L	mg/L	%	mg/L	mg/L	%
KJELDAHL NITROGEN, TKN	5	4.8883	97.80	2.50	2.44075	97.60
File ID:		20190408132408			20190408132519	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1101421	**Calibration (begin) date/time:**	04/08/19 13:21
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	04/08/19 13:30
Analytical Method:	351.2	**Analytical Run:**	R052319_2

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/L	mg/L	%	mg/L	mg/L	%
KJELDAHL NITROGEN, TKN	1	1.17445	117	0.50	.50035	100
File ID:		20190408132632			20190408132743	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1101421	**Calibration (begin) date/time:**	04/08/19 13:21
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	04/08/19 13:30
Analytical Method:	351.2	**Analytical Run:**	R052319_2

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/L	mg/L	%	mg/L	mg/L	%
KJELDAHL NITROGEN, TKN	0.25	.117625	47.10	0	.095575	
File ID:		20190408132855			20190408133007	

16C-IN

GENERAL CHEMISTRY
INITIAL CALIBRATION

SDG:	L1101421	**Calibration (begin) date/time:**	04/08/19 13:21
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	04/08/19 13:30
Analytical Method:	351.2	**Analytical Run:**	R052319_2

Analyte	Cal. Type	Weightage	Corr.	Coef1	Coef2	Slope	Incpt	% RSD
KJELDAHL NITROGEN, TKN	5	1	0.99969			0.315	0.0373	

Calibration Type

5 = Weighted Linear Regression

Weightage

1 = Inverse Concentration

365.4 Wet Chemistry

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
WW-20190520-002-DAY 18

Lab Sample ID:	L1101421-01	**SDG:**	L1101421
Client Sample ID:	WW-20190520-002-DAY 18	**Collected Date/Time:**	05/20/19 11:30
Lab File ID:	20190524101432	**Received Date/Time:**	05/22/19 08:00
Instrument ID:	LACHAT3	**Preparation Date/Time:**	05/23/19 07:54
Analytical Batch:	WG1285790	**Analysis Date/Time:**	05/24/19 10:14
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	365.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	**CAS**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
		mg/l		*mg/l*	*mg/l*	*mg/l*
Phosphorus,Total	7723-14-0	0.176	P1	0.0350	0.100	0.100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414631-1

Lab Sample ID:	R3414631-1	**SDG:**	L1101421
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	20190524095429	**Received Date/Time:**	_____
Instrument ID:	LACHAT3	**Preparation Date/Time:**	05/23/19 07:52
Analytical Batch:	WG1285790	**Analysis Date/Time:**	05/24/19 09:54
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	365.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
Phosphorus,Total	7723-14-0	U		0.0350	0.10	0.100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414631-2

Lab Sample ID:	R3414631-2	**SDG:**	L1101421
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	20190524095546	**Received Date/Time:**	_____
Instrument ID:	LACHAT3	**Preparation Date/Time:**	05/23/19 07:52
Analytical Batch:	WG1285790	**Analysis Date/Time:**	05/24/19 09:55
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	365.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	**CAS**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
		mg/l		*mg/l*	*mg/l*	*mg/l*
Phosphorus,Total	7723-14-0	1.80		0.0350	0.10	0.100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414631-4

Lab Sample ID:	R3414631-4	**SDG:**	L1101421
Client Sample ID:	DUP	**Collected Date/Time:**	05/20/19 08:06
Lab File ID:	20190524100924	**Received Date/Time:**	05/21/19 08:45
Instrument ID:	LACHAT3	**Preparation Date/Time:**	05/23/19 07:54
Analytical Batch:	WG1285790	**Analysis Date/Time:**	05/24/19 10:09
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	365.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	**CAS**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
		mg/l		*mg/l*	*mg/l*	*mg/l*
Phosphorus,Total	7723-14-0	0.211		0.0350	0.10	0.100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414631-5

Lab Sample ID:	R3414631-5	**SDG:**	L1101421
Client Sample ID:	DUP	**Collected Date/Time:**	05/20/19 11:30
Lab File ID:	20190524101549	**Received Date/Time:**	05/22/19 08:00
Instrument ID:	LACHAT3	**Preparation Date/Time:**	05/23/19 07:54
Analytical Batch:	WG1285790	**Analysis Date/Time:**	05/24/19 10:15
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	365.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	**CAS**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
		mg/l		*mg/l*	*mg/l*	*mg/l*
Phosphorus,Total	7723-14-0	0.126	P1	0.0350	0.10	0.100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414631-6

Lab Sample ID:	R3414631-6	**SDG:**	L1101421
Client Sample ID:	MS	**Collected Date/Time:**	05/20/19 11:30
Lab File ID:	20190524101707	**Received Date/Time:**	05/22/19 08:00
Instrument ID:	LACHAT3	**Preparation Date/Time:**	05/23/19 07:54
Analytical Batch:	WG1285790	**Analysis Date/Time:**	05/24/19 10:17
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	365.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	**CAS**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
		mg/l		*mg/l*	*mg/l*	*mg/l*
Phosphorus,Total	7723-14-0	2.60		0.0350	0.10	0.100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414631-7

Lab Sample ID:	R3414631-7	**SDG:**	L1101421
Client Sample ID:	MS	**Collected Date/Time:**	05/20/19 07:47
Lab File ID:	20190524102604	**Received Date/Time:**	05/21/19 08:45
Instrument ID:	LACHAT3	**Preparation Date/Time:**	05/23/19 07:54
Analytical Batch:	WG1285790	**Analysis Date/Time:**	05/24/19 10:26
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	365.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	**CAS**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
		mg/l		*mg/l*	*mg/l*	*mg/l*
Phosphorus,Total	7723-14-0	4.03		0.0350	0.10	0.100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414631-3

Lab Sample ID:	R3414631-3	**SDG:**	L1101421
Client Sample ID:	MSD	**Collected Date/Time:**	05/20/19 07:47
Lab File ID:	20190524100418	**Received Date/Time:**	05/21/19 08:45
Instrument ID:	LACHAT3	**Preparation Date/Time:**	05/23/19 07:54
Analytical Batch:	WG1285790	**Analysis Date/Time:**	05/24/19 10:04
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	365.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	**CAS**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
		mg/l		*mg/l*	*mg/l*	*mg/l*
Phosphorus,Total	7723-14-0	4.09		0.0350	0.10	0.100

2-IN

CALIBRATION VERIFICATION

SDG:	L1101421	**Calibration (begin) date/time:**	05/14/19 15:36
Instrument ID:	LACHAT3	**Calibration (end) date/time:**	05/14/19 15:43
Analytical Method:	365.4	**Analytical Run:**	R052419_2
Concentration Units:	mg/L		

	ICV				**CCV**				**CCV**			
Sample ID:	LACHAT3052419095312				LACHAT3052419100651				LACHAT3052419102214			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
PHOSPHORUS,TOTAL	2.50	2.430	97.20		2.50	2.460	98.40		2.50	2.470	98.80	

ICV Limits: 90 - 110 CCV Limits: 90 - 110

2-IN

CALIBRATION VERIFICATION

SDG:	L1101421	**Calibration (begin) date/time:**	05/14/19 15:36
Instrument ID:	LACHAT3	**Calibration (end) date/time:**	05/14/19 15:43
Analytical Method:	365.4	**Analytical Run:**	R052419_2
Concentration Units:	mg/L		

CCV

Sample ID: LACHAT3052419102837

Analyte	True	Found	%R	%RSD
PHOSPHORUS,TOTAL	2.50	2.470	98.80	

ICV Limits: 90 - 110 CCV Limits: 90 - 110

3-IN BLANKS

SDG:	L1101421	**Calibration (begin) date/time:**	05/14/19 15:36
Instrument ID:	LACHAT3	**Calibration (end) date/time:**	05/14/19 15:43
Analytical Method:	365.4	**Analytical Run:**	R052419_2

Sample ID:	**BLANK Result**	**BLANK Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**
File ID:	20190524095429		20190524100808		20190524102331		20190524102955	
Analyte	mg/l		mg/L		mg/L		mg/L	
PHOSPHORUS,TOTAL	U		0.03070		0.03420		0.03080	

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1101421-01

SAMPLE NO.:
R3414631-6

MS Sample / File ID:	R3414631-6 / 20190524101707	**SDG:**	L1101421
MSD Sample / File ID:	_____	**Analytical Batch:**	WG1285790
OS Sample / File ID:	L1101421-01 / 20190524101432	**Matrix:**	WW
Instrument ID:	LACHAT3		
Analytical Method:	365.4		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limits
	mg/l	*mg/l*	*mg/l*		*%*	*%*		*%*	*%*	*%*
Phosphorus,Total	2.50	0.176	2.60		97.0		1	90.0 - 110		

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1101421-01

SAMPLE NO.:
R3414631-7
R3414631-3

MS Sample / File ID:	R3414631-7 / 20190524102604	**SDG:**	L1101421
MSD Sample / File ID:	R3414631-3 / 20190524100418	**Analytical Batch:**	WG1285790
OS Sample / File ID:	L1100907-03 / 20190524102448	**Matrix:**	WW
Instrument ID:	LACHAT3		
Analytical Method:	365.4		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limits
	mg/l	*mg/l*	*mg/l*	*mg/l*	*%*	*%*		*%*	*%*	*%*
Phosphorus,Total	2.50	1.62	4.03	4.09	96.4	98.8	1	90.0 - 110	1.48	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

6-IN

DUPLICATES

L1101421-01

SAMPLE NO.:
R3414631-4

DUP Sample / File ID:	R3414631-4 / 20190524100924	**SDG:**	L1101421
OS Sample / File ID:	L1100907-04 / 20190524100534	**Analytical Batch:**	WG1285790
Instrument ID:	LACHAT3	**Dilution Factor:**	1
Analytical Method:	365.4	**Matrix:**	WW

Analyte	**OS Result**	**DUP Result**	**RPD**	**RPD Limits**
	mg/l	*mg/l*	*mg/l*	*mg/l*
Phosphorus,Total	0.222	0.211	5.08	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

6-IN

DUPLICATES

L1101421-01

SAMPLE NO.:
R3414631-5

DUP Sample / File ID:	R3414631-5 / 20190524101549	**SDG:**	L1101421
OS Sample / File ID:	L1101421-01 / 20190524101432	**Analytical Batch:**	WG1285790
Instrument ID:	LACHAT3	**Dilution Factor:**	1
Analytical Method:	365.4	**Matrix:**	WW

Analyte	**OS Result**	**DUP Result**	**RPD**	**RPD Limits**
	mg/l	*mg/l*	*mg/l*	*mg/l*
Phosphorus,Total	0.176	0.126	33.1*	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

7-IN

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY

L1101421-01

SAMPLE NO.:
R3414631-2

LCS Sample / File ID:	R3414631-2 / 20190524095546	**SDG:**	L1101421
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1285790
Instrument ID:	LACHAT3	**Dilution Factor:**	1
Analytical Method:	365.4	**Matrix:**	WW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	mg/l	*mg/l*		*%*	*%*	*%*	*%*	*%*
Phosphorus,Total	2.00	1.80		90.0		90.0 - 110		

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

12-IN

ANALYSIS LOG

SDG:	L1101421	**Analytical Method:**	365.4
Instrument ID:	LACHAT3	**Calibration Start Date:**	05/14/19 15:36
Analytical Run:	CAL051419_1	**Calibration End Date:**	05/14/19 15:43

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
CAL 5.0		20190514153648	05/14/19 15:36	1	
CAL 2.5		20190514153805	05/14/19 15:38	1	
CAL 1.0		20190514153922	05/14/19 15:39	1	
CAL 0.5		20190514154038	05/14/19 15:40	1	
CAL 0.1		20190514154155	05/14/19 15:41	1	
CAL 0.0		20190514154311	05/14/19 15:43	1	

12-IN

ANALYSIS LOG

SDG:	L1101421	**Analytical Method:**	365.4
Instrument ID:	LACHAT3	**Calibration Start Date:**	05/14/19 15:36
Analytical Run:	R052419_2	**Calibration End Date:**	05/14/19 15:43

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
ICV	LACHAT3052419095312	20190524095312	05/24/19 09:53	1	
BLANK	R3414631-1	20190524095429	05/24/19 09:54	1	WG1285790
LCS	R3414631-2	20190524095546	05/24/19 09:55	1	WG1285790
MSD	R3414631-3	20190524100418	05/24/19 10:04	1	WG1285790
OS	L1100907-04	20190524100534	05/24/19 10:05	1	WG1285790
CCV	LACHAT3052419100651	20190524100651	05/24/19 10:06	1	
CCB	LACHAT3052419100808	20190524100808	05/24/19 10:08	1	
DUP	R3414631-4	20190524100924	05/24/19 10:09	1	WG1285790
WW-20190520-002-DAY 18	L1101421-01	20190524101432	05/24/19 10:14	1	WG1285790
DUP	R3414631-5	20190524101549	05/24/19 10:15	1	WG1285790
MS	R3414631-6	20190524101707	05/24/19 10:17	1	WG1285790
CCV	LACHAT3052419102214	20190524102214	05/24/19 10:22	1	
CCB	LACHAT3052419102331	20190524102331	05/24/19 10:23	1	
OS	L1100907-03	20190524102448	05/24/19 10:24	1	WG1285790
MS	R3414631-7	20190524102604	05/24/19 10:26	1	WG1285790
CCV	LACHAT3052419102837	20190524102837	05/24/19 10:28	1	
CCB	LACHAT3052419102955	20190524102955	05/24/19 10:29	1	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1101421	**Calibration (begin) date/time:**	05/14/19 15:36
Instrument ID:	LACHAT3	**Calibration (end) date/time:**	05/14/19 15:43
Analytical Method:	365.4	**Analytical Run:**	R052419_2

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/L	mg/L	%	mg/L	mg/L	%
PHOSPHORUS,TOTAL	5	4.87679	97.50	2.50	2.50139	100
File ID:		20190514153648			20190514153805	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1101421	**Calibration (begin) date/time:**	05/14/19 15:36
Instrument ID:	LACHAT3	**Calibration (end) date/time:**	05/14/19 15:43
Analytical Method:	365.4	**Analytical Run:**	R052419_2

Analyte	**Std Conc** mg/L	**Result** mg/L	**Rec.** %	**Std Conc** mg/L	**Result** mg/L	**Rec.** %
PHOSPHORUS,TOTAL	1	1.03397	103	0.50	.53003	106
File ID:		20190514153922			20190514154038	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1101421	**Calibration (begin) date/time:**	05/14/19 15:36
Instrument ID:	LACHAT3	**Calibration (end) date/time:**	05/14/19 15:43
Analytical Method:	365.4	**Analytical Run:**	R052419_2

Analyte	**Std Conc** mg/L	**Result** mg/L	**Rec.** %	**Std Conc** mg/L	**Result** mg/L	**Rec.** %
PHOSPHORUS,TOTAL	0.10	.139976	140	0	-.045616	
File ID:		20190514154155			20190514154311	

16C-IN

GENERAL CHEMISTRY
INITIAL CALIBRATION

SDG:	L1101421	**Calibration (begin) date/time:**	05/14/19 15:36
Instrument ID:	LACHAT3	**Calibration (end) date/time:**	05/14/19 15:43
Analytical Method:	365.4	**Analytical Run:**	R052419_2

Analyte	Cal. Type	Weightage	Corr.	Coef1	Coef2	Slope	Incpt	% RSD
PHOSPHORUS,TOTAL	5	1	0.99955			0.222	-0.00721	

Calibration Type

5 = Weighted Linear Regression

Weightage

1 = Inverse Concentration

410.4 Wet Chemistry

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
WW-20190520-002-DAY 18

Lab Sample ID:	L1101421-01	**SDG:**	L1101421
Client Sample ID:	WW-20190520-002-DAY 18	**Collected Date/Time:**	05/20/19 11:30
Lab File ID:	20190529164542	**Received Date/Time:**	05/22/19 08:00
Instrument ID:	DR6000-1	**Preparation Date/Time:**	05/29/19 13:32
Analytical Batch:	WG1285902	**Analysis Date/Time:**	05/29/19 16:45
Dilution Factor:	1	**Prep Method:**	410.1
Analytical Method:	410.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	2.0 mL
Total Solids (%):	_____	**Final Wt/Vol:**	2.0 mL

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
COD	E-10117	34.6		3.00	10.0	10.0

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415951-1

Lab Sample ID:	R3415951-1	**SDG:**	L1101421
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	20190529163815	**Received Date/Time:**	_____
Instrument ID:	DR6000-1	**Preparation Date/Time:**	05/29/19 13:32
Analytical Batch:	WG1285902	**Analysis Date/Time:**	05/29/19 16:38
Dilution Factor:	1	**Prep Method:**	410.1
Analytical Method:	410.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	2.0 mL
Total Solids (%):	_____	**Final Wt/Vol:**	2.0 mL

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
COD	E-10117	U		3.00	10	10.0

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415951-2

Lab Sample ID:	R3415951-2	**SDG:**	L1101421
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	20190529163825	**Received Date/Time:**	_____
Instrument ID:	DR6000-1	**Preparation Date/Time:**	05/29/19 13:32
Analytical Batch:	WG1285902	**Analysis Date/Time:**	05/29/19 16:38
Dilution Factor:	1	**Prep Method:**	410.1
Analytical Method:	410.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	2.0 mL
Total Solids (%):	_____	**Final Wt/Vol:**	2.0 mL

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
COD	E-10117	215		3.00	10	10.0

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415951-3

Lab Sample ID:	R3415951-3	**SDG:**	L1101421
Client Sample ID:	DUP	**Collected Date/Time:**	05/17/19 08:00
Lab File ID:	20190529164020	**Received Date/Time:**	05/17/19 15:14
Instrument ID:	DR6000-1	**Preparation Date/Time:**	05/29/19 13:32
Analytical Batch:	WG1285902	**Analysis Date/Time:**	05/29/19 16:40
Dilution Factor:	1	**Prep Method:**	410.1
Analytical Method:	410.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	2.0 mL
Total Solids (%):	_____	**Final Wt/Vol:**	2.0 mL

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
COD	E-10117	52.4		3.00	10	10.0

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415951-6

Lab Sample ID:	R3415951-6	**SDG:**	L1101421
Client Sample ID:	DUP	**Collected Date/Time:**	05/15/19 15:44
Lab File ID:	20190529164456	**Received Date/Time:**	05/18/19 08:45
Instrument ID:	DR6000-1	**Preparation Date/Time:**	05/29/19 13:32
Analytical Batch:	WG1285902	**Analysis Date/Time:**	05/29/19 16:44
Dilution Factor:	1	**Prep Method:**	410.1
Analytical Method:	410.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	2.0 mL
Total Solids (%):	_____	**Final Wt/Vol:**	2.0 mL

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
COD	E-10117	24.5		3.00	10	10.0

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415951-4

Lab Sample ID:	R3415951-4	**SDG:**	L1101421
Client Sample ID:	MS	**Collected Date/Time:**	05/15/19 12:50
Lab File ID:	20190529164051	**Received Date/Time:**	05/16/19 08:45
Instrument ID:	DR6000-1	**Preparation Date/Time:**	05/29/19 13:32
Analytical Batch:	WG1285902	**Analysis Date/Time:**	05/29/19 16:40
Dilution Factor:	1	**Prep Method:**	410.1
Analytical Method:	410.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	2.0 mL
Total Solids (%):	_____	**Final Wt/Vol:**	2.0 mL

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
COD	E-10117	842	J6	3.00	10	10.0

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415951-5

Lab Sample ID:	R3415951-5	**SDG:**	L1101421
Client Sample ID:	MSD	**Collected Date/Time:**	05/15/19 12:50
Lab File ID:	20190529164057	**Received Date/Time:**	05/16/19 08:45
Instrument ID:	DR6000-1	**Preparation Date/Time:**	05/29/19 13:32
Analytical Batch:	WG1285902	**Analysis Date/Time:**	05/29/19 16:40
Dilution Factor:	1	**Prep Method:**	410.1
Analytical Method:	410.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	2.0 mL
Total Solids (%):	_____	**Final Wt/Vol:**	2.0 mL

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
COD	E-10117	840	J6	3.00	10	10.0

2-IN

CALIBRATION VERIFICATION

SDG:	L1101421	**Calibration (begin) date/time:**	02/21/19 11:00
Instrument ID:	DR6000-1	**Calibration (end) date/time:**	02/21/19 11:00
Analytical Method:	410.4	**Analytical Run:**	WG1285902
Concentration Units:	mg/L		

	ICV				**CCV**				**CCV**			
Sample ID:	DR6000-1052919163805				DR6000-1052919164119				DR6000-1052919164410			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
COD	400	406.14	102		400	407.41	102		400	405.0	101	

ICV Limits: 95 - 105 CCV Limits: 95 - 105

2-IN

CALIBRATION VERIFICATION

SDG:	L1101421	**Calibration (begin) date/time:**	02/21/19 11:00
Instrument ID:	DR6000-1	**Calibration (end) date/time:**	02/21/19 11:00
Analytical Method:	410.4	**Analytical Run:**	WG1285902
Concentration Units:	mg/L		

CCV

Sample ID: DR6000-1052919164601

Analyte	True	Found	%R	%RSD
COD	400	403.93	101	

ICV Limits: 95 - 105 CCV Limits: 95 - 105

3-IN BLANKS

SDG:	L1101421	**Calibration (begin) date/time:**	02/21/19 11:00
Instrument ID:	DR6000-1	**Calibration (end) date/time:**	02/21/19 11:00
Analytical Method:	410.4	**Analytical Run:**	WG1285902

Sample ID:	**BLANK Result**	**BLANK Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**
File ID:	20190529163815		20190529164153		20190529164420		20190529164649	
Analyte	mg/l		mg/L		mg/L		mg/L	
COD	U		-3.550		-4.924		-5.136	

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1101421-01

SAMPLE NO.:
R3415951-4
R3415951-5

MS Sample / File ID:	R3415951-4 / 20190529164051	**SDG:**	L1101421
MSD Sample / File ID:	R3415951-5 / 20190529164057	**Analytical Batch:**	WG1285902
OS Sample / File ID:	L1099455-01 / 20190529164041	**Matrix:**	WW
Instrument ID:	DR6000-1		
Analytical Method:	410.4		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limits
	mg/l	*mg/l*	*mg/l*	*mg/l*	*%*	*%*		*%*	*%*	*%*
COD	400	546	842	840	73.9*	73.5*	1	80.0 - 120	0.177	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

6-IN

DUPLICATES

L1101421-01

SAMPLE NO.:
R3415951-3

DUP Sample / File ID:	R3415951-3 / 20190529164020	**SDG:**	L1101421
OS Sample / File ID:	L1098264-03 / 20190529163837	**Analytical Batch:**	WG1285902
Instrument ID:	DR6000-1	**Dilution Factor:**	1
Analytical Method:	410.4	**Matrix:**	WW

Analyte	**OS Result**	**DUP Result**	**RPD**	**RPD Limits**
	mg/l	*mg/l*	*mg/l*	*mg/l*
COD	52.1	52.4	0.580	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

6-IN

DUPLICATES

L1101421-01

SAMPLE NO.:
R3415951-6

DUP Sample / File ID:	R3415951-6 / 20190529164456	**SDG:**	L1101421
OS Sample / File ID:	L1100440-01 / 20190529164449	**Analytical Batch:**	WG1285902
Instrument ID:	DR6000-1	**Dilution Factor:**	1
Analytical Method:	410.4	**Matrix:**	WW

Analyte	**OS Result**	**DUP Result**	**RPD**	**RPD Limits**
	mg/l	*mg/l*	*mg/l*	*mg/l*
COD	23.2	24.5	5.38	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

7-IN

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY

L1101421-01

SAMPLE NO.:
R3415951-2

LCS Sample / File ID:	R3415951-2 / 20190529163825	**SDG:**	L1101421
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1285902
Instrument ID:	DR6000-1	**Dilution Factor:**	1
Analytical Method:	410.4	**Matrix:**	WW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	mg/l	*mg/l*		*%*	*%*	*%*	*%*	*%*
COD	222	215		96.8		90.0 - 110		

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

12-IN

ANALYSIS LOG

SDG:	L1101421	**Analytical Method:**	410.4
Instrument ID:	DR6000-1	**Calibration Start Date:**	02/21/19 11:00
Analytical Run:	WG1242469	**Calibration End Date:**	02/21/19 11:00

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
CAL	0.000	33	02/21/19 11:00	1	
CAL	10.000	34	02/21/19 11:00	1	
CAL	50.000	35	02/21/19 11:00	1	
CAL	100.000	36	02/21/19 11:00	1	
CAL	400.000	37	02/21/19 11:00	1	
CAL	500.000	38	02/21/19 11:00	1	
CAL	1000.000	39	02/21/19 11:00	1	

12-IN

ANALYSIS LOG

SDG:	L1101421	**Analytical Method:**	410.4
Instrument ID:	DR6000-1	**Calibration Start Date:**	02/21/19 11:00
Analytical Run:	WG1285902	**Calibration End Date:**	02/21/19 11:00

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
ICV	DR6000-1052919163805	20190529163805	05/29/19 16:38	1	
BLANK	R3415951-1	20190529163815	05/29/19 16:38	1	WG1285902
LCS	R3415951-2	20190529163825	05/29/19 16:38	1	WG1285902
OS	L1098264-03	20190529163837	05/29/19 16:38	1	WG1285902
DUP	R3415951-3	20190529164020	05/29/19 16:40	1	WG1285902
OS	L1099455-01	20190529164041	05/29/19 16:40	1	WG1285902
MS	R3415951-4	20190529164051	05/29/19 16:40	1	WG1285902
MSD	R3415951-5	20190529164057	05/29/19 16:40	1	WG1285902
CCV	DR6000-1052919164119	20190529164119	05/29/19 16:41	1	
CCB	DR6000-1052919164153	20190529164153	05/29/19 16:41	1	
CCV	DR6000-1052919164410	20190529164410	05/29/19 16:44	1	
CCB	DR6000-1052919164420	20190529164420	05/29/19 16:44	1	
OS	L1100440-01	20190529164449	05/29/19 16:44	1	WG1285902
DUP	R3415951-6	20190529164456	05/29/19 16:44	1	WG1285902
WW-20190520-002-DAY 18	L1101421-01	20190529164542	05/29/19 16:45	1	WG1285902
CCV	DR6000-1052919164601	20190529164601	05/29/19 16:46	1	
CCB	DR6000-1052919164649	20190529164649	05/29/19 16:46	1	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1101421	**Calibration (begin) date/time:**	02/21/19 11:00
Instrument ID:	DR6000-1	**Calibration (end) date/time:**	02/21/19 11:00
Analytical Method:	410.4	**Analytical Run:**	WG1285902

Analyte	**Std Conc** mg/l	**Result** mg/l	**Rec.** %	**Std Conc** mg/l	**Result** mg/l	**Rec.** %
COD	10	9.600413	96	50	48.674867	97.30
File ID:		34			35	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1101421	**Calibration (begin) date/time:**	02/21/19 11:00
Instrument ID:	DR6000-1	**Calibration (end) date/time:**	02/21/19 11:00
Analytical Method:	410.4	**Analytical Run:**	WG1285902

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
COD	100	105.115745	105	400	402.515756	101
File ID:		36			37	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1101421	**Calibration (begin) date/time:**	02/21/19 11:00
Instrument ID:	DR6000-1	**Calibration (end) date/time:**	02/21/19 11:00
Analytical Method:	410.4	**Analytical Run:**	WG1285902

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
COD	500	498.031088	99.60	1000	999.486581	99.90
File ID:		38			39	

16C-IN

GENERAL CHEMISTRY
INITIAL CALIBRATION

SDG:	L1101421	**Calibration (begin) date/time:**	02/21/19 11:00
Instrument ID:	DR6000-1	**Calibration (end) date/time:**	02/21/19 11:00
Analytical Method:	410.4	**Analytical Run:**	WG1285902

Analyte	Cal. Type	Weightage	Corr.	Coef1	Coef2	Slope	Incpt	% RSD
COD	0	5	0.999969			2170.803	-3.424405	

Calibration Type

0 = Linear Regression

Weightage

5 = None

4500S2 D-2011 Wet Chemistry

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
WW-20190520-002-DAY 18

Lab Sample ID:	L1101421-01	**SDG:**	L1101421
Client Sample ID:	WW-20190520-002-DAY 18	**Collected Date/Time:**	05/20/19 11:30
Lab File ID:	20190524163033	**Received Date/Time:**	05/22/19 08:00
Instrument ID:	DR6000-1	**Preparation Date/Time:**	05/24/19 16:30
Analytical Batch:	WG1285424	**Analysis Date/Time:**	05/24/19 16:30
Dilution Factor:	1	**Prep Method:**	4500S2 D-2011
Analytical Method:	4500S2 D-2011	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	7.5 mL
Total Solids (%):	_____	**Final Wt/Vol:**	7.5 mL

Analyte	**CAS**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
		mg/l		*mg/l*	*mg/l*	*mg/l*
Sulfide	18496-25-8	U		0.00650	0.0500	0.0500

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414822-1

Lab Sample ID:	R3414822-1	**SDG:**	L1101421
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	20190524162318	**Received Date/Time:**	_____
Instrument ID:	DR6000-1	**Preparation Date/Time:**	05/24/19 16:23
Analytical Batch:	WG1285424	**Analysis Date/Time:**	05/24/19 16:23
Dilution Factor:	1	**Prep Method:**	4500S2 D-2011/9030B/9034
Analytical Method:	4500S2 D-2011	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	7.5 mL
Total Solids (%):	_____	**Final Wt/Vol:**	7.5 mL

Analyte	**CAS**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
		mg/l		*mg/l*	*mg/l*	*mg/l*
Sulfide	18496-25-8	U		0.00650	0.05	0.0500

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414822-3

Lab Sample ID:	R3414822-3	**SDG:**	L1101421
Client Sample ID:	DUP	**Collected Date/Time:**	05/20/19 12:50
Lab File ID:	20190524162400	**Received Date/Time:**	05/22/19 08:45
Instrument ID:	DR6000-1	**Preparation Date/Time:**	05/24/19 16:24
Analytical Batch:	WG1285424	**Analysis Date/Time:**	05/24/19 16:24
Dilution Factor:	1	**Prep Method:**	4500S2 D-2011
Analytical Method:	4500S2 D-2011	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	7.5 mL
Total Solids (%):	_____	**Final Wt/Vol:**	7.5 mL

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
Sulfide	18496-25-8	0.000		0.00650	0.05	0.0500

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414822-2

Lab Sample ID:	R3414822-2	**SDG:**	L1101421
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	20190524162337	**Received Date/Time:**	_____
Instrument ID:	DR6000-1	**Preparation Date/Time:**	05/24/19 16:23
Analytical Batch:	WG1285424	**Analysis Date/Time:**	05/24/19 16:23
Dilution Factor:	1	**Prep Method:**	4500S2 D-2011/9030B/9034
Analytical Method:	4500S2 D-2011	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	7.5 mL
Total Solids (%):	_____	**Final Wt/Vol:**	7.5 mL

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
Sulfide	18496-25-8	0.500		0.00650	0.05	0.0500

2-IN

CALIBRATION VERIFICATION

SDG:	L1101421	**Calibration (begin) date/time:**	02/20/19 14:30
Instrument ID:	DR6000-1	**Calibration (end) date/time:**	02/20/19 14:30
Analytical Method:	4500S2 D-2011	**Analytical Run:**	WG1285424
Concentration Units:	mg/L		

	ICV				**CCV**				**CCV**			
Sample ID:	DR6000-1052419162304				DR6000-1052419162601				DR6000-1052419162921			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
REACTIVE SULFIDE	1	1.033	103		1	1.034	103		1	1.034	103	
SULFIDE	1	1.033	103		1	1.034	103		1	1.034	103	

ICV Limits: 90 - 110 CCV Limits: 90 - 110

2-IN

CALIBRATION VERIFICATION

SDG:	L1101421	**Calibration (begin) date/time:**	02/20/19 14:30
Instrument ID:	DR6000-1	**Calibration (end) date/time:**	02/20/19 14:30
Analytical Method:	4500S2 D-2011	**Analytical Run:**	WG1285424
Concentration Units:	mg/L		

CCV

Sample ID: DR6000-1052419163839

Analyte	True	Found	%R	%RSD
REACTIVE SULFIDE	1	1.032	103	
SULFIDE	1	1.032	103	

ICV Limits: 90 - 110 CCV Limits: 90 - 110

3-IN BLANKS

SDG:	L1101421	**Calibration (begin) date/time:**	02/20/19 14:30
Instrument ID:	DR6000-1	**Calibration (end) date/time:**	02/20/19 14:30
Analytical Method:	4500S2 D-2011	**Analytical Run:**	WG1285424

Sample ID:	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**	**BLANK Result**	**BLANK Qual**
File ID:	20190524162609		20190524162929		20190524163846		20190524162318	
Analyte	mg/L		mg/L		mg/L		mg/l	
REACTIVE SULFIDE	-0.02400		-0.02500		-0.02500			
SULFIDE	-0.02400		-0.02500		-0.02500		U	

6-IN

DUPLICATES

L1101421-01

SAMPLE NO.:
R3414822-3

DUP Sample / File ID:	R3414822-3 / 20190524162400	**SDG:**	L1101421
OS Sample / File ID:	L1101204-01 / 20190524162354	**Analytical Batch:**	WG1285424
Instrument ID:	DR6000-1	**Dilution Factor:**	1
Analytical Method:	4500S2 D-2011	**Matrix:**	WW

Analyte	**OS Result**	**DUP Result**	**RPD**	**RPD Limits**
	mg/l	*mg/l*	*mg/l*	*mg/l*
Sulfide	U	0.000	0.000	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

7-IN

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY

L1101421-01

SAMPLE NO.:
R3414822-2

LCS Sample / File ID:	R3414822-2 / 20190524162337	**SDG:**	L1101421
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1285424
Instrument ID:	DR6000-1	**Dilution Factor:**	1
Analytical Method:	4500S2 D-2011	**Matrix:**	WW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	mg/l	*mg/l*		*%*	*%*	*%*	*%*	*%*
Sulfide	0.500	0.500		100		85.0 - 115		

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

12-IN

ANALYSIS LOG

SDG:	L1101421	**Analytical Method:**	4500S2 D-2011
Instrument ID:	DR6000-1	**Calibration Start Date:**	02/20/19 14:30
Analytical Run:	WG1239349	**Calibration End Date:**	02/20/19 14:30

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
CAL	0.0000	11	02/20/19 14:30	1	
CAL	0.0500	12	02/20/19 14:30	1	
CAL	0.1000	13	02/20/19 14:30	1	
CAL	0.5000	14	02/20/19 14:30	1	
CAL	1.0000	15	02/20/19 14:30	1	
CAL	1.5000	16	02/20/19 14:30	1	
CAL	2.0000	17	02/20/19 14:30	1	

12-IN

ANALYSIS LOG

SDG:	L1101421	**Analytical Method:**	4500S2 D-2011
Instrument ID:	DR6000-1	**Calibration Start Date:**	02/20/19 14:30
Analytical Run:	WG1285424	**Calibration End Date:**	02/20/19 14:30

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
ICV	DR6000-1052419162304	20190524162304	05/24/19 16:23	1	
BLANK	R3414822-1	20190524162318	05/24/19 16:23	1	WG1285424
LCS	R3414822-2	20190524162337	05/24/19 16:23	1	WG1285424
OS	L1101204-01	20190524162354	05/24/19 16:23	1	WG1285424
DUP	R3414822-3	20190524162400	05/24/19 16:24	1	WG1285424
CCV	DR6000-1052419162601	20190524162601	05/24/19 16:26	1	
CCB	DR6000-1052419162609	20190524162609	05/24/19 16:26	1	
CCV	DR6000-1052419162921	20190524162921	05/24/19 16:29	1	
CCB	DR6000-1052419162929	20190524162929	05/24/19 16:29	1	
WW-20190520-002-DAY 18	L1101421-01	20190524163033	05/24/19 16:30	1	WG1285424
CCV	DR6000-1052419163839	20190524163839	05/24/19 16:38	1	
CCB	DR6000-1052419163846	20190524163846	05/24/19 16:38	1	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1101421	**Calibration (begin) date/time:**	02/20/19 14:30
Instrument ID:	DR6000-1	**Calibration (end) date/time:**	02/20/19 14:30
Analytical Method:	4500S2 D-2011	**Analytical Run:**	WG1285424

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
SULFIDE	0.05	.047732143	95.50	0.10	.106206325	106
File ID:		12			13	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1101421	**Calibration (begin) date/time:**	02/20/19 14:30
Instrument ID:	DR6000-1	**Calibration (end) date/time:**	02/20/19 14:30
Analytical Method:	4500S2 D-2011	**Analytical Run:**	WG1285424

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
SULFIDE	0.50	.482540163	96.50	1	1.007308463	101
File ID:		14			15	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1101421	**Calibration (begin) date/time:**	02/20/19 14:30
Instrument ID:	DR6000-1	**Calibration (end) date/time:**	02/20/19 14:30
Analytical Method:	4500S2 D-2011	**Analytical Run:**	WG1285424

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
SULFIDE	1.50	1.520082059	101	2	1.984876839	99.20
File ID:		16			17	

16C-IN

GENERAL CHEMISTRY
INITIAL CALIBRATION

SDG:	L1101421	**Calibration (begin) date/time:**	02/20/19 14:30
Instrument ID:	DR6000-1	**Calibration (end) date/time:**	02/20/19 14:30
Analytical Method:	4500S2 D-2011	**Analytical Run:**	WG1285424

Analyte	Cal. Type	Weightage	Corr.	Coef1	Coef2	Slope	Incpt	% RSD
SULFIDE	0	5	0.999861			1.499338	0.001253	

Calibration Type

0 = Linear Regression

Weightage

5 = None

504.1 EDB / DBCP

3A-OR

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1101421-01

SAMPLE NO.:
R3414754-2

MS Sample / File ID:	R3414754-2 / 0523_05	**SDG:**	L1101421
MSD Sample / File ID:	_____	**Analytical Batch:**	WG1285476
OS Sample / File ID:	L1101282-02 / 0523_06	**Matrix:**	WW
Instrument ID:	SVGC23		
Analytical Method:	504.1		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limit
	mg/l	*mg/l*	*mg/l*		*%*	*%*		*%*	*%*	*%*
Ethylene Dibromide	0.000100	ND	0.000116		116		1	70.0 - 130		
1,2-Dibromo-3-Chloropropane	0.000100	ND	0.000107		107		1	70.0 - 130		

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

3B-OR

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY

L1101421-01

SAMPLE NO.:
R3414754-4
R3414754-5

LCS Sample / File ID:	R3414754-4 / 0523_18LFB	**SDG:**	L1101421
LCSD Sample / File ID:	R3414754-5 / 0523_23LFBD	**Analytical Batch:**	WG1285476
Instrument ID:	SVGC23	**Dilution Factor:**	1
Analytical Method:	504.1	**Matrix:**	WW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limit
	mg/l	*mg/l*	*mg/l*	*%*	*%*	*%*	*%*	*%*
Ethylene Dibromide	0.000250	0.000305	0.000309	122	124	70.0 - 130	1.30	20
1,2-Dibromo-3-Chloropropane	0.000250	0.000302	0.000306	121	122	70.0 - 130	1.32	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

3C-OR

LABORATORY DUPLICATE

L1101421-01

SAMPLE NO.:
R3414754-3

DUP Sample / File ID:	R3414754-3 / 0523_07	**SDG:**	L1101421
OS Sample / File ID:	L1101282-01 / 0523_08	**Analytical Batch:**	WG1285476
Lab File ID:	0523_07	**Dilution Factor:**	1
Instrument ID:	SVGC23	**Matrix:**	WW
Analytical Method:	504.1		

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

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

4A-OR

METHOD BLANK

SAMPLE NO.:
R3414754-1

Lab Sample ID:	R3414754-1	**SDG:**	L1101421
Lab File ID:	0523_04	**Preparation Date/Time:**	05/23/19 09:01
Instrument ID:	SVGC23	**Analysis Date/Time:**	05/23/19 21:07
Analytical Batch:	WG1285476	**Dilution Factor:**	1
Analytical Method:	504.1	**Matrix:**	WW

Sample ID	**Lab Sample ID**	**Instrument**	**File ID**	**Analysis** *date/time*
MS	R3414754-2	SVGC23	0523_05	05/23/19 21:18
OS	L1101282-02	SVGC23	0523_06	05/23/19 21:29
DUP	R3414754-3	SVGC23	0523_07	05/23/19 21:42
OS	L1101282-01	SVGC23	0523_08	05/23/19 21:54
LCS	R3414754-4	SVGC23	0523_18LFB	05/23/19 23:54
WW-20190520-002-DAY 18	L1101421-01	SVGC23	0523_21	05/24/19 00:30
LCSD	R3414754-5	SVGC23	0523_23LFBD	05/24/19 00:54

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
WW-20190520-002-DAY 18

Lab Sample ID:	L1101421-01	**SDG:**	L1101421
Client Sample ID:	WW-20190520-002-DAY 18	**Collected Date/Time:**	05/20/19 11:30
Lab File ID:	0523_21	**Received Date/Time:**	05/22/19 08:00
Instrument ID:	SVGC23	**Preparation Date/Time:**	05/23/19 09:01
Analytical Batch:	WG1285476	**Analysis Date/Time:**	05/24/19 00:30
Dilution Factor:	1	**Prep Method:**	8011/504.1
Analytical Method:	504.1	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	35 mL
Total Solids (%):	_____	**Final Wt/Vol:**	2 mL

Analyte	**CAS**	**RT**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
			mg/l		*mg/l*	*mg/l*	*mg/l*
Ethylene Dibromide	106-93-4	0	U		0.00000240	0.0000100	0.0000100
1,2-Dibromo-3-Chloropropane	96-12-8	0	U		0.00000430	0.0000200	0.0000200

6B-OR

RETENTION TIME
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	05/07/19 17:39
Instrument ID:	SVGC23 - 1	**Calibration (end) date/time:**	05/13/19 12:59
Analytical Method:	504.1		

Analyte	**CS: 0.01**	**CS: 0.02**	**CS: 0.05**	**CS: 0.10**	**CS: 0.25**	**CS: 0.50**
ETHYLENE DIBROMIDE	1.40	1.40	1.40	1.40	1.37	1.40
1,2-DIBROMO-3-CHLOROPROPANE	3.13	3.13	3.13	3.13	3.12	3.12
File ID:	0507A_03	0507A_04	0507A_05	0507A_06	0513_03	0507A_08

6B-OR

RETENTION TIME
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	05/07/19 17:39
Instrument ID:	SVGC23 - 2	**Calibration (end) date/time:**	05/13/19 12:59
Analytical Method:	504.1		

Analyte	**CS: 0.01**	**CS: 0.02**	**CS: 0.05**	**CS: 0.10**	**CS: 0.25**	**CS: 0.50**
ETHYLENE DIBROMIDE	1.50	1.50	1.50	1.50	1.47	1.50
1,2-DIBROMO-3-CHLOROPROPANE	3.18	3.17	3.17	3.17	3.17	3.17
File ID:	0507A_03	0507A_04	0507A_05	0507A_06	0513_03	0507A_08

6C-OR

CALIBRATION FACTOR
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	05/07/19 17:39
Instrument ID:	SVGC23 - 1	**Calibration (end) date/time:**	05/13/19 12:59
Analytical Method:	504.1		

Analyte	**RRF: 0.01**	**RRF: 0.02**	**RRF: 0.05**	**RRF: 0.10**	**RRF: 0.25**	**RRF: 0.50**
ETHYLENE DIBROMIDE	3424000	3141000	2755000	2895000	2503000	2414000
1,2-DIBROMO-3-CHLOROPROPANE	3567000	3801000	3978000	4817000	4317000	4317000
File ID:	0507A_03	0507A_04	0507A_05	0507A_06	0513_03	0507A_08

6C-OR

CALIBRATION FACTOR
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	05/07/19 17:39
Instrument ID:	SVGC23 - 1	**Calibration (end) date/time:**	05/13/19 12:59
Analytical Method:	504.1		

Analyte	RRF. Avg	%RSD	COD
ETHYLENE DIBROMIDE	2855476	13.43	0.997
1,2-DIBROMO-3-CHLOROPROPANE	4132641	10.77	0.999

6C-OR

CALIBRATION FACTOR
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	05/07/19 17:39
Instrument ID:	SVGC23 - 2	**Calibration (end) date/time:**	05/13/19 12:59
Analytical Method:	504.1		

Analyte	**RRF: 0.01**	**RRF: 0.02**	**RRF: 0.05**	**RRF: 0.10**	**RRF: 0.25**	**RRF: 0.50**
ETHYLENE DIBROMIDE	2002000	1282000	1764000	1815000	1527000	1506000
1,2-DIBROMO-3-CHLOROPROPANE	2499000	3027000	3001000	3126000	2827000	2768000
File ID:	0507A_03	0507A_04	0507A_05	0507A_06	0513_03	0507A_08

6C-OR

CALIBRATION FACTOR
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	05/07/19 17:39
Instrument ID:	SVGC23 - 2	**Calibration (end) date/time:**	05/13/19 12:59
Analytical Method:	504.1		

Analyte	RRF. Avg	%RSD	COD
ETHYLENE DIBROMIDE	1649330	15.7	0.993
1,2-DIBROMO-3-CHLOROPROPANE	2874567	7.89	

7D-OR

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	05/07/19 17:39
Instrument ID:	SVGC23 - 1	**Calibration (end) date/time:**	05/13/19 12:59
Lab File ID:	0523_03-1	**Analysis date/time:**	05/23/19 20:56
Analytical Method:	504.1	**Sample ID:**	ICV

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
1,2-DIBROMO-3-CHLOROPROPANE	0.000250	0.0002451	98	70 - 130
ETHYLENE DIBROMIDE	0.000250	0.0002700	108	70 - 130

7D-OR

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	05/07/19 17:39
Instrument ID:	SVGC23 - 2	**Calibration (end) date/time:**	05/13/19 12:59
Lab File ID:	0523_03-1	**Analysis date/time:**	05/23/19 20:56
Analytical Method:	504.1	**Sample ID:**	ICV

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
1,2-DIBROMO-3-CHLOROPROPANE	0.000250	0.0002259	90.40	70 - 130
ETHYLENE DIBROMIDE	0.000250	0.0002464	98.60	70 - 130

7D-OR

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	05/07/19 17:39
Instrument ID:	SVGC23 - 1	**Calibration (end) date/time:**	05/13/19 12:59
Lab File ID:	0523_18-1	**Analysis date/time:**	05/23/19 23:54
Analytical Method:	504.1	**Sample ID:**	CCV

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
1,2-DIBROMO-3-CHLOROPROPANE	0.000250	0.0003023	121	70 - 130
ETHYLENE DIBROMIDE	0.000250	0.0003055	122	70 - 130

7D-OR

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	05/07/19 17:39
Instrument ID:	SVGC23 - 2	**Calibration (end) date/time:**	05/13/19 12:59
Lab File ID:	0523_18-1	**Analysis date/time:**	05/23/19 23:54
Analytical Method:	504.1	**Sample ID:**	CCV

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
1,2-DIBROMO-3-CHLOROPROPANE	0.000250	0.0002685	107	70 - 130
ETHYLENE DIBROMIDE	0.000250	0.0002799	112	70 - 130

7D-OR

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	05/07/19 17:39
Instrument ID:	SVGC23 - 1	**Calibration (end) date/time:**	05/13/19 12:59
Lab File ID:	0523_23-1	**Analysis date/time:**	05/24/19 00:54
Analytical Method:	504.1	**Sample ID:**	CCV

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
1,2-DIBROMO-3-CHLOROPROPANE	0.000250	0.0003064	123	70 - 130
ETHYLENE DIBROMIDE	0.000250	0.0003094	124	70 - 130

7D-OR

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	05/07/19 17:39
Instrument ID:	SVGC23 - 2	**Calibration (end) date/time:**	05/13/19 12:59
Lab File ID:	0523_23-1	**Analysis date/time:**	05/24/19 00:54
Analytical Method:	504.1	**Sample ID:**	CCV

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
1,2-DIBROMO-3-CHLOROPROPANE	0.000250	0.0002688	108	70 - 130
ETHYLENE DIBROMIDE	0.000250	0.0002873	115	70 - 130

7F-OR

REPORTING LEVEL VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	05/07/19 17:39
Instrument ID:	SVGC23 - 1	**Calibration (end) date/time:**	05/13/19 12:59
Lab File ID:	0523_02-1	**Analysis date/time:**	05/23/19 20:44
Analytical Method:	504.1		

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
1,2-DIBROMO-3-CHLOROPROPANE	0.000010	0.000008832	88.30	60 - 140
ETHYLENE DIBROMIDE	0.000010	0.000009066	90.70	60 - 140

7F-OR

REPORTING LEVEL VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	05/07/19 17:39
Instrument ID:	SVGC23 - 2	**Calibration (end) date/time:**	05/13/19 12:59
Lab File ID:	0523_02-1	**Analysis date/time:**	05/23/19 20:44
Analytical Method:	504.1		

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
1,2-DIBROMO-3-CHLOROPROPANE	0.000010	0.00001125	113	60 - 140
ETHYLENE DIBROMIDE	0.000010	0.00001036	104	60 - 140

8B-OR

ANALYTICAL SEQUENCE

SDG:	L1101421	**Analytical Method:**	504.1
Instrument ID:	SVGC23	**Calibration Start Date:**	05/07/19 17:39
		Calibration End Date:	05/13/19 12:59

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
CAL	0.01	0507A_03	05/07/19 17:39	1	
CAL	0.02	0507A_04	05/07/19 17:58	1	
CAL	0.05	0507A_05	05/07/19 18:10	1	
CAL	0.10	0507A_06	05/07/19 18:22	1	
CAL	0.50	0507A_08	05/07/19 18:47	1	
CAL	0.25	0513_03	05/13/19 12:59	1	
RL	SVGC230523190523_02-1471812	0523_02-1	05/23/19 20:44	1	
ICV	SVGC230523190523_03-1471812	0523_03-1	05/23/19 20:56	1	
BLANK	R3414754-1	0523_04	05/23/19 21:07	1	WG1285476
MS	R3414754-2	0523_05	05/23/19 21:18	1	WG1285476
OS	L1101282-02	0523_06	05/23/19 21:29	1	WG1285476
DUP	R3414754-3	0523_07	05/23/19 21:42	1	WG1285476
OS	L1101282-01	0523_08	05/23/19 21:54	1	WG1285476
CCV	SVGC230523190523_18-1471812	0523_18-1	05/23/19 23:54	1	
LCS	R3414754-4	0523_18LFB	05/23/19 23:54	1	WG1285476
WW-20190520-002-DAY 18	L1101421-01	0523_21	05/24/19 00:30	1	WG1285476
CCV	SVGC230523190523_23-1471812	0523_23-1	05/24/19 00:54	1	
LCSD	R3414754-5	0523_23LFBD	05/24/19 00:54	1	WG1285476

10A-OR

SINGLE COMPONENT ANALYSIS IDENTIFICATION

SAMPLE NO.:
R3414754-1

Lab Sample ID:	R3414754-1	**SDG:**	L1101421
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	0523_04	**Received Date/Time:**	_____
Instrument ID:	SVGC23	**Preparation Date/Time:**	05/23/19 09:01
Analytical Batch:	WG1285476	**Analysis Date/Time:**	05/23/19 21:07
Dilution Factor:	1	**Prep Method:**	8011/504.1
Analytical Method:	504.1	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	35 mL
Total Solids (%):	_____	**Final Wt/Vol:**	2 mL

Analyte	**Column**	**RT**	**Concentration** *mg/l*	**% Diff.**
Ethylene Dibromide	1	0	U	0
1,2-Dibromo-3-Chloropropane	1	0	U	0

10A-OR

SINGLE COMPONENT ANALYSIS IDENTIFICATION

SAMPLE NO.:
R3414754-3

Lab Sample ID:	R3414754-3	**SDG:**	L1101421
Client Sample ID:	DUP	**Collected Date/Time:**	05/21/19 13:10
Lab File ID:	0523_07	**Received Date/Time:**	05/22/19 08:45
Instrument ID:	SVGC23	**Preparation Date/Time:**	05/23/19 09:01
Analytical Batch:	WG1285476	**Analysis Date/Time:**	05/23/19 21:42
Dilution Factor:	1	**Prep Method:**	8011/504.1
Analytical Method:	504.1	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	35 mL
Total Solids (%):	_____	**Final Wt/Vol:**	2 mL

Analyte	**Column**	**RT**	**Concentration** *mg/l*	**% Diff.**
Ethylene Dibromide	1	0	0.000	0
	2	0	0.000	
1,2-Dibromo-3-Chloropropane	1	0	0.000	0
	2	0	0.000	

10A-OR

SINGLE COMPONENT ANALYSIS IDENTIFICATION

SAMPLE NO.:
R3414754-4

Lab Sample ID:	R3414754-4	**SDG:**	L1101421
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	0523_18LFB	**Received Date/Time:**	_____
Instrument ID:	SVGC23	**Preparation Date/Time:**	05/23/19 09:01
Analytical Batch:	WG1285476	**Analysis Date/Time:**	05/23/19 23:54
Dilution Factor:	1	**Prep Method:**	8011/504.1
Analytical Method:	504.1	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	35 mL
Total Solids (%):	_____	**Final Wt/Vol:**	2 mL

Analyte	**Column**	**RT**	**Concentration** *mg/l*	**% Diff.**
Ethylene Dibromide	1	1.37	0.000305	8.75
1,2-Dibromo-3-Chloropropane	1	3.12	0.000302	11.8

10A-OR

SINGLE COMPONENT ANALYSIS IDENTIFICATION

SAMPLE NO.:
R3414754-5

Lab Sample ID:	R3414754-5	**SDG:**	L1101421
Client Sample ID:	LCSD	**Collected Date/Time:**	_____
Lab File ID:	0523_23LFBD	**Received Date/Time:**	_____
Instrument ID:	SVGC23	**Preparation Date/Time:**	05/23/19 09:01
Analytical Batch:	WG1285476	**Analysis Date/Time:**	05/24/19 00:54
Dilution Factor:	1	**Prep Method:**	8011/504.1
Analytical Method:	504.1	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	35 mL
Total Solids (%):	_____	**Final Wt/Vol:**	2 mL

Analyte	**Column**	**RT**	**Concentration** *mg/l*	**% Diff.**
Ethylene Dibromide	1	1.38	0.000309	7.41
1,2-Dibromo-3-Chloropropane	1	3.12	0.000306	13.1

10A-OR

SINGLE COMPONENT ANALYSIS IDENTIFICATION

SAMPLE NO.:
R3414754-2

Lab Sample ID:	R3414754-2	**SDG:**	L1101421
Client Sample ID:	MS	**Collected Date/Time:**	05/21/19 10:25
Lab File ID:	0523_05	**Received Date/Time:**	05/22/19 08:45
Instrument ID:	SVGC23	**Preparation Date/Time:**	05/23/19 09:01
Analytical Batch:	WG1285476	**Analysis Date/Time:**	05/23/19 21:18
Dilution Factor:	1	**Prep Method:**	8011/504.1
Analytical Method:	504.1	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	35 mL
Total Solids (%):	_____	**Final Wt/Vol:**	2 mL

Analyte	**Column**	**RT**	**Concentration** *mg/l*	**% Diff.**
Ethylene Dibromide	1	1.38	0.000116	7.68
	2	1.48	0.000108	
1,2-Dibromo-3-Chloropropane	1	3.12	0.000107	12
	2	3.17	0.0000953	

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414754-1

Lab Sample ID:	R3414754-1	**SDG:**	L1101421
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	0523_04	**Received Date/Time:**	_____
Instrument ID:	SVGC23	**Preparation Date/Time:**	05/23/19 09:01
Analytical Batch:	WG1285476	**Analysis Date/Time:**	05/23/19 21:07
Dilution Factor:	1	**Prep Method:**	8011/504.1
Analytical Method:	504.1	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	35 mL
Total Solids (%):	_____	**Final Wt/Vol:**	2 mL

Analyte	**CAS**	**RT**	**Result** *mg/l*	**Qualifier**	**SDL** *mg/l*	**Unadj. MQL** *mg/l*	**MQL** *mg/l*
Ethylene Dibromide	106-93-4	0	U		0.00000240	0.000010	0.0000100
1,2-Dibromo-3-Chloropropane	96-12-8	0	U		0.00000430	0.000020	0.0000200

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414754-3

Lab Sample ID:	R3414754-3	**SDG:**	L1101421
Client Sample ID:	DUP	**Collected Date/Time:**	05/21/19 13:10
Lab File ID:	0523_07	**Received Date/Time:**	05/22/19 08:45
Instrument ID:	SVGC23	**Preparation Date/Time:**	05/23/19 09:01
Analytical Batch:	WG1285476	**Analysis Date/Time:**	05/23/19 21:42
Dilution Factor:	1	**Prep Method:**	8011/504.1
Analytical Method:	504.1	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	35 mL
Total Solids (%):	_____	**Final Wt/Vol:**	2 mL

Analyte	CAS	RT	Result	Qualifier	SDL	Unadj. MQL	MQL
			mg/l		*mg/l*	*mg/l*	*mg/l*
Ethylene Dibromide	106-93-4	0	0.000		0.00000240	0.000010	0.0000100
1,2-Dibromo-3-Chloropropane	96-12-8	0	0.000		0.00000430	0.000020	0.0000200

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414754-4

Lab Sample ID:	R3414754-4	**SDG:**	L1101421
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	0523_18LFB	**Received Date/Time:**	_____
Instrument ID:	SVGC23	**Preparation Date/Time:**	05/23/19 09:01
Analytical Batch:	WG1285476	**Analysis Date/Time:**	05/23/19 23:54
Dilution Factor:	1	**Prep Method:**	8011/504.1
Analytical Method:	504.1	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	35 mL
Total Solids (%):	_____	**Final Wt/Vol:**	2 mL

Analyte	**CAS**	**RT**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
			mg/l		*mg/l*	*mg/l*	*mg/l*
Ethylene Dibromide	106-93-4	1.37	0.000305		0.00000240	0.000010	0.0000100
1,2-Dibromo-3-Chloropropane	96-12-8	3.12	0.000302		0.00000430	0.000020	0.0000200

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414754-5

Lab Sample ID:	R3414754-5	**SDG:**	L1101421
Client Sample ID:	LCSD	**Collected Date/Time:**	_____
Lab File ID:	0523_23LFBD	**Received Date/Time:**	_____
Instrument ID:	SVGC23	**Preparation Date/Time:**	05/23/19 09:01
Analytical Batch:	WG1285476	**Analysis Date/Time:**	05/24/19 00:54
Dilution Factor:	1	**Prep Method:**	8011/504.1
Analytical Method:	504.1	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	35 mL
Total Solids (%):	_____	**Final Wt/Vol:**	2 mL

Analyte	**CAS**	**RT**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
			mg/l		*mg/l*	*mg/l*	*mg/l*
Ethylene Dibromide	106-93-4	1.38	0.000309		0.00000240	0.000010	0.0000100
1,2-Dibromo-3-Chloropropane	96-12-8	3.12	0.000306		0.00000430	0.000020	0.0000200

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414754-2

Lab Sample ID:	R3414754-2	**SDG:**	L1101421
Client Sample ID:	MS	**Collected Date/Time:**	05/21/19 10:25
Lab File ID:	0523_05	**Received Date/Time:**	05/22/19 08:45
Instrument ID:	SVGC23	**Preparation Date/Time:**	05/23/19 09:01
Analytical Batch:	WG1285476	**Analysis Date/Time:**	05/23/19 21:18
Dilution Factor:	1	**Prep Method:**	8011/504.1
Analytical Method:	504.1	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	35 mL
Total Solids (%):	_____	**Final Wt/Vol:**	2 mL

Analyte	CAS	RT	Result	Qualifier	SDL	Unadj. MQL	MQL
			mg/l		*mg/l*	*mg/l*	*mg/l*
Ethylene Dibromide	106-93-4	1.38	0.000116		0.00000240	0.000010	0.0000100
1,2-Dibromo-3-Chloropropane	96-12-8	3.12	0.000107		0.00000430	0.000020	0.0000200

5310 B-2011 Wet Chemistry

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
WW-20190520-002-DAY 18

Lab Sample ID:	L1101421-01	**SDG:**	L1101421
Client Sample ID:	WW-20190520-002-DAY 18	**Collected Date/Time:**	05/20/19 11:30
Lab File ID:	20190523135156	**Received Date/Time:**	05/22/19 08:00
Instrument ID:	TOC3	**Preparation Date/Time:**	05/23/19 13:51
Analytical Batch:	WG1285456	**Analysis Date/Time:**	05/23/19 13:51
Dilution Factor:	1	**Prep Method:**	5310 B-2011
Analytical Method:	5310 B-2011	**Sample Vol Used:**	25 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
TOC (Total Organic Carbon)		5.31		0.102	1.00	1.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414574-1

Lab Sample ID:	R3414574-1	**SDG:**	L1101421
Client Sample ID:	BLANK	**Collected Date/Time:**	
Lab File ID:	20190523120027	**Received Date/Time:**	
Instrument ID:	TOC3	**Preparation Date/Time:**	05/23/19 12:00
Analytical Batch:	WG1285456	**Analysis Date/Time:**	05/23/19 12:00
Dilution Factor:	1	**Prep Method:**	9060A
Analytical Method:	5310 B-2011	**Sample Vol Used:**	25 mL
Matrix:	WW	**Initial Wt/Vol:**	
Total Solids (%):		**Final Wt/Vol:**	

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
TOC (Total Organic Carbon)		0.172	J	0.102	1	1.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414574-2

Lab Sample ID:	R3414574-2	**SDG:**	L1101421
Client Sample ID:	LCS	**Collected Date/Time:**	
Lab File ID:	20190523123501	**Received Date/Time:**	
Instrument ID:	TOC3	**Preparation Date/Time:**	05/23/19 12:35
Analytical Batch:	WG1285456	**Analysis Date/Time:**	05/23/19 12:35
Dilution Factor:	1	**Prep Method:**	9060A
Analytical Method:	5310 B-2011	**Sample Vol Used:**	25 mL
Matrix:	WW	**Initial Wt/Vol:**	
Total Solids (%):		**Final Wt/Vol:**	

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
TOC (Total Organic Carbon)		80.9		0.102	1	1.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414574-6

Lab Sample ID:	R3414574-6	**SDG:**	L1101421
Client Sample ID:	DUP	**Collected Date/Time:**	05/21/19 12:20
Lab File ID:	20190523181851	**Received Date/Time:**	05/22/19 08:45
Instrument ID:	TOC3	**Preparation Date/Time:**	05/23/19 18:18
Analytical Batch:	WG1285456	**Analysis Date/Time:**	05/23/19 18:18
Dilution Factor:	1	**Prep Method:**	9060A
Analytical Method:	5310 B-2011	**Sample Vol Used:**	25 mL
Matrix:	WW	**Initial Wt/Vol:**	
Total Solids (%):		**Final Wt/Vol:**	

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
TOC (Total Organic Carbon)		5.83		0.102	1	1.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414574-4

Lab Sample ID:	R3414574-4	**SDG:**	L1101421
Client Sample ID:	MS	**Collected Date/Time:**	05/20/19 12:00
Lab File ID:	20190523165726	**Received Date/Time:**	05/22/19 08:45
Instrument ID:	TOC3	**Preparation Date/Time:**	05/23/19 16:57
Analytical Batch:	WG1285456	**Analysis Date/Time:**	05/23/19 16:57
Dilution Factor:	1	**Prep Method:**	9060A
Analytical Method:	5310 B-2011	**Sample Vol Used:**	25 mL
Matrix:	WW	**Initial Wt/Vol:**	
Total Solids (%):		**Final Wt/Vol:**	

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
TOC (Total Organic Carbon)		55.7		0.102	1	1.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414574-7

Lab Sample ID:	R3414574-7	**SDG:**	L1101421
Client Sample ID:	MS	**Collected Date/Time:**	05/21/19 13:54
Lab File ID:	20190523210715	**Received Date/Time:**	05/22/19 08:45
Instrument ID:	TOC3	**Preparation Date/Time:**	05/23/19 21:07
Analytical Batch:	WG1285456	**Analysis Date/Time:**	05/23/19 21:07
Dilution Factor:	1	**Prep Method:**	9060A
Analytical Method:	5310 B-2011	**Sample Vol Used:**	25 mL
Matrix:	WW	**Initial Wt/Vol:**	
Total Solids (%):		**Final Wt/Vol:**	

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
TOC (Total Organic Carbon)		59.9		0.102	1	1.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414574-5

Lab Sample ID:	R3414574-5	**SDG:**	L1101421
Client Sample ID:	MSD	**Collected Date/Time:**	05/20/19 12:00
Lab File ID:	20190523171622	**Received Date/Time:**	05/22/19 08:45
Instrument ID:	TOC3	**Preparation Date/Time:**	05/23/19 17:16
Analytical Batch:	WG1285456	**Analysis Date/Time:**	05/23/19 17:16
Dilution Factor:	1	**Prep Method:**	9060A
Analytical Method:	5310 B-2011	**Sample Vol Used:**	25 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
TOC (Total Organic Carbon)		56.2		0.102	1	1.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414574-8

Lab Sample ID:	R3414574-8	**SDG:**	L1101421
Client Sample ID:	MSD	**Collected Date/Time:**	05/21/19 13:54
Lab File ID:	20190523212608	**Received Date/Time:**	05/22/19 08:45
Instrument ID:	TOC3	**Preparation Date/Time:**	05/23/19 21:26
Analytical Batch:	WG1285456	**Analysis Date/Time:**	05/23/19 21:26
Dilution Factor:	1	**Prep Method:**	9060A
Analytical Method:	5310 B-2011	**Sample Vol Used:**	25 mL
Matrix:	WW	**Initial Wt/Vol:**	
Total Solids (%):		**Final Wt/Vol:**	

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
TOC (Total Organic Carbon)		59.9		0.102	1	1.00

2-IN

CALIBRATION VERIFICATION

SDG:	L1101421	**Calibration (begin) date/time:**	01/16/19 13:22
Instrument ID:	TOC3	**Calibration (end) date/time:**	01/16/19 14:50
Analytical Method:	5310 B-2011	**Analytical Run:**	052319
Concentration Units:	mg/L		

	ICV				**SSCCV**				**CCV**			
Sample ID:	TOC30523191144				TOC30523191446				TOC30523191521			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
TOC (TOTAL ORGANIC CARBON)	50	52.49	105		75	80.31	107		50	52.86	106	

ICV Limits: 90 - 110 SSCCV Limits: 85 - 115 CCV Limits: 90 - 110

2-IN

CALIBRATION VERIFICATION

SDG:	L1101421	**Calibration (begin) date/time:**	01/16/19 13:22
Instrument ID:	TOC3	**Calibration (end) date/time:**	01/16/19 14:50
Analytical Method:	5310 B-2011	**Analytical Run:**	052319
Concentration Units:	mg/L		

	SSCCV				**CCV**				**SSCCV**			
Sample ID:	TOC30523191838				TOC30523191913				TOC30523192219			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
TOC (TOTAL ORGANIC CARBON)	75	79.26	106		50	51.32	103		75	79.48	106	

ICV Limits: 90 - 110 SSCCV Limits: 85 - 115 CCV Limits: 90 - 110

2-IN

CALIBRATION VERIFICATION

SDG:	L1101421	**Calibration (begin) date/time:**	01/16/19 13:22
Instrument ID:	TOC3	**Calibration (end) date/time:**	01/16/19 14:50
Analytical Method:	5310 B-2011	**Analytical Run:**	052319
Concentration Units:	mg/L		

CCV

Sample ID: TOC30523192251

Analyte	True	Found	%R	%RSD
TOC (TOTAL ORGANIC CARBON)	50	51.58	103	

ICV Limits: 90 - 110 SSCCV Limits: 85 - 115 CCV Limits: 90 - 110

3-IN BLANKS

SDG:	L1101421	**Calibration (begin) date/time:**	01/16/19 13:22
Instrument ID:	TOC3	**Calibration (end) date/time:**	01/16/19 14:50
Analytical Method:	5310 B-2011	**Analytical Run:**	052319

Sample ID:	**BLANK Result**	**BLANK Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**
File ID:	20190523120027		20190523153810		20190523192945		20190523230822	
Analyte	mg/l		mg/L		mg/L		mg/L	
TOC (TOTAL ORGANIC CARBON)	0.172	J	0.2532	U	0.2227	U	0.2646	U

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1101421-01

SAMPLE NO.:
R3414574-4
R3414574-5

MS Sample / File ID:	R3414574-4 / 20190523165726	**SDG:**	L1101421
MSD Sample / File ID:	R3414574-5 / 20190523171622	**Analytical Batch:**	WG1285456
OS Sample / File ID:	L1101515-05 / 20190523162741	**Matrix:**	WW
Instrument ID:	TOC3		
Analytical Method:	5310 B-2011		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limits
	mg/l	*mg/l*	*mg/l*	*mg/l*	*%*	*%*		*%*	*%*	*%*
TOC (Total Organic Carbon)	50.0	3.42	55.7	56.2	105	105	1	80.0 - 120	0.876	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1101421-01

SAMPLE NO.:
R3414574-7
R3414574-8

MS Sample / File ID:	R3414574-7 / 20190523210715	**SDG:**	L1101421
MSD Sample / File ID:	R3414574-8 / 20190523212608	**Analytical Batch:**	WG1285456
OS Sample / File ID:	L1101527-02 / 20190523204809	**Matrix:**	WW
Instrument ID:	TOC3		
Analytical Method:	5310 B-2011		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limits
	mg/l	*mg/l*	*mg/l*	*mg/l*	*%*	*%*		*%*	*%*	*%*
TOC (Total Organic Carbon)	50.0	7.17	59.9	59.9	105	105	1	80.0 - 120	0.0334	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

6-IN

DUPLICATES

L1101421-01

SAMPLE NO.:
R3414574-6

DUP Sample / File ID:	R3414574-6 / 20190523181851	**SDG:**	L1101421
OS Sample / File ID:	L1101516-03 / 20190523180307	**Analytical Batch:**	WG1285456
Instrument ID:	TOC3	**Dilution Factor:**	1
Analytical Method:	5310 B-2011	**Matrix:**	WW

Analyte	**OS Result**	**DUP Result**	**RPD**	**RPD Limits**
	mg/l	*mg/l*	*mg/l*	*mg/l*
TOC (Total Organic Carbon)	5.94	5.83	1.97	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

7-IN

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY

L1101421-01

SAMPLE NO.:
R3414574-2

LCS Sample / File ID:	R3414574-2 / 20190523123501	**SDG:**	L1101421
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1285456
Instrument ID:	TOC3	**Dilution Factor:**	1
Analytical Method:	5310 B-2011	**Matrix:**	WW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	mg/l	*mg/l*		*%*	*%*	*%*	*%*	*%*
TOC (Total Organic Carbon)	75.0	80.9		108		85.0 - 115		

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

12-IN

ANALYSIS LOG

SDG:	L1101421	**Analytical Method:**	5310 B-2011
Instrument ID:	TOC3	**Calibration Start Date:**	01/16/19 13:22
Analytical Run:	011619	**Calibration End Date:**	01/16/19 14:50

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
CAL	0	20190116132253	01/16/19 13:22	1	
CAL	1	20190116134038	01/16/19 13:40	1	
CAL	5	20190116135423	01/16/19 13:54	1	
CAL	25	20190116140929	01/16/19 14:09	1	
CAL	50	20190116142907	01/16/19 14:29	1	
CAL	100	20190116145010	01/16/19 14:50	1	

12-IN

ANALYSIS LOG

SDG:	L1101421	**Analytical Method:**	5310 B-2011
Instrument ID:	TOC3	**Calibration Start Date:**	01/16/19 13:22
Analytical Run:	052319	**Calibration End Date:**	01/16/19 14:50

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
ICV	TOC30523191144	20190523114457	05/23/19 11:44	1	
BLANK	R3414574-1	20190523120027	05/23/19 12:00	1	WG1285456
RL	TOC30523191215	20190523121531	05/23/19 12:15	1	
LCS	R3414574-2	20190523123501	05/23/19 12:35	1	WG1285456
WW-20190520-002-DAY 18	L1101421-01	20190523135156	05/23/19 13:51	1	WG1285456
SSCCV	TOC30523191446	20190523144646	05/23/19 14:46	1	
CCV	TOC30523191521	20190523152154	05/23/19 15:21	1	
CCB	TOC30523191538	20190523153810	05/23/19 15:38	1	
OS	L1101515-05	20190523162741	05/23/19 16:27	1	WG1285456
MS	R3414574-4	20190523165726	05/23/19 16:57	1	WG1285456
MSD	R3414574-5	20190523171622	05/23/19 17:16	1	WG1285456
OS	L1101516-03	20190523180307	05/23/19 18:03	1	WG1285456
DUP	R3414574-6	20190523181851	05/23/19 18:18	1	WG1285456
SSCCV	TOC30523191838	20190523183839	05/23/19 18:38	1	
CCV	TOC30523191913	20190523191348	05/23/19 19:13	1	
CCB	TOC30523191929	20190523192945	05/23/19 19:29	1	
OS	L1101527-02	20190523204809	05/23/19 20:48	1	WG1285456
MS	R3414574-7	20190523210715	05/23/19 21:07	1	WG1285456
MSD	R3414574-8	20190523212608	05/23/19 21:26	1	WG1285456
SSCCV	TOC30523192219	20190523221919	05/23/19 22:19	1	
CCV	TOC30523192251	20190523225154	05/23/19 22:51	1	
CCB	TOC30523192308	20190523230822	05/23/19 23:08	1	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1101421	**Calibration (begin) date/time:**	01/16/19 13:22
Instrument ID:	TOC3	**Calibration (end) date/time:**	01/16/19 14:50
Analytical Method:	5310 B-2011	**Analytical Run:**	052319

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
TOC (TOTAL ORGANIC CARBON)	0	.9501209		1	1.94124	194
File ID:		20190116132253			20190116134038	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1101421	**Calibration (begin) date/time:**	01/16/19 13:22
Instrument ID:	TOC3	**Calibration (end) date/time:**	01/16/19 14:50
Analytical Method:	5310 B-2011	**Analytical Run:**	052319

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
TOC (TOTAL ORGANIC CARBON)	5	5.547043	111	25	23.6811	94.70
File ID:		20190116135423			20190116140929	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1101421	**Calibration (begin) date/time:**	01/16/19 13:22
Instrument ID:	TOC3	**Calibration (end) date/time:**	01/16/19 14:50
Analytical Method:	5310 B-2011	**Analytical Run:**	052319

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
TOC (TOTAL ORGANIC CARBON)	50	47.17507	94.40	100	101.7054	102
File ID:		20190116142907			20190116145010	

16C-IN

GENERAL CHEMISTRY
INITIAL CALIBRATION

SDG:	L1101421	**Calibration (begin) date/time:**	01/16/19 13:22
Instrument ID:	TOC3	**Calibration (end) date/time:**	01/16/19 14:50
Analytical Method:	5310 B-2011	**Analytical Run:**	052319

Analyte	Cal. Type	Weightage	Corr.	Coef1	Coef2	Slope	Incpt	% RSD
TOC (TOTAL ORGANIC CARBON)	0	5	0.999045			8.912926	-7.467882	

Calibration Type

0 = Linear Regression

Weightage

5 = None

624.1 Volatile Organic Compounds (GC/MS)

2A-OR

SURROGATE RECOVERY

Analytical Method: 624.1 **SDG:** L1101421
Matrix: WW

Sample ID	Lab Sample ID	Instrument	File ID	DMC-1 % Rec.	DMC-2 % Rec.	DMC-3 % Rec.	TOT Out
WW-20190520-002-DAY 18	L1101421-01	VOCMS6	0527_81	92.5	89.9	100	0

Parm Abbreviation	Parameter	QC LIMITS
DMC-1	Toluene-d8	80.0 - 120
DMC-2	1,2-Dichloroethane-d4	70.0 - 130
DMC-3	4-Bromofluorobenzene	80.0 - 120

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

2A-OR

SURROGATE RECOVERY

Analytical Method: 624.1 **SDG:** L1101421
Matrix: WW

Sample ID	Lab Sample ID	Instrument	File ID	DMC-1 % Rec.	DMC-2 % Rec.	DMC-3 % Rec.	TOT Out
BLANK	R3415400-3	VOCMS6	0527_60	93.0	98.8	89.8	0
LCS	R3415400-1	VOCMS6	0527_56	92.2	104	86.0	0

Parm Abbreviation	Parameter	QC LIMITS
DMC-1	Toluene-d8	80.0 - 120
DMC-2	4-Bromofluorobenzene	80.0 - 120
DMC-3	1,2-Dichloroethane-d4	70.0 - 130

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

3B-OR

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY

L1101421-01

SAMPLE NO.:
R3415400-1

LCS Sample / File ID:	R3415400-1 / 0527_56	**SDG:**	L1101421
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1287157
Instrument ID:	VOCMS6	**Dilution Factor:**	1
Analytical Method:	624.1	**Matrix:**	WW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limit
	mg/l	*mg/l*		*%*	*%*	*%*	*%*	*%*
Acetone	0.125	0.134		107		10.0 - 160		
Acrylonitrile	0.125	0.148		118		60.0 - 140		
n-Butylbenzene	0.0250	0.0222		88.7		72.0 - 126		
Benzene	0.0250	0.0282		113		65.0 - 135		
sec-Butylbenzene	0.0250	0.0220		87.9		74.0 - 121		
Bromobenzene	0.0250	0.0222		89.0		79.0 - 120		
tert-Butylbenzene	0.0250	0.0228		91.3		75.0 - 122		
Bromodichloromethane	0.0250	0.0286		115		70.0 - 135		
Carbon disulfide	0.0250	0.0279		112		55.0 - 127		
Bromochloromethane	0.0250	0.0247		98.7		76.0 - 122		
Bromoform	0.0250	0.0251		100		70.0 - 130		
Bromomethane	0.0250	0.0145		58.1		15.0 - 185		
Carbon tetrachloride	0.0250	0.0293		117		70.0 - 130		
Chlorobenzene	0.0250	0.0263		105		65.0 - 135		
Chlorodibromomethane	0.0250	0.0257		103		70.0 - 135		
Chloroethane	0.0250	0.0262		105		40.0 - 160		
Chloroform	0.0250	0.0281		112		70.0 - 135		
Chloromethane	0.0250	0.0127		50.9		0.100 - 205		
2-Chlorotoluene	0.0250	0.0222		88.8		74.0 - 122		
4-Chlorotoluene	0.0250	0.0233		93.3		79.0 - 120		
Dibromomethane	0.0250	0.0274		110		78.0 - 120		
1,2-Dichlorobenzene	0.0250	0.0246		98.5		65.0 - 135		
1,3-Dichlorobenzene	0.0250	0.0235		94.0		70.0 - 130		
1,4-Dichlorobenzene	0.0250	0.0229		91.5		65.0 - 135		
Dichlorodifluoromethane	0.0250	0.0124		49.5		49.0 - 155		
1,1-Dichloroethane	0.0250	0.0283		113		70.0 - 130		
1,2-Dichloroethane	0.0250	0.0259		104		70.0 - 130		
1,1-Dichloroethene	0.0250	0.0305		122		50.0 - 150		
cis-1,2-Dichloroethene	0.0250	0.0280		112		73.0 - 120		
trans-1,2-Dichloroethene	0.0250	0.0300		120		70.0 - 130		
1,2-Dichloropropane	0.0250	0.0278		111		35.0 - 165		
1,1-Dichloropropene	0.0250	0.0299		119		71.0 - 129		
cis-1,3-Dichloropropene	0.0250	0.0291		116		25.0 - 175		
trans-1,3-Dichloropropene	0.0250	0.0258		103		50.0 - 150		
2,2-Dichloropropane	0.0250	0.0259		104		60.0 - 125		
Isopropylbenzene	0.0250	0.0259		104		75.0 - 120		
Ethylbenzene	0.0250	0.0270		108		60.0 - 140		
2-Hexanone	0.125	0.136		109		58.0 - 147		
p-Isopropyltoluene	0.0250	0.0223		89.0		74.0 - 126		
2-Butanone (MEK)	0.125	0.130		104		37.0 - 158		
n-Propylbenzene	0.0250	0.0230		92.2		79.0 - 120		
Methylene Chloride	0.0250	0.0273		109		60.0 - 140		

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

3B-OR

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY

L1101421-01

SAMPLE NO.:
R3415400-1

LCS Sample / File ID:	R3415400-1 / 0527_56	**SDG:**	L1101421
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1287157
Instrument ID:	VOCMS6	**Dilution Factor:**	1
Analytical Method:	624.1	**Matrix:**	WW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limit
	mg/l	*mg/l*		*%*	*%*	*%*	*%*	*%*
4-Methyl-2-pentanone (MIBK)	0.125	0.127		102		59.0 - 143		
Methyl tert-butyl ether	0.0250	0.0288		115		64.0 - 123		
1,1,2-Trichlorotrifluoroethane	0.0250	0.0319		128		61.0 - 136		
Styrene	0.0250	0.0280		112		78.0 - 124		
1,1,1,2-Tetrachloroethane	0.0250	0.0261		104		75.0 - 122		
1,1,2,2-Tetrachloroethane	0.0250	0.0231		92.4		60.0 - 140		
Tetrachloroethene	0.0250	0.0284		114		70.0 - 130		
Toluene	0.0250	0.0254		102		70.0 - 130		
1,2,3-Trichlorobenzene	0.0250	0.0223		89.1		61.0 - 133		
1,2,4-Trimethylbenzene	0.0250	0.0232		92.9		75.0 - 120		
1,2,4-Trichlorobenzene	0.0250	0.0230		91.8		69.0 - 129		
1,3,5-Trimethylbenzene	0.0250	0.0220		88.2		75.0 - 120		
1,1,1-Trichloroethane	0.0250	0.0298		119		70.0 - 130		
1,1,2-Trichloroethane	0.0250	0.0258		103		70.0 - 130		
Trichloroethene	0.0250	0.0305		122		65.0 - 135		
Trichlorofluoromethane	0.0250	0.0327		131		50.0 - 150		
1,2,3-Trichloropropane	0.0250	0.0239		95.7		72.0 - 124		
1,3-Dichloropropene	0.0500	0.0549		110		25.0 - 175		
Vinyl chloride	0.0250	0.0316		126		5.00 - 195		
Xylenes, Total	0.0750	0.0771		103		77.0 - 120		
o-Xylene	0.0250	0.0260		104		78.0 - 120		
m&p-Xylenes	0.0500	0.0511		102		77.0 - 120		

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

4A-OR

METHOD BLANK

SAMPLE NO.:
R3415400-3

Lab Sample ID:	R3415400-3	**SDG:**	L1101421
Lab File ID:	0527_60	**Preparation Date/Time:**	05/28/19 04:50
Instrument ID:	VOCMS6	**Analysis Date/Time:**	05/28/19 04:50
Analytical Batch:	WG1287157	**Dilution Factor:**	1
Analytical Method:	624.1	**Matrix:**	WW

Sample ID	Lab Sample ID	Instrument	File ID	Analysis *date/time*
LCS	R3415400-1	VOCMS6	0527_56	05/28/19 03:30
WW-20190520-002-DAY 18	L1101421-01	VOCMS6	0527_81	05/28/19 12:41

5A-OR

GC/MS INSTRUMENT PERFORMANCE CHECK

Lab File ID:	0502_01-6	**SDG:**	L1101421
Instrument ID:	VOCMS6	**Analytical Method:**	624.1
Analysis Date/Time:	05/02/19 14:17		

Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
95	174	50	200	101
96	95	5	9	6
173	174	0	2	1
174	95	50	200	99
175	174	5	9	7
176	174	95	105	96
177	176	5	10	7

Sample ID	Lab Sample ID	File ID	Analysis date/time
STD-0.04	0.04	0502_06	05/02/19 15:57
STD-0.1	0.1	0502_07	05/02/19 16:16
STD-0.2	0.2	0502_08	05/02/19 16:36
STD-0.5	0.5	0502_09	05/02/19 16:56
STD-1	1	0502_10	05/02/19 17:16
STD-2	2	0502_11	05/02/19 17:35
STD-5.0	5.0	0502_12	05/02/19 17:55
STD-25	25	0502_13	05/02/19 18:15
STD-75	75	0502_14	05/02/19 18:35
STD-100	100	0502_15	05/02/19 18:55
STD-200	200	0502_16	05/02/19 19:14
SSCV	VOCMS60502190502_19-6471443	0502_19-6	05/02/19 20:14

5A-OR

GC/MS INSTRUMENT PERFORMANCE CHECK

Lab File ID:	0507_53-6	**SDG:**	L1101421
Instrument ID:	VOCMS6	**Analytical Method:**	624.1
Analysis Date/Time:	05/08/19 05:10		

Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
95	174	50	200	101
96	95	5	9	6
173	174	0	2	0
174	95	50	200	99
175	174	5	9	7
176	174	95	105	97
177	176	5	10	7

Sample ID	Lab Sample ID	File ID	Analysis date/time
STD-1A	1A	0507_55	05/08/19 05:50
STD-5A	5A	0507_56	05/08/19 06:10
STD-10A	10A	0507_57	05/08/19 06:30
STD-15A	15A	0507_58	05/08/19 06:50
STD-20A	20A	0507_59	05/08/19 07:10
STD-.5	.5	0507_64	05/08/19 08:50
STD-1	1	0507_65	05/08/19 09:10
STD-2	2	0507_66	05/08/19 09:30
STD-5.0	5.0	0507_67	05/08/19 09:50
STD-10	10	0507_68	05/08/19 10:10
STD-20	20	0507_69	05/08/19 10:30

5A-OR

GC/MS INSTRUMENT PERFORMANCE CHECK

Lab File ID:	0527_54T-1	**SDG:**	L1101421
Instrument ID:	VOCMS6	**Analytical Method:**	624.1
Analysis Date/Time:	05/28/19 02:50		

Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
95	174	50	200	97
96	95	5	9	7
173	174	0	2	1
174	95	50	200	103
175	174	5	9	7
176	174	95	105	95
177	176	5	10	7

Sample ID	Lab Sample ID	File ID	Analysis date/time
ICV	VOCMS60527190527_55-1471443	0527_55-1	05/28/19 03:10
LCS	R3415400-1	0527_56	05/28/19 03:30
BLANK	R3415400-3	0527_60	05/28/19 04:50
WW-20190520-002-DAY 18	L1101421-01	0527_81	05/28/19 12:41

8A-OR

INTERNAL STANDARD AND RETENTION TIME

SDG:	L1101421	**Analytical Method:**	624.1
Instrument ID:	VOCMS6	**Calibration Start Date:**	05/02/19 15:57
Std File:	0527_55-1	**Calibration End Date:**	05/08/19 10:30
		Std Analysis Date:	05/28/19 03:10

Sample ID	File ID	1,4-DCB		8260-CB		8260-FB	
		Response	*RT*	*Response*	*RT*	*Response*	*RT*
STANDARD		66784	8.01	63776	6.32	133767	4.39
UPPER LIMIT		136208		127552		267702	
LOWER LIMIT		34052		31888		66926	
LCS R3415400-1 WG1287157 1x	0527_56	70358	8.01	63081	6.32	132254	4.39
BLANK R3415400-3 WG1287157 1x	0527_60	62008	8.01	60311	6.33	129487	4.40
L1101421-01 WG1287157 1x	0527_81	63539	8.01	60414	6.32	128306	4.39

1,4-DCB - 8260-1,4-DICHLOROBENZENE-D4 8260-CB - 8260-CHLOROBENZENE-D5
8260-FB - 8260-FLUOROBENZENE

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
WW-20190520-002-DAY 18

Lab Sample ID:	L1101421-01	**SDG:**	L1101421
Client Sample ID:	WW-20190520-002-DAY 18	**Collected Date/Time:**	05/20/19 11:30
Lab File ID:	0527_81	**Received Date/Time:**	05/22/19 08:00
Instrument ID:	VOCMS6	**Preparation Date/Time:**	05/28/19 12:41
Analytical Batch:	WG1287157	**Analysis Date/Time:**	05/28/19 12:41
Dilution Factor:	1	**Prep Method:**	624.1
Analytical Method:	624.1	**Sample Vol Used:**	5 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	5 mL

Analyte	CAS	RT	Result	Qualifier	SDL	Unadj. MQL	MQL
			mg/l		*mg/l*	*mg/l*	*mg/l*
Acetone	67-64-1	2.99	U		0.0100	0.0500	0.0500
Acrylonitrile	107-13-1	0	U		0.00187	0.0100	0.0100
Benzene	71-43-2	4.17	0.000378	J	0.000331	0.00100	0.00100
Bromobenzene	108-86-1	0	U		0.000352	0.00100	0.00100
Bromochloromethane	74-97-5	0	U		0.000520	0.00500	0.00500
Bromodichloromethane	75-27-4	0	U		0.000380	0.00100	0.00100
Bromoform	75-25-2	0	U		0.000469	0.00100	0.00100
Bromomethane	74-83-9	0	U		0.000866	0.00500	0.00500
n-Butylbenzene	104-51-8	0	U		0.000361	0.00100	0.00100
sec-Butylbenzene	135-98-8	0	U		0.000365	0.00100	0.00100
tert-Butylbenzene	98-06-6	0	U		0.000399	0.00100	0.00100
Carbon disulfide	75-15-0	0	U		0.000275	0.00100	0.00100
Carbon tetrachloride	56-23-5	0	U		0.000379	0.00100	0.00100
Chlorobenzene	108-90-7	0	U		0.000348	0.00100	0.00100
Chlorodibromomethane	124-48-1	0	U		0.000327	0.00100	0.00100
Chloroethane	75-00-3	0	U		0.000453	0.00500	0.00500
Chloroform	67-66-3	0	U		0.000324	0.00500	0.00500
Chloromethane	74-87-3	0	U		0.000276	0.00250	0.00250
2-Chlorotoluene	95-49-8	0	U		0.000375	0.00100	0.00100
4-Chlorotoluene	106-43-4	0	U		0.000351	0.00100	0.00100
Cyclohexane	110-82-7	0	U		0.000390	0.00100	0.00100
Dibromomethane	74-95-3	0	U		0.000346	0.00100	0.00100
1,2-Dichlorobenzene	95-50-1	0	U		0.000349	0.00100	0.00100
1,3-Dichlorobenzene	541-73-1	0	U		0.000220	0.00100	0.00100
1,4-Dichlorobenzene	106-46-7	0	U		0.000274	0.00100	0.00100
Dichlorodifluoromethane	75-71-8	0	U		0.000551	0.00500	0.00500
1,1-Dichloroethane	75-34-3	0	U		0.000259	0.00100	0.00100
1,2-Dichloroethane	107-06-2	0	U		0.000361	0.00100	0.00100
1,1-Dichloroethene	75-35-4	0	U		0.000398	0.00100	0.00100
cis-1,2-Dichloroethene	156-59-2	0	U		0.000260	0.00100	0.00100
trans-1,2-Dichloroethene	156-60-5	0	U		0.000396	0.00100	0.00100
1,2-Dichloropropane	78-87-5	0	U		0.000306	0.00100	0.00100
2,2-Dichloropropane	594-20-7	0	U		0.000321	0.00100	0.00100
1,1-Dichloropropene	563-58-6	0	U		0.000352	0.00100	0.00100
1,3-Dichloropropene	542-75-6	0	U		0.000320	0.00100	0.00100
cis-1,3-Dichloropropene	10061-01-5	0	U		0.000418	0.00100	0.00100
trans-1,3-Dichloropropene	10061-02-6	0	U		0.000419	0.00100	0.00100
Ethylbenzene	100-41-4	0	U		0.000384	0.00100	0.00100
2-Hexanone	591-78-6	0	U		0.00382	0.0100	0.0100
Isopropylbenzene	98-82-8	0	U		0.000326	0.00100	0.00100
p-Isopropyltoluene	99-87-6	0	U		0.000350	0.00100	0.00100
2-Butanone (MEK)	78-93-3	0	U		0.00393	0.0100	0.0100
Methyl Acetate	79-20-9	0	U		0.00430	0.0200	0.0200

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
WW-20190520-002-DAY 18

Lab Sample ID:	L1101421-01	**SDG:**	L1101421
Client Sample ID:	WW-20190520-002-DAY 18	**Collected Date/Time:**	05/20/19 11:30
Lab File ID:	0527_81	**Received Date/Time:**	05/22/19 08:00
Instrument ID:	VOCMS6	**Preparation Date/Time:**	05/28/19 12:41
Analytical Batch:	WG1287157	**Analysis Date/Time:**	05/28/19 12:41
Dilution Factor:	1	**Prep Method:**	624.1
Analytical Method:	624.1	**Sample Vol Used:**	5 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	5 mL

Analyte	CAS	RT	Result	Qualifier	SDL	Unadj. MQL	MQL
			mg/l		*mg/l*	*mg/l*	*mg/l*
Methyl Cyclohexane	108-87-2	0	U		0.000380	0.00100	0.00100
Methylene Chloride	75-09-2	0	U		0.00100	0.00500	0.00500
4-Methyl-2-pentanone (MIBK)	108-10-1	0	U		0.00214	0.0100	0.0100
Methyl tert-butyl ether	1634-04-4	0	U		0.000367	0.00100	0.00100
n-Propylbenzene	103-65-1	0	U		0.000349	0.00100	0.00100
Styrene	100-42-5	0	U		0.000307	0.00100	0.00100
1,1,1,2-Tetrachloroethane	630-20-6	0	U		0.000385	0.00100	0.00100
1,1,2,2-Tetrachloroethane	79-34-5	0	U		0.000130	0.00100	0.00100
Tetrachloroethene	127-18-4	0	U		0.000372	0.00100	0.00100
Toluene	108-88-3	5.34	U		0.000412	0.00100	0.00100
1,2,3-Trichlorobenzene	87-61-6	0	U		0.000230	0.00100	0.00100
1,2,4-Trichlorobenzene	120-82-1	0	U		0.000355	0.00100	0.00100
1,2,4-Trimethylbenzene	95-63-6	0	U		0.000373	0.00100	0.00100
1,3,5-Trimethylbenzene	108-67-8	0	U		0.000387	0.00100	0.00100
1,1,1-Trichloroethane	71-55-6	0	U		0.000319	0.00100	0.00100
1,1,2-Trichloroethane	79-00-5	0	U		0.000383	0.00100	0.00100
Trichloroethene	79-01-6	0	U		0.000398	0.00100	0.00100
Trichlorofluoromethane	75-69-4	0	U		0.00120	0.00500	0.00500
1,1,2-Trichlorotrifluoroethane	76-13-1	0	U		0.000303	0.00100	0.00100
1,2,3-Trichloropropane	96-18-4	0	U		0.000807	0.00250	0.00250
Vinyl chloride	75-01-4	0	U		0.000259	0.00100	0.00100
o-Xylene	95-47-6	0	U		0.000341	0.00100	0.00100
m&p-Xylene	1330-20-7	6.44	U		0.000719	0.00200	0.00200
Xylenes, Total	1330-20-7	6.44	U		0.00106	0.00300	0.00300

6A-OR

GC/MS INITIAL CALIBRATION DATA

SDG: L1101421 **Analytical Method:** 624.1

Instrument ID: VOCMS6

Analyte	**RRF: 0.04**	**RRF: 0.1**	**RRF: 0.2**	**RRF: 0.5**	**RRF: 1**	**RRF: 2**	**RRF: 5.0**	**RRF: 25**	**RRF: 75**	**RRF: 100**
Analysis date/time	05/02/19 15:57	05/02/19 16:16	05/02/19 16:36	05/02/19 16:56	05/02/19 17:16	05/02/19 17:35	05/02/19 17:55	05/02/19 18:15	05/02/19 18:35	05/02/19 18:55
METHYL TERT-BUTYL ETHER	1.0620	0.9290	0.8240	0.9270	0.9710	1.0970	1.0090	1.0380	1.0150	0.9690
BENZENE	1.4410	1.6110	1.5560	1.4220	1.5050	1.5230	1.4930	1.5410	1.55	1.4760
M&P-XYLENE	1.8730	1.51	1.5140	1.4370	1.5340	1.6660	1.5410	1.6450	1.6030	1.5120
1,2-DICHLOROETHANE-D4	0.3370	0.3450	0.33	0.3440	0.3410	0.3620	0.3640	0.3850	0.3490	0.3560
TOLUENE-D8	2.4280	2.4210	2.4510	2.3940	2.4330	2.5210	2.4810	2.5780	2.5310	2.4290
4-BROMOFLUOROBENZENE	0.9240	0.9190	0.9110	0.9220	0.9210	0.95	0.96	0.9890	0.9740	0.97
VINYL CHLORIDE		0.3930	0.4250	0.3960	0.48	0.4980	0.4650	0.4990	0.49	0.4590
BROMOMETHANE		0.2070	0.19	0.2510	0.2780	0.2690	0.2160	0.2080	0.1930	
TRICHLOROFLUOROMETHANE		0.5810	0.5710	0.4190	0.4380	0.4790	0.5220	0.6220	0.5980	0.5560
CARBON DISULFIDE		1.09	0.9970	0.7610	0.9070	0.9230	0.8640	0.9310	0.93	0.8950
METHYLENE CHLORIDE		0.3850	0.3790	0.3750	0.3410	0.3690	0.3450	0.3570	0.3460	0.3320
TRANS-1,2-DICHLOROETHENE		0.2460	0.2880	0.2840	0.3030	0.3520	0.3230	0.3460	0.3420	0.3230
1,1-DICHLOROETHANE		0.6990	0.7840	0.7110	0.7680	0.7960	0.7740	0.7930	0.7970	0.7520
2,2-DICHLOROPROPANE		0.4180	0.6620	0.5320	0.5460	0.6050	0.5610	0.5920	0.5970	0.5660
1,1,1-TRICHLOROETHANE		0.5150	0.5430	0.4610	0.5770	0.6380	0.5790	0.6350	0.63	0.5960
1,2-DICHLOROETHANE		0.6330	0.5960	0.5430	0.5480	0.5910	0.5520	0.5670	0.5550	0.5380
4-METHYL-2-PENTANONE (MIBK)		1.8690	1.6960	1.8090	1.8030	2.0070	2.01	2.1290	1.9980	1.8720
TOLUENE		3.9020	3.93	3.9060	4.0910	4.1090	3.7890	4.0260	3.8450	3.6210
TETRACHLOROETHENE		0.6310	0.7460	0.7580	0.8460	0.8820	0.8340	0.9130	0.8880	0.82
CHLOROBENZENE		2.3010	2.1040	2.3150	2.2530	2.3240	2.2790	2.4230	2.3730	2.2430
ISOPROPYLBENZENE		3.5530	3.8490	3.6860	3.9180	4.0350	3.86	4.1420	4.0620	3.8130
N-PROPYLBENZENE		3.9030	4.1850	4.2810	4.5190	4.5330	4.4680	4.5570	4.71	4.4280
2-CHLOROTOLUENE		3.1470	3.04	2.5130	2.8880	2.7380	2.7290	2.9070	2.9630	2.7970
4-CHLOROTOLUENE		2.5430	1.8660	2.7010	2.77	2.5670	2.5620	2.6990	2.7510	2.6270
1,3,5-TRIMETHYLBENZENE		2.9770	3.5460	3.2160	3.3150	3.1120	3.1260	3.1510	3.2230	3.0150
TERT-BUTYLBENZENE		2.35	2.4170	2.3420	2.46	2.5360	2.5010	2.5560	2.5860	2.4180
1,2,4-TRIMETHYLBENZENE		2.6490	2.5320	2.83	2.9070	3.0320	2.9080	3.0050	3.0830	2.9010
SEC-BUTYLBENZENE		3.5180	3.7610	3.3530	3.6210	3.5760	3.4290	3.5560	3.6210	3.3680
1,3-DICHLOROBENZENE		1.3180	1.6870	1.6280	1.6610	1.7610	1.6790	1.7530	1.8160	1.7280
P-ISOPROPYLTOLUENE		3.2290	2.9590	2.8040	2.9050	3.0570	2.9510	3.09	3.1330	2.91
1,4-DICHLOROBENZENE		1.8030	1.7860	1.8710	1.9290	1.7330	1.7530	1.8370	1.87	1.7590
N-BUTYLBENZENE		2.1490	2.22	2.0920	2.4890	2.4540	2.4260	2.5720	2.6460	2.4490
CHLOROETHANE			0.2780	0.2850	0.2780	0.2810	0.2550	0.2520	0.24	0.2150
1,1-DICHLOROETHENE			0.2820	0.2570	0.2760	0.2940	0.2980	0.3140	0.32	0.3030
1,1,2-TRICHLOROTRIFLUOROETHANE			0.3120	0.2670	0.2910	0.2860	0.3180	0.3740	0.3690	0.3480
ACETONE			0.22	0.1880	0.1920	0.19	0.2070	0.2280	0.2250	0.2120
CIS-1,2-DICHLOROETHENE			0.32	0.3440	0.3470	0.4030	0.3790	0.40	0.4050	0.3850
CHLOROFORM			0.6680	0.60	0.6890	0.7070	0.6780	0.7110	0.6970	0.6630
CYCLOHEXANE			0.4420	0.3670	0.3860	0.4060	0.4010	0.4740	0.4720	0.44
CARBON TETRACHLORIDE			0.5050	0.4810	0.4840	0.5640	0.5350	0.62	0.6230	0.5920
1,1-DICHLOROPROPENE			0.4360	0.3790	0.41	0.48	0.4670	0.5030	0.5090	0.4860
TRICHLOROETHENE			0.3510	0.3090	0.3820	0.3990	0.3990	0.41	0.4130	0.3950
BROMODICHLOROMETHANE			0.38	0.45	0.4290	0.5020	0.4630	0.5010	0.51	0.4930
CIS-1,3-DICHLOROPROPENE			0.4140	0.4530	0.4670	0.5650	0.5650	0.5930	0.5980	0.5870
1,1,2-TRICHLOROETHANE			0.7810	0.6750	0.7750	0.8150	0.8010	0.81	0.7830	0.7380
CHLORODIBROMOMETHANE			0.6940	0.7530	0.8540	0.8780	0.8510	0.9360	0.9340	0.90
ETHYLBENZENE			1.0340	1.1090	1.2340	1.3620	1.3120	1.3630	1.3620	1.2640
O-XYLENE			1.3460	1.5370	1.4470	1.5580	1.4720	1.5750	1.5560	1.4460
BROMOBENZENE			1.83	1.6390	1.6260	1.68	1.69	1.6790	1.7290	1.65
1,1,2,2-TETRACHLOROETHANE			1.1750	1.2210	1.2610	1.2620	1.2570	1.2960	1.2950	1.2440

6A-OR

GC/MS INITIAL CALIBRATION DATA

SDG: L1101421 **Analytical Method:** 624.1

Instrument ID: VOCMS6

Analyte	**RRF: 0.04**	**RRF: 0.1**	**RRF: 0.2**	**RRF: 0.5**	**RRF: 1**	**RRF: 2**	**RRF: 5.0**	**RRF: 25**	**RRF: 75**	**RRF: 100**
Analysis date/time	05/02/19 15:57	05/02/19 16:16	05/02/19 16:36	05/02/19 16:56	05/02/19 17:16	05/02/19 17:35	05/02/19 17:55	05/02/19 18:15	05/02/19 18:35	05/02/19 18:55
1,2-DICHLOROBENZENE			1.1890	1.5350	1.5780	1.6030	1.7150	1.7230	1.7620	1.6650
1,2,3-TRICHLOROBENZENE			0.67	0.8070	0.9030	0.9160	0.93	0.9150	0.9540	0.8920
DICHLORODIFLUOROMETHANE				0.3350	0.3470	0.3050	0.34	0.4190	0.3990	0.3750
CHLOROMETHANE				0.5420	0.5290	0.5010	0.4970	0.4960	0.5220	0.51
ACRYLONITRILE				0.1780	0.2180	0.2240	0.23	0.2720	0.2760	0.2660
BROMOCHLOROMETHANE				0.2150	0.2240	0.2350	0.25	0.2390	0.24	0.2210
METHYL CYCLOHEXANE				0.7370	0.5760	0.5050	0.4680	0.5440	0.55	0.5160
1,2-DICHLOROPROPANE				0.26	0.27	0.30	0.2810	0.2890	0.2950	0.2930
DIBROMOMETHANE				0.24	0.23	0.2440	0.2560	0.2580	0.2580	0.2540
TRANS-1,3-DICHLOROPROPENE				0.8050	0.9410	1.1110	1.1010	1.2470	1.2480	1.2050
2-HEXANONE				0.4860	0.5740	0.61	0.6570	0.7320	0.7010	0.6620
1,1,1,2-TETRACHLOROETHANE				0.8040	0.7140	0.8330	0.7770	0.8430	0.8240	0.7750
STYRENE				1.9920	1.9410	2.1260	2.12	2.4630	2.5190	2.3990
1,2,3-TRICHLOROPROPANE				0.2490	0.29	0.3510	0.3360	0.3350	0.3340	0.3180
1,2,4-TRICHLOROBENZENE				0.7510	0.9330	0.9120	0.9490	1.0080	1.03	0.9650
2-BUTANONE (MEK)					0.3530	0.4050	0.3570	0.3950	0.4030	0.3890
BROMOFORM					0.5940	0.7340	0.7690	0.8460	0.87	0.8430
METHYL ACETATE						0.4120	0.5130	0.5810	0.5740	0.5450
File ID:	0502_06	0502_07	0502_08	0502_09	0502_10	0502_11	0502_12	0502_13	0502_14	0502_15

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GC/MS INITIAL CALIBRATION DATA

SDG: L1101421 **Analytical Method:** 624.1

Instrument ID: VOCMS6

Analyte	RRF: 200	RRF. Avg	%RSD	COD
Analysis date/time	05/02/19 19:14			
METHYL TERT-BUTYL ETHER	0.9940	0.984809	7.56	
BENZENE	1.5080	1.511622	3.56	
M&P-XYLENE	1.5670	1.581862	7.38	
1,2-DICHLOROETHANE-D4	0.3420	0.350493	4.44	
TOLUENE-D8	2.5140	2.471118	2.34	
4-BROMOFLUOROBENZENE	0.9830	0.947552	3.05	
VINYL CHLORIDE	0.4590	0.45653	8.63	
BROMOMETHANE		0.22644	15.23	
TRICHLOROFLUOROMETHANE	0.5240	0.530897	12.75	
CARBON DISULFIDE	0.9070	0.920436	9.19	
METHYLENE CHLORIDE	0.3340	0.356367	5.43	
TRANS-1,2-DICHLOROETHENE	0.3250	0.313131	10.55	
1,1-DICHLOROETHANE	0.7710	0.764494	4.51	
2,2-DICHLOROPROPANE	0.5710	0.564853	11.19	
1,1,1-TRICHLOROETHANE	0.6020	0.577552	9.91	
1,2-DICHLOROETHANE	0.5490	0.567192	5.32	
4-METHYL-2-PENTANONE (MIBK)	1.8560	1.904896	6.74	
TOLUENE	3.7660	3.898506	3.9	
TETRACHLOROETHENE	0.8590	0.817634	10.35	
CHLOROBENZENE	2.3450	2.29612	3.77	
ISOPROPYLBENZENE	3.9980	3.891659	4.61	
N-PROPYLBENZENE	4.5620	4.414562	5.29	
2-CHLOROTOLUENE	2.9130	2.863576	6.24	
4-CHLOROTOLUENE	2.74	2.582533	10.28	
1,3,5-TRIMETHYLBENZENE	3.1060	3.178738	5.11	
TERT-BUTYLBENZENE	2.48	2.464572	3.38	
1,2,4-TRIMETHYLBENZENE	3.0220	2.886817	6.09	
SEC-BUTYLBENZENE	3.4850	3.528852	3.57	
1,3-DICHLOROBENZENE	1.8040	1.683441	8.45	
P-ISOPROPYLTOLUENE	2.9890	3.002866	4.17	
1,4-DICHLOROBENZENE	1.8170	1.815799	3.39	
N-BUTYLBENZENE	2.5340	2.403045	7.75	
CHLOROETHANE		0.260494	9.41	
1,1-DICHLOROETHENE	0.3040	0.294194	6.71	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.3440	0.323112	11.71	
ACETONE	0.2130	0.208346	7.27	
CIS-1,2-DICHLOROETHENE	0.39	0.374766	8.14	
CHLOROFORM	0.67	0.675771	4.93	
CYCLOHEXANE	0.4430	0.425707	8.86	
CARBON TETRACHLORIDE	0.6030	0.556278	10.24	
1,1-DICHLOROPROPENE	0.49	0.462111	9.64	
TRICHLOROETHENE	0.4040	0.384716	8.82	
BROMODICHLOROMETHANE	0.5090	0.470843	9.43	
CIS-1,3-DICHLOROPROPENE	0.6060	0.538837	13.54	
1,1,2-TRICHLOROETHANE	0.7790	0.772869	5.59	
CHLORODIBROMOMETHANE	0.9650	0.862847	10.31	
ETHYLBENZENE	1.3220	1.262567	9.39	
O-XYLENE	1.5240	1.495639	4.96	
BROMOBENZENE	1.7160	1.693283	3.63	
1,1,2,2-TETRACHLOROETHANE	1.2860	1.255178	3.11	

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GC/MS INITIAL CALIBRATION DATA

SDG: L1101421 **Analytical Method:** 624.1

Instrument ID: VOCMS6

Analyte	**RRF: 200**	**RRF. Avg**	**%RSD**	**COD**
Analysis date/time	05/02/19 19:14			
1,2-DICHLOROBENZENE	1.7430	1.612531	11	
1,2,3-TRICHLOROBENZENE	0.9360	0.88025	10.13	
DICHLORODIFLUOROMETHANE	0.3350	0.356865	10.6	
CHLOROMETHANE	0.5520	0.518631	4.14	
ACRYLONITRILE	0.2680	0.241468	14.41	
BROMOCHLOROMETHANE	0.2110	0.229347	5.96	
METHYL CYCLOHEXANE	0.5170	0.551607	14.78	
1,2-DICHLOROPROPANE	0.2970	0.285811	5	
DIBROMOMETHANE	0.2630	0.250236	4.43	
TRANS-1,3-DICHLOROPROPENE	1.29	1.11836	15.13	
2-HEXANONE	0.6790	0.637494	12.37	
1,1,1,2-TETRACHLOROETHANE	0.83	0.799955	5.41	
STYRENE	2.5270	2.260868	10.71	
1,2,3-TRICHLOROPROPANE	0.3290	0.317617	10.4	
1,2,4-TRICHLOROBENZENE	1.0040	0.944079	9.3	
2-BUTANONE (MEK)	0.3930	0.385006	5.59	
BROMOFORM	0.9080	0.794804	13.4	
METHYL ACETATE	0.5450	0.528388	11.71	
File ID:	0502_16			

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GC/MS CONTINUING CALIBRATION VERIFICATION

SDG:	L1101421	**Calibration (begin) date/time:**	05/02/19 15:57
Instrument ID:	VOCMS6	**Calibration (end) date/time:**	05/08/19 10:30
Lab File ID:	0502_19-6	**Analysis date/time:**	05/02/19 20:14
Analytical Method:	624.1	**Sample ID:**	SSCV

Analyte	Avg. RRF	RRF	Min. RRF	Diff.	Max Diff.	True Value	Result	Result	Limits
				%	%	mg/l	mg/l	% Rec.	%
1,1,1,2-TETRACHLOROETHANE	0.799955	0.76080180		4.89	40	0.0250	0.0237764	95.10	75 - 122
1,1,1-TRICHLOROETHANE	0.577552	0.59358090		2.78	40	0.0250	0.02569381	103	70 - 130
1,1,2,2-TETRACHLOROETHANE	1.255178	1.172824		6.56	30	0.0250	0.02335971	93.40	60 - 140
1,1,2-TRICHLOROETHANE	0.772869	0.73552610		4.83	40	0.0250	0.02379206	95.20	78 - 120
1,1,2-TRICHLOROTRIFLUOROETHANE	0.323112	0.34870040		7.92	40	0.0250	0.02697987	108	61 - 136
1,1-DICHLOROETHANE	0.764494	0.74803030		2.15	30	0.0250	0.02446161	97.80	70 - 130
1,1-DICHLOROETHENE	0.294194	0.31043460		5.52	30	0.0250	0.02638011	106	50 - 150
1,1-DICHLOROPROPENE	0.462111	0.47608850		3.02	40	0.0250	0.02575615	103	71 - 129
1,2,3-TRICHLOROBENZENE	0.880250	0.87216520		0.9180	40	0.0250	0.02477038	99.10	61 - 133
1,2,3-TRICHLOROPROPANE	0.317617	0.31215140		1.72	40	0.0250	0.02456977	98.30	72 - 124
1,2,4-TRICHLOROBENZENE	0.944079	0.93999660		0.4320	40	0.0250	0.02489189	99.60	69 - 129
1,2,4-TRIMETHYLBENZENE	2.886817	2.822124		2.24	40	0.0250	0.02443976	97.80	75 - 120
1,2-DICHLOROBENZENE	1.612531	1.611860		0.0416	40	0.0250	0.0249896	100	65 - 135
1,2-DICHLOROETHANE	0.567192	0.51965480		8.38	40	0.0250	0.02290473	91.60	70 - 130
1,2-DICHLOROPROPANE	0.285811	0.28628280		0.1650	30	0.0250	0.02504129	100	35 - 165
1,3,5-TRIMETHYLBENZENE	3.178738	2.957769		6.95	40	0.0250	0.02326213	93	75 - 120
1,3-DICHLOROBENZENE	1.683441	1.653744		1.76	40	0.0250	0.02455899	98.20	70 - 130
1,4-DICHLOROBENZENE	1.815799	1.681146		7.42	40	0.0250	0.02314608	92.60	65 - 135
2,2-DICHLOROPROPANE	0.564853	0.54624190		3.29	40	0.0250	0.02417631	96.70	60 - 125
2-BUTANONE (MEK)	0.385006	0.40235610		4.51	40	0.1250	0.1306332	105	37 - 158
2-CHLOROTOLUENE	2.863576	2.650430		7.44	40	0.0250	0.02313916	92.60	74 - 122
2-HEXANONE	0.637494	0.63157860		0.9280	40	0.1250	0.1238402	99.10	58 - 147
4-CHLOROTOLUENE	2.582533	2.488553		3.64	40	0.0250	0.02409023	96.40	79 - 120
4-METHYL-2-PENTANONE (MIBK)	1.904896	1.832277		3.81	40	0.1250	0.1202347	96.20	59 - 143
ACETONE	0.208346	0.22693530		8.92	40	0.1250	0.1361531	109	10 - 160
ACRYLONITRILE	0.241468	0.25127660		4.06	40	0.1250	0.1300774	104	60 - 140
BENZENE	1.511622	1.442765		4.56	40	0.0250	0.0238612	95.40	65 - 135
BROMOBENZENE	1.693283	1.555245		8.15	40	0.0250	0.02296199	91.80	79 - 120
BROMOCHLOROMETHANE	0.229347	0.20165060		12.10	40	0.0250	0.02198099	87.90	76 - 122
BROMODICHLOROMETHANE	0.470843	0.48560330		3.13	40	0.0250	0.02578369	103	65 - 135
BROMOFORM	0.794804	0.77913250		1.97	30	0.0250	0.02450707	98	70 - 130
BROMOMETHANE	0.226440	0.24211680		6.92	40	0.0250	0.02673081	107	15 - 185
CARBON DISULFIDE	0.920436	0.916379		0.4410	40	0.0250	0.0248898	99.60	55 - 127
CARBON TETRACHLORIDE	0.556278	0.56012920		0.6920	40	0.0250	0.02517306	101	70 - 130
CHLOROBENZENE	2.296120	2.197883		4.28	30	0.0250	0.0239304	95.70	65 - 135
CHLORODIBROMOMETHANE	0.862847	0.89626630		3.87	40	0.0250	0.02596829	104	70 - 135
CHLOROETHANE	0.260494	0.24443880		6.16	40	0.0250	0.02345916	93.80	40 - 160
CHLOROFORM	0.675771	0.65895670		2.49	30	0.0250	0.02437795	97.50	70 - 130
CHLOROMETHANE	0.518631	0.57479040		10.80	30	0.0250	0.0277071	111	0.0010 - 205
CIS-1,2-DICHLOROETHENE	0.374766	0.35624990		4.94	40	0.0250	0.0237648	95.10	73 - 120
CIS-1,3-DICHLOROPROPENE	0.538837	0.55738170		3.44	40	0.0250	0.02586043	103	25 - 175
CYCLOHEXANE	0.425707	0.46903350		10.20	40	0.0250	0.02754438	110	70 - 130
DIBROMOMETHANE	0.250236	0.23790650		4.93	40	0.0250	0.02376825	95.10	78 - 120
DICHLORODIFLUOROMETHANE	0.356865	0.56481770		58.30	40	0.0250	0.03956808	158	49 - 155
ETHYLBENZENE	1.262567	1.249874		1.01	30	0.0250	0.02474866	99	60 - 140
ISOPROPYLBENZENE	3.891659	3.825468		1.70	40	0.0250	0.02457478	98.30	75 - 120
M&P-XYLENE	1.581862	1.488350		5.91	40	0.05	0.04704424	94.10	77 - 120

7A-OR

GC/MS CONTINUING CALIBRATION VERIFICATION

SDG:	L1101421	**Calibration (begin) date/time:**	05/02/19 15:57
Instrument ID:	VOCMS6	**Calibration (end) date/time:**	05/08/19 10:30
Lab File ID:	0502_19-6	**Analysis date/time:**	05/02/19 20:14
Analytical Method:	624.1	**Sample ID:**	SSCV

Analyte	Avg. RRF	RRF	Min. RRF	Diff.	Max Diff.	True Value	Result	Result	Limits
				%	%	mg/l	mg/l	% Rec.	%
METHYL ACETATE	0.528388	0.54945550		3.99	40	0.1250	0.1299839	104	70 - 130
METHYL CYCLOHEXANE	0.551607	0.53215210		3.53	40	0.0250	0.02411825	96.50	70 - 130
METHYL TERT-BUTYL ETHER	0.984809	0.99105080		0.6340	40	0.0250	0.02515846	101	64 - 123
METHYLENE CHLORIDE	0.356367	0.33005170		7.38	40	0.0250	0.02315394	92.60	60 - 140
N-BUTYLBENZENE	2.403045	2.397580		0.2270	40	0.0250	0.02494314	99.80	72 - 126
N-PROPYLBENZENE	4.414562	4.280021		3.05	40	0.0250	0.02423808	97	79 - 120
O-XYLENE	1.495639	1.446717		3.27	40	0.0250	0.02418225	96.70	78 - 120
P-ISOPROPYLTOLUENE	3.002866	2.816125		6.22	40	0.0250	0.02344531	93.80	74 - 126
SEC-BUTYLBENZENE	3.528852	3.339077		5.38	40	0.0250	0.02365555	94.60	74 - 121
STYRENE	2.260868	2.337928		3.41	40	0.0250	0.02585211	103	78 - 124
TERT-BUTYLBENZENE	2.464572	2.379261		3.46	40	0.0250	0.02413462	96.50	75 - 122
TETRACHLOROETHENE	0.817634	0.82259920		0.6070	40	0.0250	0.02515183	101	70 - 130
TOLUENE	3.898506	3.614139		7.29	30	0.0250	0.02317644	92.70	70 - 130
TRANS-1,2-DICHLOROETHENE	0.313131	0.31675210		1.16	40	0.0250	0.02528907	101	70 - 130
TRANS-1,3-DICHLOROPROPENE	1.118360	1.107669		0.9560	40	0.0250	0.02476102	99	50 - 150
TRICHLOROETHENE	0.384716	0.37599270		2.27	40	0.0250	0.02443314	97.70	65 - 135
TRICHLOROFLUOROMETHANE	0.530897	0.60439250		13.80	40	0.0250	0.02846091	114	50 - 150
VINYL CHLORIDE	0.456530	0.48352450		5.91	30	0.0250	0.02647822	106	5 - 195
XYLENES, TOTAL	0	1.457301		0	40	0.0750	0.07122649	95	77 - 120
1,2-DICHLOROETHANE-D4	0.350493	0.36456770		4.02	40	0.0160	0.01664251	104	70 - 130
4-BROMOFLUOROBENZENE	0.947552	0.93711630		1.10	40	0.0160	0.01582379	98.90	70 - 130
TOLUENE-D8	2.471118	2.374131		3.92	40	0.0160	0.01537203	96.10	70 - 130

7A-OR

GC/MS CONTINUING CALIBRATION VERIFICATION

SDG:	L1101421	**Calibration (begin) date/time:**	05/02/19 15:57
Instrument ID:	VOCMS6	**Calibration (end) date/time:**	05/08/19 10:30
Lab File ID:	0527_55-1	**Analysis date/time:**	05/28/19 03:10
Analytical Method:	624.1	**Sample ID:**	ICV

Analyte	Avg. RRF	RRF	Min. RRF	Diff.	Max Diff.	True Value	Result	Result	Limits
				%	%	mg/l	mg/l	% Rec.	%
1,1,1,2-TETRACHLOROETHANE	0.799955	0.80940290		1.18		0.0250	0.02529527	101	75 - 122
1,1,1-TRICHLOROETHANE	0.577552	0.67984960		17.70		0.0250	0.02942805	118	70 - 130
1,1,2,2-TETRACHLOROETHANE	1.255178	1.178179		6.13		0.0250	0.02346637	93.90	60 - 140
1,1,2-TRICHLOROETHANE	0.772869	0.77739090		0.5850		0.0250	0.02514626	101	70 - 130
1,1,2-TRICHLOROTRIFLUOROETHANE	0.323112	0.41168180		27.40		0.0250	0.03185291	127	61 - 136
1,1-DICHLOROETHANE	0.764494	0.84377880		10.40		0.0250	0.02759272	110	70 - 130
1,1-DICHLOROETHENE	0.294194	0.35265620		19.90		0.0250	0.02996802	120	50 - 150
1,1-DICHLOROPROPENE	0.462111	0.54921530		18.80		0.0250	0.02971228	119	71 - 129
1,2,3-TRICHLOROBENZENE	0.880250	0.79326310		9.88		0.0250	0.02252948	90.10	61 - 133
1,2,3-TRICHLOROPROPANE	0.317617	0.31248680		1.62		0.0250	0.02459617	98.40	72 - 124
1,2,4-TRICHLOROBENZENE	0.944079	0.899473		4.72		0.0250	0.02381879	95.30	69 - 129
1,2,4-TRIMETHYLBENZENE	2.886817	2.789114		3.38		0.0250	0.02415388	96.60	75 - 120
1,2-DICHLOROBENZENE	1.612531	1.645414		2.04		0.0250	0.02550981	102	65 - 135
1,2-DICHLOROETHANE	0.567192	0.57659660		1.66		0.0250	0.02541454	102	70 - 130
1,2-DICHLOROPROPANE	0.285811	0.31036650		8.59		0.0250	0.0271479	109	35 - 165
1,3,5-TRIMETHYLBENZENE	3.178738	2.938016		7.57		0.0250	0.02310678	92.40	75 - 120
1,3-DICHLOROBENZENE	1.683441	1.648759		2.06		0.0250	0.02448495	97.90	70 - 130
1,4-DICHLOROBENZENE	1.815799	1.727331		4.87		0.0250	0.02378196	95.10	65 - 135
2,2-DICHLOROPROPANE	0.564853	0.58110840		2.88		0.0250	0.02571947	103	60 - 125
2-BUTANONE (MEK)	0.385006	0.38618750		0.3070		0.1250	0.1253837	100	37 - 158
2-CHLOROTOLUENE	2.863576	2.635515		7.96		0.0250	0.02300895	92	74 - 122
2-HEXANONE	0.637494	0.67235120		5.47		0.1250	0.1318349	105	58 - 147
4-CHLOROTOLUENE	2.582533	2.481045		3.93		0.0250	0.02401755	96.10	79 - 120
4-METHYL-2-PENTANONE (MIBK)	1.904896	1.881572		1.22		0.1250	0.1234694	98.80	59 - 143
ACETONE	0.208346	0.20270330		2.71		0.1250	0.1216148	97.30	10 - 160
ACRYLONITRILE	0.241468	0.27254650		12.90		0.1250	0.1410881	113	60 - 140
BENZENE	1.511622	1.710743		13.20		0.0250	0.02829316	113	65 - 135
BROMOBENZENE	1.693283	1.575831		6.94		0.0250	0.02326592	93.10	79 - 120
BROMOCHLOROMETHANE	0.229347	0.22991140		0.2460		0.0250	0.02506157	100	76 - 122
BROMODICHLOROMETHANE	0.470843	0.51756620		9.92		0.0250	0.0274808	110	65 - 135
BROMOFORM	0.794804	0.74048170		6.83		0.0250	0.02329134	93.20	70 - 130
BROMOMETHANE	0.226440	0.13529910		40.20		0.0250	0.01493764	59.80	15 - 185
CARBON DISULFIDE	0.920436	1.025578		11.40		0.0250	0.02785576	111	55 - 127
CARBON TETRACHLORIDE	0.556278	0.64241140		15.50		0.0250	0.02887095	115	70 - 130
CHLOROBENZENE	2.296120	2.367155		3.09		0.0250	0.02577342	103	65 - 135
CHLORODIBROMOMETHANE	0.862847	0.86581030		0.3430		0.0250	0.02508587	100	70 - 135
CHLOROETHANE	0.260494	0.27207670		4.45		0.0250	0.02611161	104	40 - 160
CHLOROFORM	0.675771	0.75703220		12		0.0250	0.02800623	112	70 - 130
CHLOROMETHANE	0.518631	0.36053620		30.50		0.0250	0.01737922	69.50	0.0010 - 205
CIS-1,2-DICHLOROETHENE	0.374766	0.43821630		16.90		0.0250	0.02923264	117	73 - 120
CIS-1,3-DICHLOROPROPENE	0.538837	0.61204460		13.60		0.0250	0.02839658	114	25 - 175
CYCLOHEXANE	0.425707	0.51552330		21.10		0.0250	0.03027453	121	70 - 130
DIBROMOMETHANE	0.250236	0.26666550		6.57		0.0250	0.02664144	107	78 - 120
DICHLORODIFLUOROMETHANE	0.356865	0.49418470		38.50		0.0250	0.03461991	138	49 - 155
ETHYLBENZENE	1.262567	1.357762		7.54		0.0250	0.02688495	108	60 - 140
ISOPROPYLBENZENE	3.891659	3.965188		1.89		0.0250	0.02547235	102	75 - 120
M&P-XYLENE	1.581862	1.605474		1.49		0.05	0.05074635	101	77 - 120

7A-OR

GC/MS CONTINUING CALIBRATION VERIFICATION

SDG:	L1101421	**Calibration (begin) date/time:**	05/02/19 15:57
Instrument ID:	VOCMS6	**Calibration (end) date/time:**	05/08/19 10:30
Lab File ID:	0527_55-1	**Analysis date/time:**	05/28/19 03:10
Analytical Method:	624.1	**Sample ID:**	ICV

Analyte	Avg. RRF	RRF	Min. RRF	Diff.	Max Diff.	True Value	Result	Result	Limits
				%	%	mg/l	mg/l	% Rec.	%
METHYL ACETATE	0.528388	0.57346190		8.53		0.1250	0.1356631	109	70 - 130
METHYL CYCLOHEXANE	0.551607	0.57588850		4.40		0.0250	0.02610048	104	70 - 130
METHYL TERT-BUTYL ETHER	0.984809	1.099684		11.70		0.0250	0.02791618	112	64 - 123
METHYLENE CHLORIDE	0.356367	0.38167860		7.10		0.0250	0.02677569	107	60 - 140
N-BUTYLBENZENE	2.403045	2.210561		8.01		0.0250	0.02299749	92	72 - 126
N-PROPYLBENZENE	4.414562	4.226258		4.27		0.0250	0.02393362	95.70	79 - 120
O-XYLENE	1.495639	1.524887		1.96		0.0250	0.02548888	102	78 - 120
P-ISOPROPYLTOLUENE	3.002866	2.789737		7.10		0.0250	0.02322562	92.90	74 - 126
SEC-BUTYLBENZENE	3.528852	3.277077		7.13		0.0250	0.02321631	92.90	74 - 121
STYRENE	2.260868	2.457341		8.69		0.0250	0.02717254	109	78 - 124
TERT-BUTYLBENZENE	2.464572	2.373982		3.68		0.0250	0.02408107	96.30	75 - 122
TETRACHLOROETHENE	0.817634	0.90924240		11.20		0.0250	0.02780103	111	70 - 130
TOLUENE	3.898506	3.939248		1.05		0.0250	0.02526126	101	70 - 130
TRANS-1,2-DICHLOROETHENE	0.313131	0.37983660		21.30		0.0250	0.03032565	121	70 - 130
TRANS-1,3-DICHLOROPROPENE	1.118360	1.130537		1.09		0.0250	0.0252722	101	50 - 150
TRICHLOROETHENE	0.384716	0.46289440		20.30		0.0250	0.03008028	120	65 - 135
TRICHLOROFLUOROMETHANE	0.530897	0.68615070		29.20		0.0250	0.03231091	129	50 - 150
VINYL CHLORIDE	0.456530	0.58055340		27.20		0.0250	0.0317916	127	5 - 195
XYLENES, TOTAL	0	1.507510		0		0.0750	0.07623523	102	77 - 120
1,2-DICHLOROETHANE-D4	0.350493	0.30150940		14		0.0160	0.0137639	86	70 - 130
4-BROMOFLUOROBENZENE	0.947552	0.97510030		2.91		0.0160	0.01646518	103	70 - 130
TOLUENE-D8	2.471118	2.218499		10.20		0.0160	0.01436434	89.80	70 - 130

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415400-3

Lab Sample ID:	R3415400-3	**SDG:**	L1101421
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	0527_60	**Received Date/Time:**	_____
Instrument ID:	VOCMS6	**Preparation Date/Time:**	05/28/19 04:50
Analytical Batch:	WG1287157	**Analysis Date/Time:**	05/28/19 04:50
Dilution Factor:	1	**Prep Method:**	624.1/8260B
Analytical Method:	624.1	**Sample Vol Used:**	5 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	5 mL

Analyte	CAS	RT	Result	Qualifier	SDL	Unadj. MQL	MQL
			mg/l		*mg/l*	*mg/l*	*mg/l*
Acetone	67-64-1	0	U		0.0100	0.05	0.0500
Acrylonitrile	107-13-1	0	U		0.00187	0.01	0.0100
Benzene	71-43-2	0	U		0.000331	0.0010	0.00100
Bromobenzene	108-86-1	0	U		0.000352	0.0010	0.00100
Bromodichloromethane	75-27-4	0	U		0.000380	0.0010	0.00100
Bromochloromethane	74-97-5	0	U		0.000520	0.0050	0.00500
Bromoform	75-25-2	0	U		0.000469	0.0010	0.00100
Bromomethane	74-83-9	0	U		0.000866	0.0050	0.00500
n-Butylbenzene	104-51-8	0	U		0.000361	0.0010	0.00100
sec-Butylbenzene	135-98-8	0	U		0.000365	0.0010	0.00100
tert-Butylbenzene	98-06-6	0	U		0.000399	0.0010	0.00100
Carbon disulfide	75-15-0	0	U		0.000275	0.0010	0.00100
Carbon tetrachloride	56-23-5	0	U		0.000379	0.0010	0.00100
Chlorobenzene	108-90-7	0	U		0.000348	0.0010	0.00100
Chlorodibromomethane	124-48-1	0	U		0.000327	0.0010	0.00100
Chloroethane	75-00-3	0	U		0.000453	0.0050	0.00500
Chloroform	67-66-3	0	U		0.000324	0.0050	0.00500
Chloromethane	74-87-3	0	U		0.000276	0.0025	0.00250
Cyclohexane	110-82-7	0	U		0.000390	0.0010	0.00100
2-Chlorotoluene	95-49-8	0	U		0.000375	0.0010	0.00100
4-Chlorotoluene	106-43-4	0	U		0.000351	0.0010	0.00100
Dibromomethane	74-95-3	0	U		0.000346	0.0010	0.00100
1,2-Dichlorobenzene	95-50-1	0	U		0.000349	0.0010	0.00100
1,3-Dichlorobenzene	541-73-1	0	U		0.000220	0.0010	0.00100
1,4-Dichlorobenzene	106-46-7	0	U		0.000274	0.0010	0.00100
Dichlorodifluoromethane	75-71-8	0	U		0.000551	0.0050	0.00500
1,1-Dichloroethane	75-34-3	0	U		0.000259	0.0010	0.00100
1,2-Dichloroethane	107-06-2	0	U		0.000361	0.0010	0.00100
1,1-Dichloroethene	75-35-4	0	U		0.000398	0.0010	0.00100
cis-1,2-Dichloroethene	156-59-2	0	U		0.000260	0.0010	0.00100
trans-1,2-Dichloroethene	156-60-5	0	U		0.000396	0.0010	0.00100
1,2-Dichloropropane	78-87-5	0	U		0.000306	0.0010	0.00100
1,1-Dichloropropene	563-58-6	0	U		0.000352	0.0010	0.00100
cis-1,3-Dichloropropene	10061-01-5	0	U		0.000418	0.0010	0.00100
trans-1,3-Dichloropropene	10061-02-6	0	U		0.000419	0.0010	0.00100
2,2-Dichloropropane	594-20-7	0	U		0.000321	0.0010	0.00100
Ethylbenzene	100-41-4	0	U		0.000384	0.0010	0.00100
2-Hexanone	591-78-6	0	U		0.00382	0.01	0.0100
Isopropylbenzene	98-82-8	0	U		0.000326	0.0010	0.00100
Methyl Acetate	79-20-9	0	U		0.00430	0.02	0.0200
p-Isopropyltoluene	99-87-6	0	U		0.000350	0.0010	0.00100
2-Butanone (MEK)	78-93-3	0	U		0.00393	0.01	0.0100
Methyl Cyclohexane	108-87-2	0	U		0.000380	0.0010	0.00100

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415400-3

Lab Sample ID:	R3415400-3	**SDG:**	L1101421
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	0527_60	**Received Date/Time:**	_____
Instrument ID:	VOCMS6	**Preparation Date/Time:**	05/28/19 04:50
Analytical Batch:	WG1287157	**Analysis Date/Time:**	05/28/19 04:50
Dilution Factor:	1	**Prep Method:**	624.1/8260B
Analytical Method:	624.1	**Sample Vol Used:**	5 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	5 mL

Analyte	CAS	RT	Result	Qualifier	SDL	Unadj. MQL	MQL
			mg/l		*mg/l*	*mg/l*	*mg/l*
Methylene Chloride	75-09-2	0	U		0.00100	0.0050	0.00500
4-Methyl-2-pentanone (MIBK)	108-10-1	0	U		0.00214	0.01	0.0100
Methyl tert-butyl ether	1634-04-4	0	U		0.000367	0.0010	0.00100
n-Propylbenzene	103-65-1	0	U		0.000349	0.0010	0.00100
Styrene	100-42-5	0	U		0.000307	0.0010	0.00100
1,1,1,2-Tetrachloroethane	630-20-6	0	U		0.000385	0.0010	0.00100
1,1,2,2-Tetrachloroethane	79-34-5	0	U		0.000130	0.0010	0.00100
1,1,2-Trichlorotrifluoroethane	76-13-1	0	U		0.000303	0.0010	0.00100
Tetrachloroethene	127-18-4	0	U		0.000372	0.0010	0.00100
Toluene	108-88-3	0	U		0.000412	0.0010	0.00100
1,2,3-Trichlorobenzene	87-61-6	0	U		0.000230	0.0010	0.00100
1,2,4-Trichlorobenzene	120-82-1	0	U		0.000355	0.0010	0.00100
1,1,1-Trichloroethane	71-55-6	0	U		0.000319	0.0010	0.00100
1,1,2-Trichloroethane	79-00-5	0	U		0.000383	0.0010	0.00100
1,2,4-Trimethylbenzene	95-63-6	0	U		0.000373	0.0010	0.00100
Trichloroethene	79-01-6	0	U		0.000398	0.0010	0.00100
1,3,5-Trimethylbenzene	108-67-8	0	U		0.000387	0.0010	0.00100
Trichlorofluoromethane	75-69-4	0	U		0.00120	0.0050	0.00500
1,2,3-Trichloropropane	96-18-4	0	U		0.000807	0.0025	0.00250
Vinyl chloride	75-01-4	0	U		0.000259	0.0010	0.00100
Xylenes, Total	1330-20-7	0	U		0.00106	0.0030	0.00300
o-Xylene	95-47-6	0	U		0.000341	0.0010	0.00100
m&p-Xylenes	1330-20-7	0	U		0.000719	0.0020	0.00200
1,3-Dichloropropene	542-75-6	0	U		0.000320	0.0010	0.00100

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415400-1

Lab Sample ID:	R3415400-1	**SDG:**	L1101421
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	0527_56	**Received Date/Time:**	_____
Instrument ID:	VOCMS6	**Preparation Date/Time:**	05/28/19 03:30
Analytical Batch:	WG1287157	**Analysis Date/Time:**	05/28/19 03:30
Dilution Factor:	1	**Prep Method:**	624.1/8260B
Analytical Method:	624.1	**Sample Vol Used:**	5 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	5 mL

Analyte	CAS	RT	Result	Qualifier	SDL	Unadj. MQL	MQL
			mg/l		*mg/l*	*mg/l*	*mg/l*
Acetone	67-64-1	2.98	0.134		0.0100	0.05	0.0500
Acrylonitrile	107-13-1	3.42	0.148		0.00187	0.01	0.0100
n-Butylbenzene	104-51-8	8.19	0.0222		0.000361	0.0010	0.00100
Benzene	71-43-2	4.17	0.0282		0.000331	0.0010	0.00100
sec-Butylbenzene	135-98-8	7.76	0.0220		0.000365	0.0010	0.00100
Bromobenzene	108-86-1	7.25	0.0222		0.000352	0.0010	0.00100
tert-Butylbenzene	98-06-6	7.63	0.0228		0.000399	0.0010	0.00100
Bromodichloromethane	75-27-4	4.82	0.0286		0.000380	0.0010	0.00100
Carbon disulfide	75-15-0	2.66	0.0279		0.000275	0.0010	0.00100
Bromochloromethane	74-97-5	3.81	0.0247		0.000520	0.0010	0.00100
Bromoform	75-25-2	6.81	0.0251		0.000469	0.0010	0.00100
Bromomethane	74-83-9	2.11	0.0145		0.000866	0.0050	0.00500
Carbon tetrachloride	56-23-5	3.93	0.0293		0.000379	0.0010	0.00100
Chlorobenzene	108-90-7	6.33	0.0263		0.000348	0.0010	0.00100
Chlorodibromomethane	124-48-1	5.83	0.0257		0.000327	0.0010	0.00100
Chloroethane	75-00-3	2.20	0.0262		0.000453	0.0050	0.00500
Chloroform	67-66-3	3.83	0.0281		0.000324	0.0050	0.00500
Chloromethane	74-87-3	1.84	0.0127		0.000276	0.0025	0.00250
2-Chlorotoluene	95-49-8	7.38	0.0222		0.000375	0.0010	0.00100
4-Chlorotoluene	106-43-4	7.50	0.0233		0.000351	0.0010	0.00100
Dibromomethane	74-95-3	4.75	0.0274		0.000346	0.0010	0.00100
1,2-Dichlorobenzene	95-50-1	8.35	0.0246		0.000349	0.0010	0.00100
1,3-Dichlorobenzene	541-73-1	7.95	0.0235		0.000220	0.0010	0.00100
1,4-Dichlorobenzene	106-46-7	8.02	0.0229		0.000274	0.0010	0.00100
Dichlorodifluoromethane	75-71-8	1.65	0.0124		0.000551	0.0050	0.00500
1,1-Dichloroethane	75-34-3	3.40	0.0283		0.000259	0.0010	0.00100
1,2-Dichloroethane	107-06-2	4.28	0.0259		0.000361	0.0010	0.00100
1,1-Dichloroethene	75-35-4	2.62	0.0305		0.000398	0.0010	0.00100
cis-1,2-Dichloroethene	156-59-2	3.70	0.0280		0.000260	0.0010	0.00100
trans-1,2-Dichloroethene	156-60-5	3.06	0.0300		0.000396	0.0010	0.00100
1,2-Dichloropropane	78-87-5	4.79	0.0278		0.000306	0.0010	0.00100
1,1-Dichloropropene	563-58-6	4.03	0.0299		0.000352	0.0010	0.00100
cis-1,3-Dichloropropene	10061-01-5	5.19	0.0291		0.000418	0.0010	0.00100
trans-1,3-Dichloropropene	10061-02-6	5.59	0.0258		0.000419	0.0010	0.00100
2,2-Dichloropropane	594-20-7	3.76	0.0259		0.000321	0.0010	0.00100
Isopropylbenzene	98-82-8	6.95	0.0259		0.000326	0.0010	0.00100
Ethylbenzene	100-41-4	6.33	0.0270		0.000384	0.0010	0.00100
2-Hexanone	591-78-6	6.09	0.136		0.00382	0.01	0.0100
p-Isopropyltoluene	99-87-6	7.86	0.0223		0.000350	0.0010	0.00100
2-Butanone (MEK)	78-93-3	3.99	0.130		0.00393	0.01	0.0100
n-Propylbenzene	103-65-1	7.25	0.0230		0.000349	0.0010	0.00100
Methylene Chloride	75-09-2	2.97	0.0273		0.00100	0.0050	0.00500
4-Methyl-2-pentanone (MIBK)	108-10-1	5.55	0.127		0.00214	0.01	0.0100

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415400-1

Lab Sample ID:	R3415400-1	**SDG:**	L1101421
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	0527_56	**Received Date/Time:**	_____
Instrument ID:	VOCMS6	**Preparation Date/Time:**	05/28/19 03:30
Analytical Batch:	WG1287157	**Analysis Date/Time:**	05/28/19 03:30
Dilution Factor:	1	**Prep Method:**	624.1/8260B
Analytical Method:	624.1	**Sample Vol Used:**	5 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	5 mL

Analyte	CAS	RT	Result	Qualifier	SDL	Unadj. MQL	MQL
			mg/l		*mg/l*	*mg/l*	*mg/l*
Methyl tert-butyl ether	1634-04-4	3.10	0.0288		0.000367	0.0010	0.00100
1,1,2-Trichlorotrifluoroethane	76-13-1	2.64	0.0319		0.000303	0.0010	0.00100
Styrene	100-42-5	6.77	0.0280		0.000307	0.0010	0.00100
1,1,1,2-Tetrachloroethane	630-20-6	6.37	0.0261		0.000385	0.0010	0.00100
1,1,2,2-Tetrachloroethane	79-34-5	7.30	0.0231		0.000130	0.0010	0.00100
Tetrachloroethene	127-18-4	5.60	0.0284		0.000372	0.0010	0.00100
Toluene	108-88-3	5.34	0.0254		0.000412	0.0010	0.00100
1,2,3-Trichlorobenzene	87-61-6	9.96	0.0223		0.000230	0.0010	0.00100
1,2,4-Trimethylbenzene	95-63-6	7.68	0.0232		0.000373	0.0010	0.00100
1,2,4-Trichlorobenzene	120-82-1	9.53	0.0230		0.000355	0.0010	0.00100
1,3,5-Trimethylbenzene	108-67-8	7.38	0.0220		0.000387	0.0010	0.00100
1,1,1-Trichloroethane	71-55-6	3.97	0.0298		0.000319	0.0010	0.00100
1,1,2-Trichloroethane	79-00-5	5.70	0.0258		0.000383	0.0010	0.00100
Trichloroethene	79-01-6	4.49	0.0305		0.000398	0.0010	0.00100
Trichlorofluoromethane	75-69-4	2.29	0.0327		0.00120	0.0050	0.00500
1,2,3-Trichloropropane	96-18-4	7.41	0.0239		0.000807	0.0010	0.00100
1,3-Dichloropropene	542-75-6	5.59	0.0549		0.000837	0.0020	0.00200
Vinyl chloride	75-01-4	1.87	0.0316		0.000259	0.0010	0.00100
Xylenes, Total	1330-20-7	6.73	0.0771		0.00106	0.0030	0.00300
o-Xylene	95-47-6	6.73	0.0260		0.000341	0.0010	0.00100
m&p-Xylenes	1330-20-7	6.42	0.0511		0.000719	0.0020	0.00200

8015M SVOC-GC-GLYCOLS

2A-OR

SURROGATE RECOVERY

Analytical Method: 8015M **SDG:** L1101421
Matrix: WW

Sample ID	Lab Sample ID	Instrument	File ID	DMC-1 % Rec.	TOT Out
WW-20190520-002-DAY 18	L1101421-01	SVGC10	0528_12	68.9	0

Parm Abbreviation	Parameter	QC LIMITS
DMC-1	1,3-Propanediol	28.0 - 145

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

2A-OR SURROGATE RECOVERY

Analytical Method: 8015M **SDG:** L1101421
Matrix: WW

Sample ID	Lab Sample ID	Instrument	File ID	DMC-1 % Rec.	TOT Out
MS	R3415416-4	SVGC10	0528_28	71.2	0
MSD	R3415416-5	SVGC10	0528_29	72.8	0
BLANK	R3415416-1	SVGC10	0528_06	58.2	0
LCS	R3415416-2	SVGC10	0528_07	66.9	0
LCSD	R3415416-3	SVGC10	0528_08	61.6	0

Parm Abbreviation	Parameter	QC LIMITS
DMC-1	1,3-Propanediol	28.0 - 145

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

3A-OR

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1101421-01

SAMPLE NO.:
R3415416-4
R3415416-5

MS Sample / File ID:	R3415416-4 / 0528_28	**SDG:**	L1101421
MSD Sample / File ID:	R3415416-5 / 0528_29	**Analytical Batch:**	WG1285892
OS Sample / File ID:	L1101887-01 / 0528_27	**Matrix:**	WW
Instrument ID:	SVGC10		
Analytical Method:	8015M		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limit
	mg/l	*mg/l*	*mg/l*	*mg/l*	*%*	*%*		*%*	*%*	*%*
Ethylene glycol	90.0	U	96.8	96.6	108	107	1	62.0 - 136	0.207	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

3B-OR

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY

L1101421-01

SAMPLE NO.:
R3415416-2
R3415416-3

LCS Sample / File ID:	R3415416-2 / 0528_07	**SDG:**	L1101421
LCSD Sample / File ID:	R3415416-3 / 0528_08	**Analytical Batch:**	WG1285892
Instrument ID:	SVGC10	**Dilution Factor:**	1
Analytical Method:	8015M	**Matrix:**	WW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limit
	mg/l	*mg/l*	*mg/l*	*%*	*%*	*%*	*%*	*%*
Ethylene glycol	90.0	94.8	92.6	105	103	80.0 - 120	2.35	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

4A-OR

METHOD BLANK

SAMPLE NO.:
R3415416-1

Lab Sample ID:	R3415416-1	**SDG:**	L1101421
Lab File ID:	0528_06	**Preparation Date/Time:**	05/23/19 20:22
Instrument ID:	SVGC10	**Analysis Date/Time:**	05/28/19 11:22
Analytical Batch:	WG1285892	**Dilution Factor:**	1
Analytical Method:	8015M	**Matrix:**	WW

Sample ID	**Lab Sample ID**	**Instrument**	**File ID**	**Analysis** *date/time*
LCS	R3415416-2	SVGC10	0528_07	05/28/19 11:40
LCSD	R3415416-3	SVGC10	0528_08	05/28/19 11:58
WW-20190520-002-DAY 18	L1101421-01	SVGC10	0528_12	05/28/19 13:09
OS	L1101887-01	SVGC10	0528_27	05/28/19 17:37
MS	R3415416-4	SVGC10	0528_28	05/28/19 17:55
MSD	R3415416-5	SVGC10	0528_29	05/28/19 18:13

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
WW-20190520-002-DAY 18

Lab Sample ID:	L1101421-01	**SDG:**	L1101421
Client Sample ID:	WW-20190520-002-DAY 18	**Collected Date/Time:**	05/20/19 11:30
Lab File ID:	0528_12	**Received Date/Time:**	05/22/19 08:00
Instrument ID:	SVGC10	**Preparation Date/Time:**	05/23/19 20:23
Analytical Batch:	WG1285892	**Analysis Date/Time:**	05/28/19 13:09
Dilution Factor:	1	**Prep Method:**	8015
Analytical Method:	8015M	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	5 mL
Total Solids (%):	_____	**Final Wt/Vol:**	15 mL

Analyte	**CAS**	**RT**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
			mg/l		*mg/l*	*mg/l*	*mg/l*
Ethylene glycol	107-21-1	0	U		0.492	5.00	5.00

6B-OR

RETENTION TIME
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	01/15/19 00:04
Instrument ID:	SVGC10 - 1	**Calibration (end) date/time:**	01/15/19 01:16
Analytical Method:	8015M		

Analyte	**CS: 1.5**	**CS: 15**	**CS: 30**	**CS: 45**	**CS: 60**
ETHYLENE GLYCOL	5.86	5.81	5.76	5.79	5.79
1,3-PROPANEDIOL	7.86	7.82	7.76	7.81	7.81
File ID:	0114_04	0114_05	0114_06	0114_07	0114_08

6C-OR

CALIBRATION FACTOR
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	01/15/19 00:04
Instrument ID:	SVGC10 - 1	**Calibration (end) date/time:**	01/15/19 01:16
Analytical Method:	8015M		

Analyte	**RRF: 1.5**	**RRF: 15**	**RRF: 30**	**RRF: 45**	**RRF: 60**	**RRF. Avg**	**%RSD**	**COD**
ETHYLENE GLYCOL	128700	144600	142400	141900	142500	140041.5	4.59	
1,3-PROPANEDIOL	180500	193100	187700	189100	190100	188099.5	2.49	
File ID:	0114_04	0114_05	0114_06	0114_07	0114_08			

7C-OR

CONTINUING CALIBRATION VERIFICATION
SINGLE COMPONENT ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	01/15/19 00:04
Instrument ID:	SVGC10	**Calibration (end) date/time:**	01/15/19 01:16
Lab File ID:	0114_09	**Analysis date/time:**	01/15/19 01:34
Analytical Method:	8015M	**Sample ID:**	SSCV

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
ETHYLENE GLYCOL	30	30.91	103	80 - 120

7C-OR

CONTINUING CALIBRATION VERIFICATION
SINGLE COMPONENT ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	01/15/19 00:04
Instrument ID:	SVGC10	**Calibration (end) date/time:**	01/15/19 01:16
Lab File ID:	0528_04	**Analysis date/time:**	05/28/19 10:47
Analytical Method:	8015M	**Sample ID:**	CCV

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
ETHYLENE GLYCOL	30	32.46	108	80 - 120
1,3-PROPANEDIOL	30	29.33	97.80	50 - 150

7C-OR

CONTINUING CALIBRATION VERIFICATION
SINGLE COMPONENT ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	01/15/19 00:04
Instrument ID:	SVGC10	**Calibration (end) date/time:**	01/15/19 01:16
Lab File ID:	0528_10	**Analysis date/time:**	05/28/19 12:34
Analytical Method:	8015M	**Sample ID:**	CCV

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
ETHYLENE GLYCOL	30	32.52	108	80 - 120
1,3-PROPANEDIOL	30	28.96	96.50	50 - 150

7C-OR

CONTINUING CALIBRATION VERIFICATION
SINGLE COMPONENT ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	01/15/19 00:04
Instrument ID:	SVGC10	**Calibration (end) date/time:**	01/15/19 01:16
Lab File ID:	0528_14	**Analysis date/time:**	05/28/19 13:45
Analytical Method:	8015M	**Sample ID:**	CCV

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
ETHYLENE GLYCOL	30	31.88	106	80 - 120
1,3-PROPANEDIOL	30	28.34	94.50	50 - 150

7C-OR

CONTINUING CALIBRATION VERIFICATION
SINGLE COMPONENT ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	01/15/19 00:04
Instrument ID:	SVGC10	**Calibration (end) date/time:**	01/15/19 01:16
Lab File ID:	0528_23	**Analysis date/time:**	05/28/19 16:26
Analytical Method:	8015M	**Sample ID:**	CCV

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
ETHYLENE GLYCOL	30	30.13	100	80 - 120
1,3-PROPANEDIOL	30	25.51	85	50 - 150

7C-OR

CONTINUING CALIBRATION VERIFICATION
SINGLE COMPONENT ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	01/15/19 00:04
Instrument ID:	SVGC10	**Calibration (end) date/time:**	01/15/19 01:16
Lab File ID:	0528_31	**Analysis date/time:**	05/28/19 21:28
Analytical Method:	8015M	**Sample ID:**	CCV

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
ETHYLENE GLYCOL	30	31.39	105	80 - 120
1,3-PROPANEDIOL	30	27.60	92	50 - 150

8B-OR

ANALYTICAL SEQUENCE

SDG:	L1101421	**Analytical Method:**	8015M
Instrument ID:	SVGC10	**Calibration Start Date:**	01/15/19 00:04
		Calibration End Date:	01/15/19 01:16

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
CAL	1.5	0114_04	01/15/19 00:04	1	
CAL	15	0114_05	01/15/19 00:22	1	
CAL	30	0114_06	01/15/19 00:40	1	
CAL	45	0114_07	01/15/19 00:58	1	
CAL	60	0114_08	01/15/19 01:16	1	
SSCV	SVGC100114190114_09465874	0114_09	01/15/19 01:34	1	
CCV	SVGC100528190528_04465874	0528_04	05/28/19 10:47	1	
BLANK	R3415416-1	0528_06	05/28/19 11:22	1	WG1285892
LCS	R3415416-2	0528_07	05/28/19 11:40	1	WG1285892
LCSD	R3415416-3	0528_08	05/28/19 11:58	1	WG1285892
CCV	SVGC100528190528_10465874	0528_10	05/28/19 12:34	1	
WW-20190520-002-DAY 18	L1101421-01	0528_12	05/28/19 13:09	1	WG1285892
CCV	SVGC100528190528_14465874	0528_14	05/28/19 13:45	1	
CCV	SVGC100528190528_23465874	0528_23	05/28/19 16:26	1	
OS	L1101887-01	0528_27	05/28/19 17:37	1	WG1285892
MS	R3415416-4	0528_28	05/28/19 17:55	1	WG1285892
MSD	R3415416-5	0528_29	05/28/19 18:13	1	WG1285892
CCV	SVGC100528190528_31465874	0528_31	05/28/19 21:28	1	

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415416-1

Lab Sample ID:	R3415416-1	**SDG:**	L1101421
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	0528_06	**Received Date/Time:**	_____
Instrument ID:	SVGC10	**Preparation Date/Time:**	05/23/19 20:22
Analytical Batch:	WG1285892	**Analysis Date/Time:**	05/28/19 11:22
Dilution Factor:	1	**Prep Method:**	8015
Analytical Method:	8015M	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	5 mL
Total Solids (%):	_____	**Final Wt/Vol:**	15 mL

Analyte	**CAS**	**RT**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
			mg/l		*mg/l*	*mg/l*	*mg/l*
Ethylene glycol	107-21-1	0	U		0.492	5	5.00

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415416-2

Lab Sample ID:	R3415416-2	**SDG:**	L1101421
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	0528_07	**Received Date/Time:**	_____
Instrument ID:	SVGC10	**Preparation Date/Time:**	05/23/19 20:22
Analytical Batch:	WG1285892	**Analysis Date/Time:**	05/28/19 11:40
Dilution Factor:	1	**Prep Method:**	8015
Analytical Method:	8015M	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	5 mL
Total Solids (%):	_____	**Final Wt/Vol:**	15 mL

Analyte	**CAS**	**RT**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
			mg/l		*mg/l*	*mg/l*	*mg/l*
Ethylene glycol	107-21-1	5.71	94.8		0.492	5	5.00

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415416-3

Lab Sample ID:	R3415416-3	**SDG:**	L1101421
Client Sample ID:	LCSD	**Collected Date/Time:**	_____
Lab File ID:	0528_08	**Received Date/Time:**	_____
Instrument ID:	SVGC10	**Preparation Date/Time:**	05/23/19 20:22
Analytical Batch:	WG1285892	**Analysis Date/Time:**	05/28/19 11:58
Dilution Factor:	1	**Prep Method:**	8015
Analytical Method:	8015M	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	5 mL
Total Solids (%):	_____	**Final Wt/Vol:**	15 mL

Analyte	**CAS**	**RT**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
			mg/l		*mg/l*	*mg/l*	*mg/l*
Ethylene glycol	107-21-1	5.71	92.6		0.492	5	5.00

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415416-4

Lab Sample ID:	R3415416-4	**SDG:**	L1101421
Client Sample ID:	MS	**Collected Date/Time:**	05/22/19 10:00
Lab File ID:	0528_28	**Received Date/Time:**	05/23/19 08:45
Instrument ID:	SVGC10	**Preparation Date/Time:**	05/23/19 20:23
Analytical Batch:	WG1285892	**Analysis Date/Time:**	05/28/19 17:55
Dilution Factor:	1	**Prep Method:**	8015
Analytical Method:	8015M	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	5 mL
Total Solids (%):	_____	**Final Wt/Vol:**	15 mL

Analyte	**CAS**	**RT**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
			mg/l		*mg/l*	*mg/l*	*mg/l*
Ethylene glycol	107-21-1	5.69	96.8		0.492	5	5.00

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415416-5

Lab Sample ID:	R3415416-5	**SDG:**	L1101421
Client Sample ID:	MSD	**Collected Date/Time:**	05/22/19 10:00
Lab File ID:	0528_29	**Received Date/Time:**	05/23/19 08:45
Instrument ID:	SVGC10	**Preparation Date/Time:**	05/23/19 20:23
Analytical Batch:	WG1285892	**Analysis Date/Time:**	05/28/19 18:13
Dilution Factor:	1	**Prep Method:**	8015
Analytical Method:	8015M	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	5 mL
Total Solids (%):	_____	**Final Wt/Vol:**	15 mL

Analyte	**CAS**	**RT**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
			mg/l		*mg/l*	*mg/l*	*mg/l*
Ethylene glycol	107-21-1	5.70	96.6		0.492	5	5.00

8151 Chlorinated Acid Herbicides (GC)

2A-OR

SURROGATE RECOVERY

Analytical Method: 8151 **SDG:** L1101421
Matrix: WW

Sample ID	Lab Sample ID	Instrument	File ID	DMC-1 % Rec.	TOT Out
WW-20190520-002-DAY 18	L1101421-01	SVGC11	0524A_52	60.6	0
BLANK	R3414946-1	SVGC11	0524A_49	66.2	0
LCS	R3414946-2	SVGC11	0524A_50	68.8	0
LCSD	R3414946-3	SVGC11	0524A_51	69.8	0

Parm Abbreviation	Parameter	QC LIMITS
DMC-1	2,4-Dichlorophenyl Acetic Acid	14.0 - 158

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

3B-OR

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY

L1101421-01

SAMPLE NO.:
R3414946-2
R3414946-3

LCS Sample / File ID:	R3414946-2 / 0524A_50	**SDG:**	L1101421
LCSD Sample / File ID:	R3414946-3 / 0524A_51	**Analytical Batch:**	WG1286035
Instrument ID:	SVGC11	**Dilution Factor:**	1
Analytical Method:	8151	**Matrix:**	WW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limit
	mg/l	*mg/l*	*mg/l*	*%*	*%*	*%*	*%*	*%*
2,4,5-TP (Silvex)	0.00500	0.00428	0.00444	85.6	88.8	50.0 - 125	3.67	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

4A-OR

METHOD BLANK

SAMPLE NO.:
R3414946-1

Lab Sample ID:	R3414946-1	**SDG:**	L1101421
Lab File ID:	0524A_49	**Preparation Date/Time:**	05/24/19 06:54
Instrument ID:	SVGC11	**Analysis Date/Time:**	05/24/19 22:43
Analytical Batch:	WG1286035	**Dilution Factor:**	1
Analytical Method:	8151	**Matrix:**	WW

Sample ID	Lab Sample ID	Instrument	File ID	Analysis *date/time*
LCS	R3414946-2	SVGC11	0524A_50	05/24/19 22:56
LCSD	R3414946-3	SVGC11	0524A_51	05/24/19 23:10
WW-20190520-002-DAY 18	L1101421-01	SVGC11	0524A_52	05/24/19 23:23

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
WW-20190520-002-DAY 18

Lab Sample ID:	L1101421-01	**SDG:**	L1101421
Client Sample ID:	WW-20190520-002-DAY 18	**Collected Date/Time:**	05/20/19 11:30
Lab File ID:	0524A_52	**Received Date/Time:**	05/22/19 08:00
Instrument ID:	SVGC11	**Preparation Date/Time:**	05/24/19 06:54
Analytical Batch:	WG1286035	**Analysis Date/Time:**	05/24/19 23:23
Dilution Factor:	1	**Prep Method:**	8151A
Analytical Method:	8151	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	1000 mL
Total Solids (%):	_____	**Final Wt/Vol:**	10 mL

Analyte	**CAS**	**RT**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
			mg/l		*mg/l*	*mg/l*	*mg/l*
2,4,5-TP (Silvex)	93-72-1	0	U		0.000845	0.00200	0.00200

6B-OR

RETENTION TIME
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	05/22/19 08:50
Instrument ID:	SVGC11 - 1	**Calibration (end) date/time:**	05/22/19 10:00
Analytical Method:	8151		

Analyte	**CS: 20**	**CS: 50**	**CS: 100**	**CS: 200**	**CS: 500**	**CS: 1000**
2,4-DICHLOROPHENYL ACETIC ACID	5.20	5.20	5.20	5.20	5.20	5.20
2,4,5-TP (SILVEX)	6.16	6.16	6.16	6.16	6.16	6.16
File ID:	0522_04	0522_05	0522_06	0522_03	0522_07	0522_08

6B-OR

RETENTION TIME
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	05/22/19 08:50
Instrument ID:	SVGC11 - 2	**Calibration (end) date/time:**	05/22/19 10:00
Analytical Method:	8151		

Analyte	**CS: 20**	**CS: 50**	**CS: 100**	**CS: 200**	**CS: 500**	**CS: 1000**
2,4-DICHLOROPHENYL ACETIC ACID	5.37	5.37	5.37	5.37	5.37	5.37
2,4,5-TP (SILVEX)	6.35	6.35	6.35	6.35	6.35	6.35
File ID:	0522_04	0522_05	0522_06	0522_03	0522_07	0522_08

6C-OR

CALIBRATION FACTOR
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	05/22/19 08:50
Instrument ID:	SVGC11 - 1	**Calibration (end) date/time:**	05/22/19 10:00
Analytical Method:	8151		

Analyte	**RRF: 20**	**RRF: 50**	**RRF: 100**	**RRF: 200**	**RRF: 500**	**RRF: 1000**
2,4-DICHLOROPHENYL ACETIC ACID	2358000	1942000	1899000	1812000	1690000	1685000
2,4,5-TP (SILVEX)	14850000	13110000	13530000	13460000	13040000	11280000
File ID:	0522_04	0522_05	0522_06	0522_03	0522_07	0522_08

6C-OR

CALIBRATION FACTOR
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	05/22/19 08:50
Instrument ID:	SVGC11 - 1	**Calibration (end) date/time:**	05/22/19 10:00
Analytical Method:	8151		

Analyte	RRF. Avg	%RSD	COD
2,4-DICHLOROPHENYL ACETIC ACID	1897786	13.11	
2,4,5-TP (SILVEX)	13211930	8.71	

6C-OR

CALIBRATION FACTOR
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	05/22/19 08:50
Instrument ID:	SVGC11 - 2	**Calibration (end) date/time:**	05/22/19 10:00
Analytical Method:	8151		

Analyte	**RRF: 20**	**RRF: 50**	**RRF: 100**	**RRF: 200**	**RRF: 500**	**RRF: 1000**
2,4-DICHLOROPHENYL ACETIC ACID	2021000	1891000	1922000	1994000	1944000	1919000
2,4,5-TP (SILVEX)	13210000	12120000	13440000	13940000	14120000	12760000
File ID:	0522_04	0522_05	0522_06	0522_03	0522_07	0522_08

6C-OR

CALIBRATION FACTOR
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	05/22/19 08:50
Instrument ID:	SVGC11 - 2	**Calibration (end) date/time:**	05/22/19 10:00
Analytical Method:	8151		

Analyte	RRF. Avg	%RSD	COD
2,4-DICHLOROPHENYL ACETIC ACID	1948334	2.54	
2,4,5-TP (SILVEX)	13264750	5.64	

7D-OR

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	05/22/19 08:50
Instrument ID:	SVGC11 - 1	**Calibration (end) date/time:**	05/22/19 10:00
Lab File ID:	0522_09	**Analysis date/time:**	05/22/19 10:14
Analytical Method:	8151	**Sample ID:**	SSCV

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
2,4,5-TP (SILVEX)	0.20	0.1942	97.10	80 - 120

7D-OR

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	05/22/19 08:50
Instrument ID:	SVGC11 - 2	**Calibration (end) date/time:**	05/22/19 10:00
Lab File ID:	0522_09	**Analysis date/time:**	05/22/19 10:14
Analytical Method:	8151	**Sample ID:**	SSCV

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
2,4,5-TP (SILVEX)	0.20	0.1948	97.40	80 - 120

7D-OR

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	05/22/19 08:50
Instrument ID:	SVGC11 - 1	**Calibration (end) date/time:**	05/22/19 10:00
Lab File ID:	0524A_48	**Analysis date/time:**	05/24/19 22:29
Analytical Method:	8151	**Sample ID:**	CCV

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
2,4,5-TP (SILVEX)	0.20	0.2474	124	85 - 115
2,4-DICHLOROPHENYL ACETIC ACID	0.20	0.2114	106	70 - 130

7D-OR

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	05/22/19 08:50
Instrument ID:	SVGC11 - 2	**Calibration (end) date/time:**	05/22/19 10:00
Lab File ID:	0524A_48	**Analysis date/time:**	05/24/19 22:29
Analytical Method:	8151	**Sample ID:**	CCV

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
2,4,5-TP (SILVEX)	0.20	0.1886	94.30	85 - 115
2,4-DICHLOROPHENYL ACETIC ACID	0.20	0.2046	102	70 - 130

7D-OR

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	05/22/19 08:50
Instrument ID:	SVGC11 - 1	**Calibration (end) date/time:**	05/22/19 10:00
Lab File ID:	0524A_59	**Analysis date/time:**	05/25/19 00:58
Analytical Method:	8151	**Sample ID:**	CCV

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
2,4,5-TP (SILVEX)	0.20	0.2497	125	85 - 115
2,4-DICHLOROPHENYL ACETIC ACID	0.20	0.2233	112	70 - 130

7D-OR

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1101421	**Calibration (begin) date/time:**	05/22/19 08:50
Instrument ID:	SVGC11 - 2	**Calibration (end) date/time:**	05/22/19 10:00
Lab File ID:	0524A_59	**Analysis date/time:**	05/25/19 00:58
Analytical Method:	8151	**Sample ID:**	CCV

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
2,4,5-TP (SILVEX)	0.20	0.2046	102	85 - 115
2,4-DICHLOROPHENYL ACETIC ACID	0.20	0.2106	105	70 - 130

8B-OR

ANALYTICAL SEQUENCE

SDG:	L1101421	**Analytical Method:**	8151
Instrument ID:	SVGC11	**Calibration Start Date:**	05/22/19 08:50
		Calibration End Date:	05/22/19 10:00

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
CAL	200	0522_03	05/22/19 08:50	1	
CAL	20	0522_04	05/22/19 09:04	1	
CAL	50	0522_05	05/22/19 09:18	1	
CAL	100	0522_06	05/22/19 09:32	1	
CAL	500	0522_07	05/22/19 09:46	1	
CAL	1000	0522_08	05/22/19 10:00	1	
SSCV	SVGC110522190522_09472385	0522_09	05/22/19 10:14	1	
CCV	SVGC11052419A0524A_48472385	0524A_48	05/24/19 22:29	1	
BLANK	R3414946-1	0524A_49	05/24/19 22:43	1	WG1286035
LCS	R3414946-2	0524A_50	05/24/19 22:56	1	WG1286035
LCSD	R3414946-3	0524A_51	05/24/19 23:10	1	WG1286035
WW-20190520-002-DAY 18	L1101421-01	0524A_52	05/24/19 23:23	1	WG1286035
CCV	SVGC11052419A0524A_59472385	0524A_59	05/25/19 00:58	1	

10A-OR

SINGLE COMPONENT ANALYSIS IDENTIFICATION

SAMPLE NO.:
R3414946-1

Lab Sample ID:	R3414946-1	**SDG:**	L1101421
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	0524A_49	**Received Date/Time:**	_____
Instrument ID:	SVGC11	**Preparation Date/Time:**	05/24/19 06:54
Analytical Batch:	WG1286035	**Analysis Date/Time:**	05/24/19 22:43
Dilution Factor:	1	**Prep Method:**	8151A
Analytical Method:	8151	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	1000 mL
Total Solids (%):	_____	**Final Wt/Vol:**	10 mL

Analyte	**Column**	**RT**	**Concentration** *mg/l*	**% Diff.**
2,4,5-TP (Silvex)	1	0	U	0

10A-OR

SINGLE COMPONENT ANALYSIS IDENTIFICATION

SAMPLE NO.:
R3414946-2

Lab Sample ID:	R3414946-2	**SDG:**	L1101421
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	0524A_50	**Received Date/Time:**	_____
Instrument ID:	SVGC11	**Preparation Date/Time:**	05/24/19 06:54
Analytical Batch:	WG1286035	**Analysis Date/Time:**	05/24/19 22:56
Dilution Factor:	1	**Prep Method:**	8151A
Analytical Method:	8151	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	1000 mL
Total Solids (%):	_____	**Final Wt/Vol:**	10 mL

Analyte	**Column**	**RT**	**Concentration** *mg/l*	**% Diff.**
2,4,5-TP (Silvex)	1	6.16	0.00428	28

10A-OR

SINGLE COMPONENT ANALYSIS IDENTIFICATION

SAMPLE NO.:
R3414946-3

Lab Sample ID:	R3414946-3	**SDG:**	L1101421
Client Sample ID:	LCSD	**Collected Date/Time:**	_____
Lab File ID:	0524A_51	**Received Date/Time:**	_____
Instrument ID:	SVGC11	**Preparation Date/Time:**	05/24/19 06:54
Analytical Batch:	WG1286035	**Analysis Date/Time:**	05/24/19 23:10
Dilution Factor:	1	**Prep Method:**	8151A
Analytical Method:	8151	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	1000 mL
Total Solids (%):	_____	**Final Wt/Vol:**	10 mL

Analyte	**Column**	**RT**	**Concentration** *mg/l*	**% Diff.**
2,4,5-TP (Silvex)	1	6.16	0.00444	28.6

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414946-1

Lab Sample ID:	R3414946-1	**SDG:**	L1101421
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	0524A_49	**Received Date/Time:**	_____
Instrument ID:	SVGC11	**Preparation Date/Time:**	05/24/19 06:54
Analytical Batch:	WG1286035	**Analysis Date/Time:**	05/24/19 22:43
Dilution Factor:	1	**Prep Method:**	8151A
Analytical Method:	8151	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	1000 mL
Total Solids (%):	_____	**Final Wt/Vol:**	10 mL

Analyte	**CAS**	**RT**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
			mg/l		*mg/l*	*mg/l*	*mg/l*
2,4,5-TP (Silvex)	93-72-1	0	U		0.000845	0.0020	0.00200

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414946-2

Lab Sample ID:	R3414946-2	**SDG:**	L1101421
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	0524A_50	**Received Date/Time:**	_____
Instrument ID:	SVGC11	**Preparation Date/Time:**	05/24/19 06:54
Analytical Batch:	WG1286035	**Analysis Date/Time:**	05/24/19 22:56
Dilution Factor:	1	**Prep Method:**	8151A
Analytical Method:	8151	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	1000 mL
Total Solids (%):	_____	**Final Wt/Vol:**	10 mL

Analyte	**CAS**	**RT**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
			mg/l		*mg/l*	*mg/l*	*mg/l*
2,4,5-TP (Silvex)	93-72-1	6.16	0.00428		0.000845	0.0020	0.00200

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3414946-3

Lab Sample ID:	R3414946-3	**SDG:**	L1101421
Client Sample ID:	LCSD	**Collected Date/Time:**	_____
Lab File ID:	0524A_51	**Received Date/Time:**	_____
Instrument ID:	SVGC11	**Preparation Date/Time:**	05/24/19 06:54
Analytical Batch:	WG1286035	**Analysis Date/Time:**	05/24/19 23:10
Dilution Factor:	1	**Prep Method:**	8151A
Analytical Method:	8151	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	1000 mL
Total Solids (%):	_____	**Final Wt/Vol:**	10 mL

Analyte	**CAS**	**RT**	**Result**	**Qualifier**	**SDL**	**Unadj. MQL**	**MQL**
			mg/l		*mg/l*	*mg/l*	*mg/l*
2,4,5-TP (Silvex)	93-72-1	6.16	0.00444		0.000845	0.0020	0.00200

Calc. Calculated Results

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
WW-20190520-002-DAY 18

Lab Sample ID:	L1101421-01	**SDG:**	L1101421
Client Sample ID:	WW-20190520-002-DAY 18	**Collected Date/Time:**	05/20/19 11:30
Lab File ID:	NONE	**Received Date/Time:**	05/22/19 08:00
Instrument ID:	NONE	**Preparation Date/Time:**	05/24/19 21:03
Analytical Batch:	WG1286272	**Analysis Date/Time:**	05/24/19 21:03
Dilution Factor:	1	**Prep Method:**	Calc.
Analytical Method:	Calc.	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	SDL	Unadj. MQL	MQL
		mg/l		*mg/l*	*mg/l*	*mg/l*
Organic Nitrogen	7727-37-9	0.492		0.0317	0.100	0.100

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Su
7 Gl
8 Al
9 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

MQL	Method Quantitation Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	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.
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.
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

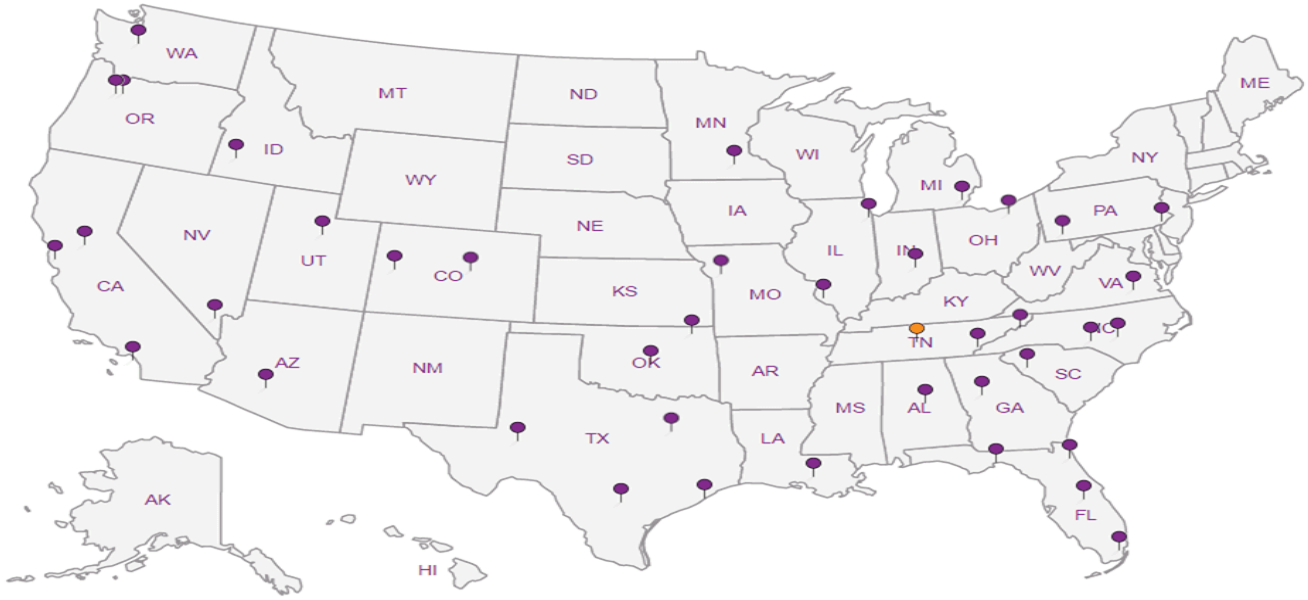
Third Party Federal Accreditations

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: Deer Park 002
City/State Collected:

Phone: 610-220-3957
Fax:
Client Project #
Lab Project # CARDNONDE-ITC

Collected by (print): Valerie Richard Nakamura, Ph.D.
Site/Facility ID #
P.O. #

Collected by (signature): Val M
Immediately Packed on Ice N ___ Y X

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

Quote #
Date Results Needed

Pres Chk: 12, 12, 12

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-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-20190520-002-DA	18 C	GW	NA	5/20/19	1130	~~30~~ 29	X	X	X	X	X	X	X	X	X	X		-01

Immediately Packed on Ice: N ___ Y X

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

Remarks:

pH _____ Temp _____
Flow _____ Other _____

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeOH TBR	If preservation required by Login: Date/Time
Val M.	5/21/19	1527	[signature]		
[signature]	5/21/19	1980	Received by: (Signature)	Temp: 4.2 °C 2.3+.1=2.4 Bottles Received: 29	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 5/22/19 Time: 0800	Hold: / Conditions: NCF / OK
B Maxwell					

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

RAD SCREEN: <0.5 mR/hr

Chain of Custody Page ___ of ___

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# L1101421
Tabl E157
Acctnum: CARDNONDE
Template: T149278
Prelogin: P704877
TSR: 034 - Craig Cothron
PB:
Shipped Via:

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: Deer Park 002

City/State Collected:

Phone: 610-220-3957
Fax:

Client Project #

Lab Project # CARDNONDE-ITC

Collected by (print): Valerie Phipps, Richard Nakamura,

Site/Facility ID #

P.O. #

Collected by (signature): VLPhipps

Quote #

Immediately Packed on Ice N ___ Y X

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

Date Results Needed

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

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 # 410421

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	~~***EDB/DBCP 250mlHDPE-NoPres~~	***CR6, TDS*** 250mlHDPE-NoPres	~~8081/8082 100ml Amb-NoPres~~	~~8141 100ml Amb NoPres~~	~~8270/P9 100mlAmb-NoPres~~	COD, NH3, PT, TKN 250mlHDPE-H2SO4	~~COLIFORM Microbiological~~	Chloride, pH, CHLORR 250mlHDPE-NoPres	Ethylene Glycol 40mlAmb-NoPres	Extra Volume 1L-Amb-No Pres SV/657	Remarks	Sample # (lab only)
NW-20190520-002-DAY18	C	GW	NA	5/20/19	1130	~~36~~ 29	X	X	X	X	X	X	X	X	X	X		-01

* 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

RAD SCREEN: <0.5 mR/hr

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
VLPhipps	5/20/19	1527	[illegible]		
[illegible]	5/21/19	1980	Received by: (Signature)	Temp: A2 BF °C 2.3+.1=2.4 Bottles Received: 29	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 5/22/19 Time: 0800	Hold: / Condition: NCF / OK

B Maxwell

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: Deer Park 002

City/State Collected:

Phone: 610-220-3957
Fax:

Client Project #

Lab Project # CARDNONDE-ITC

Collected by (print): Valerie Phipps, Richard Nakamura

Site/Facility ID #

P.O. #

Collected by (signature): VLP M.

Immediately Packed on Ice N ___ Y X

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

Quote #

Date Results Needed

Pres Chk

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	V8260AP9 40mlAmb-HCl	Dioxin Furans TCDD Equivalents 1613	HG 245.7 other 245.7R2	SV504 COMPOSITE AT LAB	VG24.1 AP9							
~~[illegible]20190~~		GW				~~36~~	X	X	X	X	X							-01
NW-20190520-002-DAY18	C	GW	NA	5/20/19	1130	29	X	X	X	X	X							

Chain of Custody Page ___ of ___

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# L101421

Table #

Acctnum: CARDNONDE

Template: T149278

Prelogin: P704877

TSR: 034 - Craig Cothron

PB:

Shipped Via:

Remarks | Sample # (lab only)

* 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

RAD SCREEN: <0.5 mR/hr

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	
VLP M.	5/21/19	1527	[signature]		
Relinquished by: (Signature) [signature]	Date: 5/21/19	Time: 1980	Received by: (Signature)	Temp: A2BF °C 2.3+.1=2.4 Bottles Received: 29	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) B Maxwell	Date: 5/22/19 Time: 0800	Hold: / Condition: NCF / OK