Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

June 06, 2019

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

Cardno - Newark, DE

Sample Delivery Group:	L1102841
Samples Received:	05/27/2019
Project Number:	
Description:	
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.

90015977

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LCSD(R3416052-3) WG1287805 05/29/19 18:01 SVGC11 400
Calc. Calculated Results 402
Sample Result Inorganic Analysis Data Sheet 402
L1102841-01 05/30/19 11:56 NONE 402
Gl: Glossary of Terms 403
Al: Accreditations & Locations 404
Sc: Sample Chain of Custody 405

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

WW-20190524-002-DAY 22 L1102841-01 WW

Collected by	Collected date/time	Received date/time
	05/24/19 14:00	05/27/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1287198	1	05/30/19 11:56	05/30/19 11:56	SDL	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG1289308	1	05/31/19 19:42	05/31/19 22:34	AEC	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 D-2011	WG1287406	1	05/29/19 13:51	05/29/19 15:21	MMF	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1287349	10	05/28/19 20:21	05/28/19 20:21	ELN	Mt. Juliet, TN
Wet Chemistry by Method 350.1	WG1287198	1	05/29/19 10:12	05/29/19 10:12	BRJ	Mt. Juliet, TN
Wet Chemistry by Method 351.2	WG1287203	1	05/29/19 14:14	05/30/19 11:56	SDL	Mt. Juliet, TN
Wet Chemistry by Method 365.4	WG1288444	1	05/29/19 14:14	05/30/19 12:09	SDL	Mt. Juliet, TN
Wet Chemistry by Method 410.4	WG1285903	1	05/30/19 10:26	05/30/19 14:32	MJA	Mt. Juliet, TN
Wet Chemistry by Method 4500S2 D-2011	WG1287291	1	05/28/19 13:39	05/28/19 13:39	MJA	Mt. Juliet, TN
Wet Chemistry by Method 5310 B-2011	WG1287482	1	05/29/19 04:48	05/29/19 04:48	EEM	Mt. Juliet, TN
Metals (ICPMS) by Method 200.8	WG1286583	1	05/28/19 17:27	05/29/19 22:40	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 200.8	WG1286583	1	05/28/19 17:27	05/31/19 12:47	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 624.1	WG1287848	1	05/29/19 16:05	05/29/19 16:05	DWR	Mt. Juliet, TN
EDB / DBCP by Method 504.1	WG1287037	1	05/28/19 08:45	05/28/19 23:25	HMH	Mt. Juliet, TN
SVOC-GC-GLYCOLS by Method 8015M	WG1287559	1	05/28/19 18:08	05/29/19 01:15	MTJ	Mt. Juliet, TN
Chlorinated Acid Herbicides (GC) by Method 8151	WG1287805	1.08	05/29/19 11:04	05/29/19 18:14	LEL	Mt. Juliet, TN
OP Pesticides by Method 1657M	WG1286777	1	05/30/19 07:38	05/30/19 15:37	HMH	Mt. Juliet, TN

WW-20190524-002-DAY 22 L1102841-02 WW

Collected by	Collected date/time	Received date/time
	05/24/19 14:00	05/27/19 08:45

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

Sample Handling and Receiving

Analysis was performed from an unpreserved or improperly preserved sample.

Lab Sample ID	Project Sample ID	Method
L1102841-01	WW-20190524-002-DAY 22	5310 B-2011

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: 06/06/2019 09:16
Project Name:	Laboratory Job Number: L1102841-01 and 02
Reviewer Name: Craig Cothron	Prep Batch Number(s): WG1287291, WG1287349, WG1287268, WG1287482, WG1287559, WG1287198, WG1287037, WG1287848, WG1286583, WG1287805, WG1287406, WG1287203, WG1288444, WG1285903, WG1286777, WG1289308 and WG1287401

#[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			1
		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			2
		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				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			3
		Were MS/MSD RPDs within laboratory QC limits?		X			4
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?		X			5
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

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

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 06/06/2019 09:16
Project Name:	Laboratory Job Number: L1102841-01 and 02
Reviewer Name: Craig Cothron	Prep Batch Number(s): WG1287291, WG1287349, WG1287268, WG1287482, WG1287559, WG1287198, WG1287037, WG1287848, WG1286583, WG1287805, WG1287406, WG1287203, WG1288444, WG1285903, WG1286777, WG1289308 and WG1287401

#[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.
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: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 06/06/2019 09:16
Project Name:	Laboratory Job Number: L1102841-01 and 02
Reviewer Name: Craig Cothron	Prep Batch Number(s): WG1287291, WG1287349, WG1287268, WG1287482, WG1287559, WG1287198, WG1287037, WG1287848, WG1286583, WG1287805, WG1287406, WG1287203, WG1288444, WG1285903, WG1286777, WG1289308 and WG1287401

ER #[1]	Description
1	5310 B-2011 WG1287482 L1102841-01: Analysis was performed from an unpreserved or improperly preserved sample.
2	WG1287349 R3415485-7: The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL). WG1287848 R3415931-5 and 6: The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
3	200.8 WG1286583 Arsenic: Percent Recovery is outside of established control limits. 624.1 WG1287848 Carbon tetrachloride: Percent Recovery is outside of established control limits.
4	1657M WG1286777 Azinphos-Methyl, Chlorpyrifos, Demeton,-O and -S, Diazinon, Malathion: Relative Percent Difference is outside of established control limits.
5	351.2 WG1287203 Kjeldahl Nitrogen, TKN: 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:** L1102841
Matrix: WW

Sample ID	Lab Sample ID	Instrument	File ID	DMC-1 % Rec.	TOT Out
WW-20190524-002-DAY 22	L1102841-01	SVGC12	0530A_05	63.2	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:** L1102841
Matrix: WW

Sample ID	Lab Sample ID	Instrument	File ID	DMC-1	TOT Out
				% Rec.	
MS	R3417263-1	SVGC12	0603_11	60.8	0
MSD	R3417263-2	SVGC12	0603_12	80.4	0
BLANK	R3416395-1	SVGC12	0530A_03	69.2	0
LCS	R3416395-2	SVGC12	0530A_04	72.8	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.

3A-OR

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1102841-01

SAMPLE NO.:
R3417263-1
R3417263-2

MS Sample / File ID:	R3417263-1 / 0603_11	**SDG:**	L1102841
MSD Sample / File ID:	R3417263-2 / 0603_12	**Analytical Batch:**	WG1286777
OS Sample / File ID:	L1102303-05 / 0603_10	**Matrix:**	WW
Instrument ID:	SVGC12		
Analytical Method:	1657M		

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*	*%*	*%*		*%*	*%*	*%*
Azinphos-Methyl	0.00500	U	0.00364	0.00475	72.8	95.0	1	29.0 - 157	26.5*	20
Chlorpyrifos	0.00500	U	0.00359	0.00478	71.8	95.6	1	42.0 - 131	28.4*	20
Demeton,-O and -S	0.00250	U	0.00130	0.00178	52.0	71.2	1	30.0 - 152	31.2*	20
Diazinon	0.00500	U	0.00385	0.00511	77.0	102	1	47.0 - 134	28.1*	20
Malathion	0.00500	U	0.00340	0.00455	68.0	91.0	1	39.0 - 126	28.9*	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

L1102841-01

SAMPLE NO.:
R3416395-2

LCS Sample / File ID:	R3416395-2 / 0530A_04	**SDG:**	L1102841
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1286777
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*		*%*	*%*	*%*	*%*	*%*
Azinphos-Methyl	0.00500	0.00443		88.6		43.0 - 142		
Chlorpyrifos	0.00500	0.00458		91.6		50.0 - 126		
Demeton,-O and -S	0.00250	0.00174		69.6		22.0 - 150		
Diazinon	0.00500	0.00478		95.6		54.0 - 130		
Malathion	0.00500	0.00432		86.4		47.0 - 121		

*: 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.:
R3416395-1

Lab Sample ID:	R3416395-1	**SDG:**	L1102841
Lab File ID:	0530A_03	**Preparation Date/Time:**	05/25/19 18:52
Instrument ID:	SVGC12	**Analysis Date/Time:**	05/30/19 14:34
Analytical Batch:	WG1286777	**Dilution Factor:**	1
Analytical Method:	1657M	**Matrix:**	WW

Sample ID	Lab Sample ID	Instrument	File ID	Analysis *date/time*
LCS	R3416395-2	SVGC12	0530A_04	05/30/19 15:06
WW-20190524-002-DAY 22	L1102841-01	SVGC12	0530A_05	05/30/19 15:37
OS	L1102303-05	SVGC12	0603_10	06/03/19 14:54
MS	R3417263-1	SVGC12	0603_11	06/03/19 15:26
MSD	R3417263-2	SVGC12	0603_12	06/03/19 15:57

8A-OR

INTERNAL STANDARD AND RETENTION TIME

SDG:	L1102841	**Analytical Method:**	1657M
Instrument ID:	SVGC12	**Calibration Start Date:**	05/28/19 17:09
Std File:	AVG	**Calibration End Date:**	05/28/19 21:11
		Std Analysis Date:	AVG

Sample ID	File ID	TBP	
		Response	*RT*
STANDARD		1616573750	15.06
UPPER LIMIT		2424861000	
LOWER LIMIT		808287000	
BLANK R3416395-1 WG1286777 1x	0530A_03	1513701000	15.04
LCS R3416395-2 WG1286777 1x	0530A_04	1540145000	15.04
L1102841-01 WG1286777 1x	0530A_05	1572944000	15.04
OS L1102303-05 WG1286777 1x	0603_10	1778764000	15.08
MS R3417263-1 WG1286777 1x	0603_11	1770078000	15.07
MSD R3417263-2 WG1286777 1x	0603_12	1678130000	15.07

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-20190524-002-DAY 22

Lab Sample ID:	L1102841-01	**SDG:**	L1102841
Client Sample ID:	WW-20190524-002-DAY 22	**Collected Date/Time:**	05/24/19 14:00
Lab File ID:	0530A_05	**Received Date/Time:**	05/27/19 08:45
Instrument ID:	SVGC12	**Preparation Date/Time:**	05/30/19 07:38
Analytical Batch:	WG1286777	**Analysis Date/Time:**	05/30/19 15:37
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:	L1102841	**Calibration (begin) date/time:**	05/28/19 17:09
Instrument ID:	SVGC12 - 1	**Calibration (end) date/time:**	05/28/19 21:11
Analytical Method:	1657M		

Analyte	**CS: 100**	**CS: 200**	**CS: 500**	**CS: 1000**	**CS: 2000**	**CS: 5000**	**CS: 10000**	**CS: 20000**
DIAZINON	15.78	15.78	15.77	15.78	15.77	15.78	15.78	15.79
DEMETON,-O AND -S	16.67	16.66	16.65	16.66	16.65	16.66	16.66	16.67
CHLORPYRIFOS	20.11	20.10	20.10	20.10	20.10	20.10	20.11	20.11
MALATHION	22.04	22.03	22.03	22.03	22.03	22.04	22.04	22.05
AZINPHOS-METHYL	26.98	26.98	26.98	26.98	26.98	26.98	26.98	26.98
TRIPHENYL PHOSPHATE	26.11	26.11	26.11	26.11	26.11	26.11	26.11	26.11
File ID:	0528A_02	0528A_03	0528A_04	0528A_05	0528A_06	0528A_07	0528A_08	0528A_09

6B-OR

RETENTION TIME
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1102841	**Calibration (begin) date/time:**	05/28/19 17:09
Instrument ID:	SVGC12 - 2	**Calibration (end) date/time:**	05/28/19 21:11
Analytical Method:	1657M		

Analyte	**CS: 100**	**CS: 200**	**CS: 500**	**CS: 1000**	**CS: 2000**	**CS: 5000**	**CS: 10000**	**CS: 20000**
DIAZINON	18.08	18.09	18.08	18.08	18.09	18.09	18.10	18.10
DEMETON,-O AND -S	16.75	16.76	16.74	16.74	16.75	16.76	16.76	16.77
CHLORPYRIFOS	22.56	22.57	22.57	22.57	22.57	22.58	22.58	22.59
MALATHION	22.42	22.42	22.42	22.42	22.42	22.43	22.44	22.46
AZINPHOS-METHYL	27.41	27.41	27.40	27.41	27.40	27.40	27.41	27.41
TRIPHENYL PHOSPHATE	26.69	26.69	26.69	26.69	26.69	26.69	26.70	26.70
File ID:	0528A_02	0528A_03	0528A_04	0528A_05	0528A_06	0528A_07	0528A_08	0528A_09

6C-OR

CALIBRATION FACTOR
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1102841	**Calibration (begin) date/time:**	05/28/19 17:09
Instrument ID:	SVGC12 - 1	**Calibration (end) date/time:**	05/28/19 21:11
Analytical Method:	1657M		

Analyte	**RRF: 100**	**RRF: 200**	**RRF: 500**	**RRF: 1000**	**RRF: 2000**	**RRF: 5000**	**RRF: 10000**	**RRF: 20000**
DIAZINON	0.8080	0.6730	0.6150	0.7650	0.6660	0.6530	0.6760	0.6570
DEMETON,-O AND -S	1.6340	1.5560	1.4310	1.8350	1.6360	1.5680	1.5450	1.5260
CHLORPYRIFOS	0.7080	0.6190	0.5620	0.7320	0.6330	0.6440	0.6640	0.6150
MALATHION	0.6480	0.5720	0.49	0.6130	0.5480	0.5410	0.6140	0.5890
AZINPHOS-METHYL	0.1930	0.2550	0.3490	0.5650	0.5580	0.5720	0.5650	0.4830
TRIPHENYL PHOSPHATE	0.8370	0.7060	0.6680	0.8160	0.7340	0.7150	0.7150	0.6410
File ID:	0528A_02	0528A_03	0528A_04	0528A_05	0528A_06	0528A_07	0528A_08	0528A_09

6C-OR

CALIBRATION FACTOR
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1102841	**Calibration (begin) date/time:**	05/28/19 17:09
Instrument ID:	SVGC12 - 1	**Calibration (end) date/time:**	05/28/19 21:11
Analytical Method:	1657M		

Analyte	RRF. Avg	%RSD	COD
DIAZINON	0.689387	9.3	
DEMETON,-O AND -S	1.591445	7.41	
CHLORPYRIFOS	0.647348	8.35	
MALATHION	0.577021	8.68	
AZINPHOS-METHYL	0.442553	35.02	0.991
TRIPHENYL PHOSPHATE	0.729084	9.25	

6C-OR

CALIBRATION FACTOR
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1102841	**Calibration (begin) date/time:**	05/28/19 17:09
Instrument ID:	SVGC12 - 2	**Calibration (end) date/time:**	05/28/19 21:11
Analytical Method:	1657M		

Analyte	**RRF: 100**	**RRF: 200**	**RRF: 500**	**RRF: 1000**	**RRF: 2000**	**RRF: 5000**	**RRF: 10000**	**RRF: 20000**
DIAZINON	1.2750	0.9880	0.7450	0.8840	0.7860	0.7580	0.77	0.7970
DEMETON,-O AND -S	2.0750	1.9150	1.4780	1.9240	1.6810	1.6380	1.5870	1.2980
CHLORPYRIFOS	0.9850	0.8420	0.6690	0.8110	0.7350	0.7230	0.7460	0.7710
MALATHION	0.8880	0.7560	0.6250	0.7280	0.6370	0.6280	0.6450	0.6940
AZINPHOS-METHYL	0.4740	0.5140	0.5920	0.9830	0.96	1.0050	0.99	1.0090
TRIPHENYL PHOSPHATE	1.5720	1.1970	1.1930	1.4870	1.2980	1.2650	1.28	1.3350
File ID:	0528A_02	0528A_03	0528A_04	0528A_05	0528A_06	0528A_07	0528A_08	0528A_09

6C-OR

CALIBRATION FACTOR
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1102841	**Calibration (begin) date/time:**	05/28/19 17:09
Instrument ID:	SVGC12 - 2	**Calibration (end) date/time:**	05/28/19 21:11
Analytical Method:	1657M		

Analyte	RRF. Avg	%RSD	COD
DIAZINON	0.875226	20.65	0.999
DEMETON,-O AND -S	1.699432	15.16	
CHLORPYRIFOS	0.785147	12.32	
MALATHION	0.700297	12.9	
AZINPHOS-METHYL	0.81593	29.65	0.999
TRIPHENYL PHOSPHATE	1.328381	10.15	

7D-OR

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1102841	**Calibration (begin) date/time:**	05/28/19 17:09
Instrument ID:	SVGC12 - 1	**Calibration (end) date/time:**	05/28/19 21:11
Lab File ID:	0528A_11-1	**Analysis date/time:**	05/28/19 22:14
Analytical Method:	1657M	**Sample ID:**	SSCV

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
AZINPHOS-METHYL	2	2.260	113	70 - 130
CHLORPYRIFOS	2	2.112	106	70 - 130
DEMETON,-O AND -S	1	1.032	103	70 - 130
DIAZINON	2	2.008	100	70 - 130
MALATHION	2	2.127	106	70 - 130

7D-OR

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1102841	**Calibration (begin) date/time:**	05/28/19 17:09
Instrument ID:	SVGC12 - 2	**Calibration (end) date/time:**	05/28/19 21:11
Lab File ID:	0528A_11-1	**Analysis date/time:**	05/28/19 22:14
Analytical Method:	1657M	**Sample ID:**	SSCV

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
AZINPHOS-METHYL	2	2.165	108	70 - 130
CHLORPYRIFOS	2	2.144	107	70 - 130
DEMETON,-O AND -S	1	1.024	102	70 - 130
DIAZINON	2	2.220	111	70 - 130
MALATHION	2	2.040	102	70 - 130

7D-OR

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1102841	**Calibration (begin) date/time:**	05/28/19 17:09
Instrument ID:	SVGC12 - 1	**Calibration (end) date/time:**	05/28/19 21:11
Lab File ID:	0530A_02-1	**Analysis date/time:**	05/30/19 14:02
Analytical Method:	1657M	**Sample ID:**	ICV

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
AZINPHOS-METHYL	2	2.143	107	85 - 115
CHLORPYRIFOS	2	2.271	114	85 - 115
DEMETON,-O AND -S	1	0.8566	85.70	85 - 115
DIAZINON	2	2.326	116	85 - 115
MALATHION	2	2.069	103	85 - 115
TRIPHENYL PHOSPHATE	2	1.743	87.20	85 - 115

7D-OR

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1102841	**Calibration (begin) date/time:**	05/28/19 17:09
Instrument ID:	SVGC12 - 2	**Calibration (end) date/time:**	05/28/19 21:11
Lab File ID:	0530A_02-1	**Analysis date/time:**	05/30/19 14:02
Analytical Method:	1657M	**Sample ID:**	ICV

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
AZINPHOS-METHYL	2	2.093	105	85 - 115
CHLORPYRIFOS	2	1.925	96.30	85 - 115
DEMETON,-O AND -S	1	0.8170	81.70	85 - 115
DIAZINON	2	2.079	104	85 - 115
MALATHION	2	1.967	98.30	85 - 115
TRIPHENYL PHOSPHATE	2	1.946	97.30	85 - 115

7D-OR

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1102841	**Calibration (begin) date/time:**	05/28/19 17:09
Instrument ID:	SVGC12 - 1	**Calibration (end) date/time:**	05/28/19 21:11
Lab File ID:	0603_02-1	**Analysis date/time:**	06/03/19 10:41
Analytical Method:	1657M	**Sample ID:**	ICV

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
AZINPHOS-METHYL	2	2.186	109	85 - 115
CHLORPYRIFOS	2	2.168	108	85 - 115
DEMETON,-O AND -S	1	0.8086	80.90	85 - 115
DIAZINON	2	2.218	111	85 - 115
MALATHION	2	2.047	102	85 - 115
TRIPHENYL PHOSPHATE	2	1.792	89.60	85 - 115

7D-OR

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1102841	**Calibration (begin) date/time:**	05/28/19 17:09
Instrument ID:	SVGC12 - 2	**Calibration (end) date/time:**	05/28/19 21:11
Lab File ID:	0603_02-1	**Analysis date/time:**	06/03/19 10:41
Analytical Method:	1657M	**Sample ID:**	ICV

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
AZINPHOS-METHYL	2	1.885	94.30	85 - 115
CHLORPYRIFOS	2	1.858	92.90	85 - 115
DEMETON,-O AND -S	1	0.6879	68.80	85 - 115
DIAZINON	2	2.088	104	85 - 115
MALATHION	2	1.846	92.30	85 - 115
TRIPHENYL PHOSPHATE	2	1.813	90.70	85 - 115

8B-OR

ANALYTICAL SEQUENCE

SDG:	L1102841	**Analytical Method:**	1657M
Instrument ID:	SVGC12	**Calibration Start Date:**	05/28/19 17:09
		Calibration End Date:	05/28/19 21:11

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
CAL	100	0528A_02	05/28/19 17:09	1	
CAL	200	0528A_03	05/28/19 17:40	1	
CAL	500	0528A_04	05/28/19 18:12	1	
CAL	1000	0528A_05	05/28/19 19:05	1	
CAL	2000	0528A_06	05/28/19 19:36	1	
CAL	5000	0528A_07	05/28/19 20:08	1	
CAL	10000	0528A_08	05/28/19 20:39	1	
CAL	20000	0528A_09	05/28/19 21:11	1	
SSCV	SVGC12052819A0528A_11-1472799	0528A_11-1	05/28/19 22:14	1	
ICV	SVGC12053019A0530A_02-1472799	0530A_02-1	05/30/19 14:02	1	
BLANK	R3416395-1	0530A_03	05/30/19 14:34	1	WG1286777
LCS	R3416395-2	0530A_04	05/30/19 15:06	1	WG1286777
WW-20190524-002-DAY 22	L1102841-01	0530A_05	05/30/19 15:37	1	WG1286777
ICV	SVGC120603190603_02-1472799	0603_02-1	06/03/19 10:41	1	
OS	L1102303-05	0603_10	06/03/19 14:54	1	WG1286777
MS	R3417263-1	0603_11	06/03/19 15:26	1	WG1286777
MSD	R3417263-2	0603_12	06/03/19 15:57	1	WG1286777

10A-OR

SINGLE COMPONENT ANALYSIS IDENTIFICATION

SAMPLE NO.:
R3416395-1

Lab Sample ID:	R3416395-1	**SDG:**	L1102841
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	0530A_03	**Received Date/Time:**	_____
Instrument ID:	SVGC12	**Preparation Date/Time:**	05/25/19 18:52
Analytical Batch:	WG1286777	**Analysis Date/Time:**	05/30/19 14:34
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.:
R3416395-2

Lab Sample ID:	R3416395-2	**SDG:**	L1102841
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	0530A_04	**Received Date/Time:**	_____
Instrument ID:	SVGC12	**Preparation Date/Time:**	05/25/19 18:52
Analytical Batch:	WG1286777	**Analysis Date/Time:**	05/30/19 15:06
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	26.98	0.00443	5.44
Chlorpyrifos	1	20.08	0.00458	8.58
Demeton,-O and -S	1	16.64	0.00174	97.5
Diazinon	1	15.76	0.00478	.567
Malathion	1	22.01	0.00432	3.58

10A-OR

SINGLE COMPONENT ANALYSIS IDENTIFICATION

SAMPLE NO.:
R3417263-1

Lab Sample ID:	R3417263-1	**SDG:**	L1102841
Client Sample ID:	MS	**Collected Date/Time:**	05/15/19 15:00
Lab File ID:	0603_11	**Received Date/Time:**	05/22/19 08:45
Instrument ID:	SVGC12	**Preparation Date/Time:**	05/30/19 07:38
Analytical Batch:	WG1286777	**Analysis Date/Time:**	06/03/19 15:26
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	26.98	0.00364	.468
	2	27.41	0.00363	
Chlorpyrifos	1	20.11	0.00359	8.8
	2	22.59	0.00329	
Demeton,-O and -S	1	16.67	0.00130	15.1
	2	16.77	0.00112	
Diazinon	1	15.79	0.00385	18.5
	2	18.10	0.00320	
Malathion	1	22.04	0.00340	6.4
	2	22.43	0.00319	

10A-OR

SINGLE COMPONENT ANALYSIS IDENTIFICATION

SAMPLE NO.: R3417263-2

Lab Sample ID:	R3417263-2	**SDG:**	L1102841
Client Sample ID:	MSD	**Collected Date/Time:**	05/15/19 15:00
Lab File ID:	0603_12	**Received Date/Time:**	05/22/19 08:45
Instrument ID:	SVGC12	**Preparation Date/Time:**	05/30/19 07:38
Analytical Batch:	WG1286777	**Analysis Date/Time:**	06/03/19 15:57
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	26.98	0.00475	1.12
	2	27.41	0.00470	
Chlorpyrifos	1	20.11	0.00478	9.43
	2	22.59	0.00435	
Demeton,-O and -S	1	16.67	0.00178	61.1
	2	16.77	0.000944	
Diazinon	1	15.79	0.00511	24.8
	2	18.10	0.00398	
Malathion	1	22.04	0.00455	5.69
	2	22.43	0.00430	

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416395-1

Lab Sample ID:	R3416395-1	**SDG:**	L1102841
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	0530A_03	**Received Date/Time:**	_____
Instrument ID:	SVGC12	**Preparation Date/Time:**	05/25/19 18:52
Analytical Batch:	WG1286777	**Analysis Date/Time:**	05/30/19 14:34
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.:
R3416395-2

Lab Sample ID:	R3416395-2	**SDG:**	L1102841
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	0530A_04	**Received Date/Time:**	_____
Instrument ID:	SVGC12	**Preparation Date/Time:**	05/25/19 18:52
Analytical Batch:	WG1286777	**Analysis Date/Time:**	05/30/19 15:06
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	26.98	0.00443		0.000140	0.0010	0.00100
Chlorpyrifos	2921-88-2	20.08	0.00458		0.000133	0.0010	0.00100
Demeton,-O and -S	8065-48-3	16.64	0.00174		0.0000680	0.0020	0.00200
Diazinon	333-41-5	15.76	0.00478		0.000377	0.0010	0.00100
Malathion	121-75-5	22.01	0.00432		0.000116	0.0010	0.00100

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3417263-1

Lab Sample ID:	R3417263-1	**SDG:**	L1102841
Client Sample ID:	MS	**Collected Date/Time:**	05/15/19 15:00
Lab File ID:	0603_11	**Received Date/Time:**	05/22/19 08:45
Instrument ID:	SVGC12	**Preparation Date/Time:**	05/30/19 07:38
Analytical Batch:	WG1286777	**Analysis Date/Time:**	06/03/19 15:26
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	26.98	0.00364		0.000140	0.0010	0.00100
Chlorpyrifos	2921-88-2	20.11	0.00359		0.000133	0.0010	0.00100
Demeton,-O and -S	8065-48-3	16.67	0.00130		0.0000680	0.0020	0.00200
Diazinon	333-41-5	15.79	0.00385		0.000377	0.0010	0.00100
Malathion	121-75-5	22.04	0.00340		0.000116	0.0010	0.00100

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3417263-2

Lab Sample ID:	R3417263-2	**SDG:**	L1102841
Client Sample ID:	MSD	**Collected Date/Time:**	05/15/19 15:00
Lab File ID:	0603_12	**Received Date/Time:**	05/22/19 08:45
Instrument ID:	SVGC12	**Preparation Date/Time:**	05/30/19 07:38
Analytical Batch:	WG1286777	**Analysis Date/Time:**	06/03/19 15:57
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	26.98	0.00475	J3	0.000140	0.0010	0.00100
Chlorpyrifos	2921-88-2	20.11	0.00478	J3	0.000133	0.0010	0.00100
Demeton,-O and -S	8065-48-3	16.67	0.00178	J3	0.0000680	0.0020	0.00200
Diazinon	333-41-5	15.79	0.00511	J3	0.000377	0.0010	0.00100
Malathion	121-75-5	22.04	0.00455	J3	0.000116	0.0010	0.00100

1664A Wet Chemistry

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
WW-20190524-002-DAY 22

Lab Sample ID:	L1102841-02	**SDG:**	L1102841
Client Sample ID:	WW-20190524-002-DAY 22	**Collected Date/Time:**	05/24/19 14:00
Lab File ID:	24	**Received Date/Time:**	05/27/19 08:45
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:**	890 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		1.30	5.62	5.62

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415564-1

Lab Sample ID:	R3415564-1	**SDG:**	L1102841
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:**	L1102841
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:**	L1102841
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:	L1102841	**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

L1102841-02

SAMPLE NO.:
R3415564-2
R3415564-3

LCS Sample / File ID:	R3415564-2 / 04	**SDG:**	L1102841
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:	L1102841	**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-20190524-002-DAY 22	L1102841-02	24	05/28/19 19:29	1	WG1287268

200.8 Metals (ICPMS)

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
WW-20190524-002-DAY 22

Lab Sample ID:	L1102841-01	**SDG:**	L1102841
Client Sample ID:	WW-20190524-002-DAY 22	**Collected Date/Time:**	05/24/19 14:00
Lab File ID:	20190531124752	**Received Date/Time:**	05/27/19 08:45
Instrument ID:	ICPMS10	**Preparation Date/Time:**	05/28/19 17:27
Analytical Batch:	WG1286583	**Analysis Date/Time:**	05/31/19 12:47
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	0.00142	J	0.000754	0.00200	0.00200

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
WW-20190524-002-DAY 22

Lab Sample ID:	L1102841-01	**SDG:**	L1102841
Client Sample ID:	WW-20190524-002-DAY 22	**Collected Date/Time:**	05/24/19 14:00
Lab File ID:	20190529224002	**Received Date/Time:**	05/27/19 08:45
Instrument ID:	ICPMS11	**Preparation Date/Time:**	05/28/19 17:27
Analytical Batch:	WG1286583	**Analysis Date/Time:**	05/29/19 22:40
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*
Arsenic	7440-38-2	0.00445		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	0.000791	J	0.000270	0.00200	0.00200
Copper	7440-50-8	0.000602	J	0.000270	0.00100	0.00100
Lead	7439-92-1	U		0.000260	0.00100	0.00100
Nickel	7440-02-0	0.00255		0.000320	0.00100	0.00100
Selenium	7782-49-2	0.000650	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	0.000276	B J	0.000240	0.00100	0.00100
Zinc	7440-66-6	0.0260		0.00191	0.0100	0.0100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416034-1

Lab Sample ID:	R3416034-1	**SDG:**	L1102841
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	20190529182125	**Received Date/Time:**	_____
Instrument ID:	ICPMS11	**Preparation Date/Time:**	05/28/19 17:27
Analytical Batch:	WG1286583	**Analysis Date/Time:**	05/29/19 18:21
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*
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	0.000272	J	0.000240	0.0010	0.00100
Zinc	7440-66-6	U		0.00191	0.01	0.0100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416640-1

Lab Sample ID:	R3416640-1	**SDG:**	L1102841
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	20190531115216	**Received Date/Time:**	_____
Instrument ID:	ICPMS10	**Preparation Date/Time:**	05/28/19 17:27
Analytical Batch:	WG1286583	**Analysis Date/Time:**	05/31/19 11:52
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

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416034-2

Lab Sample ID:	R3416034-2	**SDG:**	L1102841
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	20190529182635	**Received Date/Time:**	_____
Instrument ID:	ICPMS11	**Preparation Date/Time:**	05/28/19 17:27
Analytical Batch:	WG1286583	**Analysis Date/Time:**	05/29/19 18:26
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*
Arsenic	7440-38-2	0.0504		0.000170	0.0010	0.00100
Cadmium	7440-43-9	0.0509		0.000220	0.0010	0.00100
Chromium	7440-47-3	0.0504		0.000320	0.0010	0.00100
Cobalt	7440-48-4	0.0502		0.000270	0.0020	0.00200
Copper	7440-50-8	0.0515		0.000270	0.0010	0.00100
Lead	7439-92-1	0.0515		0.000260	0.0010	0.00100
Nickel	7440-02-0	0.0506		0.000320	0.0010	0.00100
Selenium	7782-49-2	0.0537		0.000320	0.0020	0.00200
Silver	7440-22-4	0.0523		0.000180	0.0010	0.00100
Thallium	7440-28-0	0.0513		0.000280	0.0010	0.00100
Tin	7440-31-5	0.0477		0.000240	0.0010	0.00100
Zinc	7440-66-6	0.0514		0.00191	0.01	0.0100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416640-2

Lab Sample ID:	R3416640-2	**SDG:**	L1102841
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	20190531115651	**Received Date/Time:**	_____
Instrument ID:	ICPMS10	**Preparation Date/Time:**	05/28/19 17:27
Analytical Batch:	WG1286583	**Analysis Date/Time:**	05/31/19 11:56
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	0.0548		0.000754	0.0020	0.00200

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416034-3

Lab Sample ID:	R3416034-3	**SDG:**	L1102841
Client Sample ID:	LCSD	**Collected Date/Time:**	_____
Lab File ID:	20190529183144	**Received Date/Time:**	_____
Instrument ID:	ICPMS11	**Preparation Date/Time:**	05/28/19 17:27
Analytical Batch:	WG1286583	**Analysis Date/Time:**	05/29/19 18:31
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*
Arsenic	7440-38-2	0.0523		0.000170	0.0010	0.00100
Cadmium	7440-43-9	0.0516		0.000220	0.0010	0.00100
Chromium	7440-47-3	0.0524		0.000320	0.0010	0.00100
Cobalt	7440-48-4	0.0528		0.000270	0.0020	0.00200
Copper	7440-50-8	0.0518		0.000270	0.0010	0.00100
Lead	7439-92-1	0.0521		0.000260	0.0010	0.00100
Nickel	7440-02-0	0.0543		0.000320	0.0010	0.00100
Selenium	7782-49-2	0.0526		0.000320	0.0020	0.00200
Silver	7440-22-4	0.0540		0.000180	0.0010	0.00100
Thallium	7440-28-0	0.0527		0.000280	0.0010	0.00100
Tin	7440-31-5	0.0487		0.000240	0.0010	0.00100
Zinc	7440-66-6	0.0543		0.00191	0.01	0.0100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416640-3

Lab Sample ID:	R3416640-3	**SDG:**	L1102841
Client Sample ID:	LCSD	**Collected Date/Time:**	_____
Lab File ID:	20190531120125	**Received Date/Time:**	_____
Instrument ID:	ICPMS10	**Preparation Date/Time:**	05/28/19 17:27
Analytical Batch:	WG1286583	**Analysis Date/Time:**	05/31/19 12:01
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	0.0549		0.000754	0.0020	0.00200

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416034-5

Lab Sample ID:	R3416034-5	**SDG:**	L1102841
Client Sample ID:	MS	**Collected Date/Time:**	05/21/19 14:35
Lab File ID:	20190529184712	**Received Date/Time:**	05/24/19 08:45
Instrument ID:	ICPMS11	**Preparation Date/Time:**	05/28/19 17:27
Analytical Batch:	WG1286583	**Analysis Date/Time:**	05/29/19 18:47
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*
Arsenic	7440-38-2	0.0514		0.000170	0.0010	0.00100
Cadmium	7440-43-9	0.0496		0.000220	0.0010	0.00100
Chromium	7440-47-3	0.0501		0.000320	0.0010	0.00100
Cobalt	7440-48-4	0.0484		0.000270	0.0020	0.00200
Copper	7440-50-8	0.0492		0.000270	0.0010	0.00100
Lead	7439-92-1	0.0488		0.000260	0.0010	0.00100
Nickel	7440-02-0	0.0484		0.000320	0.0010	0.00100
Selenium	7782-49-2	0.0582		0.000320	0.0020	0.00200
Silver	7440-22-4	0.0509		0.000180	0.0010	0.00100
Thallium	7440-28-0	0.0498		0.000280	0.0010	0.00100
Tin	7440-31-5	0.0472		0.000240	0.0010	0.00100
Zinc	7440-66-6	0.0801		0.00191	0.01	0.0100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416034-7

Lab Sample ID:	R3416034-7	**SDG:**	L1102841
Client Sample ID:	MS	**Collected Date/Time:**	05/22/19 11:00
Lab File ID:	20190529190241	**Received Date/Time:**	05/24/19 08:45
Instrument ID:	ICPMS11	**Preparation Date/Time:**	05/28/19 17:27
Analytical Batch:	WG1286583	**Analysis Date/Time:**	05/29/19 19:02
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*
Arsenic	7440-38-2	0.436	V	0.000170	0.0010	0.00100
Cadmium	7440-43-9	0.0502		0.000220	0.0010	0.00100
Chromium	7440-47-3	0.0499		0.000320	0.0010	0.00100
Cobalt	7440-48-4	0.0495		0.000270	0.0020	0.00200
Copper	7440-50-8	0.0525		0.000270	0.0010	0.00100
Lead	7439-92-1	0.0547		0.000260	0.0010	0.00100
Nickel	7440-02-0	0.0497		0.000320	0.0010	0.00100
Selenium	7782-49-2	0.0520		0.000320	0.0020	0.00200
Silver	7440-22-4	0.0517		0.000180	0.0010	0.00100
Thallium	7440-28-0	0.0509		0.000280	0.0010	0.00100
Tin	7440-31-5	0.0501		0.000240	0.0010	0.00100
Zinc	7440-66-6	0.0605		0.00191	0.01	0.0100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416640-5

Lab Sample ID:	R3416640-5	**SDG:**	L1102841
Client Sample ID:	MS	**Collected Date/Time:**	05/21/19 14:35
Lab File ID:	20190531121508	**Received Date/Time:**	05/24/19 08:45
Instrument ID:	ICPMS10	**Preparation Date/Time:**	05/28/19 17:27
Analytical Batch:	WG1286583	**Analysis Date/Time:**	05/31/19 12:15
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	0.0536		0.000754	0.0020	0.00200

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416034-6

Lab Sample ID:	R3416034-6	**SDG:**	L1102841
Client Sample ID:	MSD	**Collected Date/Time:**	05/21/19 14:35
Lab File ID:	20190529185221	**Received Date/Time:**	05/24/19 08:45
Instrument ID:	ICPMS11	**Preparation Date/Time:**	05/28/19 17:27
Analytical Batch:	WG1286583	**Analysis Date/Time:**	05/29/19 18:52
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*
Arsenic	7440-38-2	0.0506		0.000170	0.0010	0.00100
Cadmium	7440-43-9	0.0493		0.000220	0.0010	0.00100
Chromium	7440-47-3	0.0492		0.000320	0.0010	0.00100
Cobalt	7440-48-4	0.0473		0.000270	0.0020	0.00200
Copper	7440-50-8	0.0491		0.000270	0.0010	0.00100
Lead	7439-92-1	0.0488		0.000260	0.0010	0.00100
Nickel	7440-02-0	0.0479		0.000320	0.0010	0.00100
Selenium	7782-49-2	0.0607		0.000320	0.0020	0.00200
Silver	7440-22-4	0.0505		0.000180	0.0010	0.00100
Thallium	7440-28-0	0.0490		0.000280	0.0010	0.00100
Tin	7440-31-5	0.0464		0.000240	0.0010	0.00100
Zinc	7440-66-6	0.0766		0.00191	0.01	0.0100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416034-8

Lab Sample ID:	R3416034-8	**SDG:**	L1102841
Client Sample ID:	MSD	**Collected Date/Time:**	05/22/19 11:00
Lab File ID:	20190529190751	**Received Date/Time:**	05/24/19 08:45
Instrument ID:	ICPMS11	**Preparation Date/Time:**	05/28/19 17:27
Analytical Batch:	WG1286583	**Analysis Date/Time:**	05/29/19 19:07
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*
Arsenic	7440-38-2	0.427	V	0.000170	0.0010	0.00100
Cadmium	7440-43-9	0.0495		0.000220	0.0010	0.00100
Chromium	7440-47-3	0.0483		0.000320	0.0010	0.00100
Cobalt	7440-48-4	0.0476		0.000270	0.0020	0.00200
Copper	7440-50-8	0.0516		0.000270	0.0010	0.00100
Lead	7439-92-1	0.0554		0.000260	0.0010	0.00100
Nickel	7440-02-0	0.0473		0.000320	0.0010	0.00100
Selenium	7782-49-2	0.0523		0.000320	0.0020	0.00200
Silver	7440-22-4	0.0504		0.000180	0.0010	0.00100
Thallium	7440-28-0	0.0499		0.000280	0.0010	0.00100
Tin	7440-31-5	0.0496		0.000240	0.0010	0.00100
Zinc	7440-66-6	0.0604		0.00191	0.01	0.0100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416640-6

Lab Sample ID:	R3416640-6	**SDG:**	L1102841
Client Sample ID:	MSD	**Collected Date/Time:**	05/21/19 14:35
Lab File ID:	20190531121943	**Received Date/Time:**	05/24/19 08:45
Instrument ID:	ICPMS10	**Preparation Date/Time:**	05/28/19 17:27
Analytical Batch:	WG1286583	**Analysis Date/Time:**	05/31/19 12:19
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	0.0538		0.000754	0.0020	0.00200

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416034-4

Lab Sample ID:	R3416034-4	**SDG:**	L1102841
Client Sample ID:	SD	**Collected Date/Time:**	05/21/19 14:35
Lab File ID:	20190529184202	**Received Date/Time:**	05/24/19 08:45
Instrument ID:	ICPMS11	**Preparation Date/Time:**	05/28/19 17:27
Analytical Batch:	WG1286583	**Analysis Date/Time:**	05/29/19 18:42
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*
Arsenic	7440-38-2	0.00207		0.000850	0.0010	0.00500
Cadmium	7440-43-9	ND		0.00110	0.0010	0.00500
Chromium	7440-47-3	0.00184		0.00160	0.0010	0.00500
Cobalt	7440-48-4	ND		0.00135	0.0020	0.0100
Copper	7440-50-8	0.00224		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	0.00835		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	0.0359		0.00955	0.01	0.0500

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416640-4

Lab Sample ID:	R3416640-4	**SDG:**	L1102841
Client Sample ID:	SD	**Collected Date/Time:**	05/21/19 14:35
Lab File ID:	20190531121034	**Received Date/Time:**	05/24/19 08:45
Instrument ID:	ICPMS10	**Preparation Date/Time:**	05/28/19 17:27
Analytical Batch:	WG1286583	**Analysis Date/Time:**	05/31/19 12:10
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

2-IN

CALIBRATION VERIFICATION

SDG:	L1102841	**Calibration (begin) date/time:**	05/31/19 10:18
Instrument ID:	ICPMS10	**Calibration (end) date/time:**	05/31/19 10:41
Analytical Method:	200.8	**Analytical Run:**	053119ICPMS10A
Concentration Units:	mg/l		

	ICV				**CCV**				**ICVLL**			
Sample ID:	ICPMS100531191045				ICPMS100531191107				ICPMS100531191121			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
ANTIMONY	0.10	0.1022946	102	1.990000	0.10	0.1004186	100	0.840000	0.0010	0.001550918	155	14.900000

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

2-IN

CALIBRATION VERIFICATION

SDG:	L1102841	**Calibration (begin) date/time:**	05/31/19 10:18
Instrument ID:	ICPMS10	**Calibration (end) date/time:**	05/31/19 10:41
Analytical Method:	200.8	**Analytical Run:**	053119ICPMS10A
Concentration Units:	mg/l		

	CCV				**CCV**			
Sample ID:	ICPMS100531191233				ICPMS100531191257-2			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD
ANTIMONY	0.10	0.09418203	94.20	0.340000	0.10	0.09501192	95	2.090000

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

2-IN

CALIBRATION VERIFICATION

SDG:	L1102841	**Calibration (begin) date/time:**	05/29/19 09:08
Instrument ID:	ICPMS11	**Calibration (end) date/time:**	05/29/19 09:34
Analytical Method:	200.8	**Analytical Run:**	052919ICPMS11
Concentration Units:	mg/l		

	ICV				**ICVLL**				**CCV**			
Sample ID:	ICPMS110529190939-4				ICPMS110529191013-4				ICPMS110529191750-2			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
ARSENIC	0.10	0.1018444	102	1.770000	0.0010	0.001025856	103	7.770000	0.10	0.1031118	103	2.460000
CADMIUM	0.10	0.103164	103	0.740000	0.0010	0.001030395	103	10.200000	0.10	0.101014	101	1.310000
CHROMIUM	0.10	0.1000041	100	1.930000	0.0010	0.00090754	90.80	7.900000	0.10	0.1027953	103	2.980000
COBALT	0.10	0.1021174	102	1.300000	0.0010	0.00112778	113	0.570000	0.10	0.1040144	104	2.170000
COPPER	0.10	0.1010594	101	0.610000	0.0010	0.001067083	107	1.710000	0.10	0.1024972	102	1.270000
LEAD	0.10	0.1025458	103	0.830000	0.0010	0.001044058	104	4.340000	0.10	0.102132	102	0.550000
NICKEL	0.10	0.103062	103	2.190000	0.0010	0.001169613	117	3.570000	0.10	0.1041311	104	2.080000
SELENIUM	0.10	0.1040562	104	0.820000	0.0010	0.001065034	107	15.100000	0.10	0.105066	105	3.160000
SILVER	0.10	0.1045036	105	1.580000	0.0010	0.001060442	106	1.100000	0.10	0.1044153	104	1.010000
THALLIUM	0.10	0.1028775	103	0.830000	0.0010	0.001035336	104	2.760000	0.10	0.1039297	104	2.750000
TIN	0.10	0.09976793	99.80	1.330000	0.0010	0.00105448	105	7.780000	0.10	0.09890504	98.90	3.010000
ZINC	0.10	0.1020451	102	1.910000	0.01	0.01214281	121	3.120000	0.10	0.1045605	105	2.240000

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

2-IN

CALIBRATION VERIFICATION

SDG:	L1102841	**Calibration (begin) date/time:**	05/29/19 09:08
Instrument ID:	ICPMS11	**Calibration (end) date/time:**	05/29/19 09:34
Analytical Method:	200.8	**Analytical Run:**	052919ICPMS11
Concentration Units:	mg/l		

	CCV				**CCV**				**CCV**			
Sample ID:	ICPMS110529192017				ICPMS110529192203				ICPMS110529192331			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
ARSENIC	0.10	0.1078775	108	3.560000	0.10	0.09825377	98.30	2.570000	0.10	0.1058101	106	1.190000
CADMIUM	0.10	0.1052113	105	1.350000	0.10	0.09649581	96.50	0.370000	0.10	0.1048	105	0.850000
CHROMIUM	0.10	0.1063195	106	3.780000	0.10	0.09383289	93.80	1.620000	0.10	0.1034262	103	1.620000
COBALT	0.10	0.1063405	106	3.170000	0.10	0.0958926	95.90	1.400000	0.10	0.1029389	103	1.580000
COPPER	0.10	0.1043801	104	2.230000	0.10	0.0975453	97.50	0.800000	0.10	0.1044092	104	1.190000
LEAD	0.10	0.1037312	104	1.440000	0.10	0.09607307	96.10	1.680000	0.10	0.1040473	104	1.160000
NICKEL	0.10	0.1052996	105	4.110000	0.10	0.09467945	94.70	2.470000	0.10	0.1018974	102	2.170000
SELENIUM	0.10	0.1051517	105	1.700000	0.10	0.09891882	98.90	1.590000	0.10	0.1090838	109	1.930000
SILVER	0.10	0.1072256	107	1.120000	0.10	0.09880236	98.80	0.140000	0.10	0.1063346	106	0.120000
THALLIUM	0.10	0.1051698	105	2.300000	0.10	0.09749392	97.50	2.230000	0.10	0.1046835	105	1.030000
TIN	0.10	0.1027492	103	1.610000	0.10	0.09275564	92.80	0.250000	0.10	0.1030975	103	0.930000
ZINC	0.10	0.1080527	108	3.790000	0.10	0.09655954	96.60	0.500000	0.10	0.1026633	103	0.890000

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

3-IN BLANKS

SDG:	L1102841	**Calibration (begin) date/time:**	05/31/19 10:18
Instrument ID:	ICPMS10	**Calibration (end) date/time:**	05/31/19 10:41
Analytical Method:	200.8	**Analytical Run:**	053119ICPMS10A

Sample ID:	**ICB Result**	**ICB Qual**	**CCB Result**	**CCB Qual**	**BLANK Result**	**BLANK Qual**	**CCB Result**	**CCB Qual**
File ID:	20190531110246		20190531111155		20190531115216		20190531123801	
Analyte	mg/l		mg/l		mg/l		mg/l	
ANTIMONY	0.000498321	U	0.001498872		U		0.001206792	

3-IN BLANKS

SDG:	L1102841	**Calibration (begin) date/time:**	05/31/19 10:18
Instrument ID:	ICPMS10	**Calibration (end) date/time:**	05/31/19 10:41
Analytical Method:	200.8	**Analytical Run:**	053119ICPMS10A

Sample ID:	**CCB Result**	**CCB Qual**
File ID:	20190531130136-2	
Analyte	mg/l	
ANTIMONY	0.001242721	

3-IN

BLANKS

SDG:	L1102841	**Calibration (begin) date/time:**	05/29/19 09:08
Instrument ID:	ICPMS11	**Calibration (end) date/time:**	05/29/19 09:34
Analytical Method:	200.8	**Analytical Run:**	052919ICPMS11

Sample ID:	**ICB Result**	**ICB Qual**	**CCB Result**	**CCB Qual**	**BLANK Result**	**BLANK Qual**	**CCB Result**	**CCB Qual**
File ID:	20190529095749-4		20190529175532-2		20190529182125		20190529203235	
Analyte	mg/l		mg/l		mg/l		mg/l	
ARSENIC	0.000017008	U	0.000283516	U	U		0.000012016	U
CADMIUM	0.000009756	U	0.000261863	U	U		0.000012883	U
CHROMIUM	0.00005053	U	0.000433608	U	U		0.000007444	U
COBALT	0.000008887	U	0.00024987	U	U		0.000007375	U
COPPER	0.00001813	U	0.000516942	U	U		0.000004557	U
LEAD	0.000004209	U	0.000533387	U	U		-0.000003351	U
NICKEL	-0.000063586	U	0.00015608	U	U		-0.000137411	U
SELENIUM	0.000044999	U	0.000282285	U	U		0.000079421	U
SILVER	0.000023448	U	0.000236527	U	U		0.00002689	U
THALLIUM	0.000023125	U	0.000589732	U	U		0.000018791	U
TIN	0.000054067	U	0.000223405	U	0.000272	J	0.00005891	U
ZINC	0.000799974	U	-0.000120739	U	U		-0.000446149	U

3-IN BLANKS

SDG:	L1102841	**Calibration (begin) date/time:**	05/29/19 09:08
Instrument ID:	ICPMS11	**Calibration (end) date/time:**	05/29/19 09:34
Analytical Method:	200.8	**Analytical Run:**	052919ICPMS11

Sample ID:	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**
File ID:	20190529220900		20190529233619	
Analyte	mg/l		mg/l	
ARSENIC	0.000413596	U	0.000448944	U
CADMIUM	0.000235227	U	0.000263919	U
CHROMIUM	-0.000010385	U	0.000118457	U
COBALT	0.000213205	U	0.0001970	U
COPPER	0.0003912	U	0.000521467	U
LEAD	0.000460115	U	0.000376172	U
NICKEL	0.00005255	U	0.000040355	U
SELENIUM	0.000199674	U	0.000220024	U
SILVER	0.00028005	U	0.000282431	U
THALLIUM	0.000477483	U	0.000319256	U
TIN	0.000258569	U	0.000338046	U
ZINC	-0.00013206	U	-0.000093691	U

4-IN

INTERFERENCE CHECK SAMPLE

SDG:	L1102841	**Analytical Method:**	200.8
Instrument ID:	ICPMS10	**Date:**	05/31/19 11:26
Instrument Run:	053119ICPMS10A		

Analyte	**True**	**Found**		**True**	**Found**	
	ICSA	*ICSA*	*ICSA*	*ICSAB*	*ICSAB*	*ICSAB*
	mg/l	*mg/l*	*% Rec.*	*mg/l*	*mg/l*	*% Rec.*
ALUMINUM	100	95.77522	95.80	100	95.57446	95.60
ANTIMONY	0	0.000400902		0.02	0.02320004	116
ARSENIC	0	0.000020527		0.02	0.01862983	93.10
BARIUM	0	0.000177371		0.02	0.019727	98.60
BERYLLIUM	0	0.000033048		0.02	0.01898736	94.90
BISMUTH (NO HE)		526509.8	104		532127.4	105
BORON	0	0.006569269		0.02	0.02280409	114
CADMIUM	0	0.000146558		0.02	0.01939098	97
CALCIUM	100	94.79175	94.80	100	94.00534	94
CHROMIUM	0	-0.000042702		0.02	0.0182944	91.50
COBALT	0	0.000259693		0.02	0.01866706	93.30
COPPER	0	0.001238658		0.02	0.02008013	100
GERMANIUM		3892.39	106		3861.06	105
GERMANIUM (NO HE)		16669.23	105		16903.93	106
IRON	100	94.23562	94.20	100	92.19354	92.20
LEAD	0	0.000057421		0.02	0.01875371	93.80
LITHIUM	0	0.000385204		0	0.00041177	
MAGNESIUM	100	102.0004	102	100	100.3652	100
MANGANESE	0	0.000164713		0.02	0.01800173	90
MOLYBDENUM	2	2.013884	101	2	1.967505	98.40
NICKEL	0	0.000442726		0.02	0.01879923	94
POTASSIUM	100	99.93821	99.90	100	97.46102	97.50
RHODIUM		90168.33	101		89453.76	100
SCANDIUM		49196.63	103		47670.29	99.60
SCANDIUM (NO HE)		655634.7	106		658555.5	106
SELENIUM	0	-0.000169869		0.02	0.01923815	96.20
SILVER	0	0.000017507		0.02	0.01942453	97.10
SODIUM	100	95.1216	95.10	100	94.94477	94.90
STRONTIUM	0	0.000882492		0.02	0.02033733	102
TELLURIUM		19713.5	101		19249.27	98.60
TELLURIUM (HIGH HE)		41688.57	103		34084.26	84.60
TELLURIUM (NO HE)		85241.57	100		85783.2	101
THALLIUM	0	-0.000002574		0.02	0.01864125	93.20
THORIUM	0	0.000117084		0.02	0.01818564	90.90
TIN	0	0.000322174		0.02	0.01959077	98
TITANIUM	2	1.958297	97.90	2	1.960697	98
URANIUM	0	-0.00000007600		0.02	0.0188738	94.40
VANADIUM	0	0.000021753		0.02	0.0185311	92.70
ZINC	0	0.001698414		0.02	0.01814992	90.70

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

4-IN

INTERFERENCE CHECK SAMPLE

SDG:	L1102841	**Analytical Method:**	200.8
Instrument ID:	ICPMS10	**Date:**	05/31/19 13:06
Instrument Run:	053119ICPMS10A		

Analyte	**True**	**Found**		**True**	**Found**	
	ICSA	*ICSA*	*ICSA*	*ICSAB*	*ICSAB*	*ICSAB*
	mg/l	*mg/l*	*% Rec.*	*mg/l*	*mg/l*	*% Rec.*
ALUMINUM	100	94.05171	94.10	100	93.80619	93.80
ANTIMONY	0	0.000507304		0.02	0.02289528	114
ARSENIC	0	-0.000002703		0.02	0.01802771	90.10
BARIUM	0	0.000284213		0.02	0.01933133	96.70
BERYLLIUM	0	0.00005985		0.02	0.01784389	89.20
BISMUTH (NO HE)		555390.3	109		554013.9	109
BORON	0	0.01678788		0.02	0.0341892	171
CADMIUM	0	0.000136512		0.02	0.01939772	97
CALCIUM	100	93.31493	93.30	100	92.84381	92.80
CHROMIUM	0	-0.000056014		0.02	0.01803774	90.20
COBALT	0	0.0002655		0.02	0.01858907	92.90
COPPER	0	0.00112419		0.02	0.01941039	97.10
GERMANIUM		4003.067	109		4028.4	110
GERMANIUM (NO HE)		17373.34	109		17506.84	110
IRON	100	90.09428	90.10	100	90.69484	90.70
LEAD	0	0.000073207		0.02	0.01833511	91.70
LITHIUM	0	0.000492024		0	0.00042847	
MAGNESIUM	100	96.01257	96	100	97.20992	97.20
MANGANESE	0	0.000012263		0.02	0.01797017	89.90
MOLYBDENUM	2	1.968378	98.40	2	1.953285	97.70
NICKEL	0	0.000392018		0.02	0.01853858	92.70
POTASSIUM	100	95.39563	95.40	100	96.04047	96
RHODIUM		92774.45	104		92638.01	104
SCANDIUM		49964.91	104		49510.22	103
SCANDIUM (NO HE)		669406.3	108		684801.8	111
SELENIUM	0	-0.000039708		0.02	0.01849116	92.50
SILVER	0	0.000020192		0.02	0.01927253	96.40
SODIUM	100	92.75398	92.80	100	92.41599	92.40
STRONTIUM	0	0.000840715		0.02	0.0203355	102
TELLURIUM		20138.39	103		20173.1	103
TELLURIUM (HIGH HE)		42829.15	106		43068.84	107
TELLURIUM (NO HE)		88484.95	104		89008.44	105
THALLIUM	0	0.000008173		0.02	0.01815905	90.80
THORIUM	0	0.000162517		0.02	0.01794107	89.70
TIN	0	0.000254839		0.02	0.01952262	97.60
TITANIUM	2	1.917682	95.90	2	1.893276	94.70
URANIUM	0	-0.000001046		0.02	0.01836947	91.80
VANADIUM	0	0.000039962		0.02	0.0178309	89.20
ZINC	0	0.001699775		0.02	0.01725748	86.30

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

4-IN

INTERFERENCE CHECK SAMPLE

SDG:	L1102841	**Analytical Method:**	200.8
Instrument ID:	ICPMS11	**Date:**	05/29/19 10:18
Instrument Run:	052919ICPMS11		

Analyte	**True**	**Found**		**True**	**Found**	
	ICSA	*ICSA*	*ICSA*	*ICSAB*	*ICSAB*	*ICSAB*
	mg/l	*mg/l*	*% Rec.*	*mg/l*	*mg/l*	*% Rec.*
ALUMINUM	100	101.8199	102	100	99.51619	99.50
ANTIMONY	0	0.000784408		0.02	0.02534352	127
ARSENIC	0	0.000045976		0.02	0.01934746	96.70
BARIUM	0	0.000187543		0.02	0.02043545	102
BERYLLIUM	0	0.000013234		0.02	0.01950179	97.50
BISMUTH (NO HE)		978325	104		1063934	113
BORON	0	0.006928272		0.02	0.02447091	122
CADMIUM	0	0.000121693		0.02	0.02036917	102
CALCIUM	100	98.8693	98.90	100	97.47365	97.50
CHROMIUM	0	0.000215123		0.02	0.01910215	95.50
COBALT	0	0.000318757		0.02	0.01996592	99.80
COPPER	0	0.001170562		0.02	0.02056245	103
GERMANIUM		5532.63	101		5694	104
GERMANIUM (HIGH HE)		7147.697	104		7221.047	105
GERMANIUM (NO HE)		38316.08	106		38360.23	106
IRON	100	100.8741	101	100	97.36814	97.40
LEAD	0	0.000089718		0.02	0.01883453	94.20
LITHIUM	0	0.000523865		0	0.000591198	
MAGNESIUM	100	100.9902	101	100	99.62578	99.60
MANGANESE	0	0.000318309		0.02	0.0195598	97.80
MERCURY	0	0.003435004		0	0.005113661	
MOLYBDENUM	2	2.061088	103	2	2.042549	102
NICKEL	0	0.000328847		0.02	0.01980311	99
POTASSIUM	100	99.66617	99.70	100	100.7345	101
RHODIUM		146576	102		148295.4	103
SCANDIUM		61050.44	103		61482.1	104
SCANDIUM (NO HE)		1449252	103		1494688	106
SELENIUM	0	0.000144704		0.02	0.02051667	103
SILVER	0	0.000049882		0.02	0.0200905	100
SODIUM	100	97.00352	97	100	95.81605	95.80
STRONTIUM	0	0.00093586		0.02	0.02098002	105
TELLURIUM		23839.62	101		24320.6	103
TELLURIUM (HIGH HE)		78866.1	101		79116.36	101
TELLURIUM (NO HE)		169796.1	101		176878.3	105
THALLIUM	0	0.000025229		0.02	0.0191868	95.90
THORIUM	0	0.000075027		0.02	0.01874884	93.70
TIN	0	0.000306308		0.02	0.02046334	102
TITANIUM	2	2.043192	102	2	1.993989	99.70
URANIUM	0	0.000010324		0.02	0.01965645	98.30
VANADIUM	0	0.000046929		0.02	0.0194727	97.40
ZINC	0	0.00141512		0.02	0.02054343	103

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

4-IN

INTERFERENCE CHECK SAMPLE

SDG:	L1102841	**Analytical Method:**	200.8
Instrument ID:	ICPMS11	**Date:**	05/29/19 18:00
Instrument Run:	052919ICPMS11		

Analyte	True	Found		True	Found	
	ICSA	*ICSA*	*ICSA*	*ICSAB*	*ICSAB*	*ICSAB*
	mg/l	*mg/l*	*% Rec.*	*mg/l*	*mg/l*	*% Rec.*
ALUMINUM	100	107.2593	107	100	105.6549	106
ANTIMONY	0	0.000800389		0.02	0.02618367	131
ARSENIC	0	0.000123531		0.02	0.0213487	107
BARIUM	0	0.000247459		0.02	0.0209745	105
BERYLLIUM	0	0.000035006		0.02	0.02154196	108
BISMUTH (NO HE)		888106.7	94		943797.2	99.90
BORON	0	0.01006715		0.02	0.02580248	129
CADMIUM	0	0.00020705		0.02	0.02133681	107
CALCIUM	100	104.2764	104	100	103.338	103
CHROMIUM	0	0.00036363		0.02	0.02102485	105
COBALT	0	0.000348696		0.02	0.02154582	108
COPPER	0	0.001278374		0.02	0.02181018	109
GERMANIUM		5047.887	92		5097.893	92.90
GERMANIUM (HIGH HE)		6646.883	96.30		6720.237	97.40
GERMANIUM (NO HE)		34131.75	94.30		34845.34	96.30
IRON	100	106.9769	107	100	105.0672	105
LEAD	0	0.000129349		0.02	0.02068523	103
LITHIUM	0	0.000584084		0	0.000528383	
MAGNESIUM	100	107.3225	107	100	108.2189	108
MANGANESE	0	0.000385705		0.02	0.0214029	107
MERCURY	0	0.004660594		0	0.004267364	
MOLYBDENUM	2	2.184394	109	2	2.182073	109
NICKEL	0	0.000402002		0.02	0.02179639	109
POTASSIUM	100	109.3881	109	100	104.9811	105
RHODIUM		134145.8	93.20		135711.8	94.30
SCANDIUM		54282.46	91.50		55460.17	93.50
SCANDIUM (NO HE)		1259987	89.50		1332589	94.60
SELENIUM	0	0.000097078		0.02	0.02136105	107
SILVER	0	0.000153087		0.02	0.02175286	109
SODIUM	100	106.1574	106	100	102.8239	103
STRONTIUM	0	0.001002899		0.02	0.0215738	108
TELLURIUM		21346.52	90.30		21777.18	92.10
TELLURIUM (HIGH HE)		73800.76	94.30		74045.29	94.70
TELLURIUM (NO HE)		155324.3	92.10		159805.6	94.80
THALLIUM	0	0.000061812		0.02	0.02051491	103
THORIUM	0	0.000058195		0.02	0.02099891	105
TIN	0	0.000391492		0.02	0.02130232	107
TITANIUM	2	2.169561	108	2	2.152916	108
URANIUM	0	0.000052819		0.02	0.02130089	107
VANADIUM	0	0.000110621		0.02	0.0214005	107
ZINC	0	0.001617973		0.02	0.0225534	113

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

4-IN

INTERFERENCE CHECK SAMPLE

SDG:	L1102841	**Analytical Method:**	200.8
Instrument ID:	ICPMS11	**Date:**	05/29/19 20:37
Instrument Run:	052919ICPMS11		

Analyte	True	Found		True	Found	
	ICSA	*ICSA*	*ICSA*	*ICSAB*	*ICSAB*	*ICSAB*
	mg/l	*mg/l*	*% Rec.*	*mg/l*	*mg/l*	*% Rec.*
ALUMINUM	100	112.4948	112	100	103.2018	103
ANTIMONY	0	0.000473821		0.02	0.02647574	132
ARSENIC	0	0.000061969		0.02	0.02091051	105
BARIUM	0	0.00030214		0.02	0.02107654	105
BERYLLIUM	0	0.000020586		0.02	0.01994054	99.70
BISMUTH (NO HE)		877141.5	92.80		911832.3	96.50
BORON	0	0.006450101		0.02	0.02444614	122
CADMIUM	0	0.000106658		0.02	0.0208932	104
CALCIUM	100	108.2293	108	100	98.60533	98.60
CHROMIUM	0	0.000324075		0.02	0.02059155	103
COBALT	0	0.000323364		0.02	0.02086901	104
COPPER	0	0.001362463		0.02	0.02172584	109
GERMANIUM		5155.903	94		5321.93	97
GERMANIUM (HIGH HE)		6716.237	97.30		7136.367	103
GERMANIUM (NO HE)		33965.39	93.80		34929.48	96.50
IRON	100	109.0309	109	100	102.6367	103
LEAD	0	0.00009409		0.02	0.02038148	102
LITHIUM	0	0.000504586		0	0.000466965	
MAGNESIUM	100	110.0516	110	100	103.5327	104
MANGANESE	0	0.000422719		0.02	0.02054031	103
MERCURY	0	0.003314451		0	0.005584487	
MOLYBDENUM	2	2.277724	114	2	2.154246	108
NICKEL	0	0.000361451		0.02	0.02044898	102
POTASSIUM	100	111.1785	111	100	101.9626	102
RHODIUM		131920.6	91.70		136254	94.70
SCANDIUM		55530.2	93.60		58218.87	98.10
SCANDIUM (NO HE)		1344918	95.50		1370297	97.30
SELENIUM	0	0.000053947		0.02	0.02163842	108
SILVER	0	0.000100231		0.02	0.02137753	107
SODIUM	100	106.9105	107	100	100.7949	101
STRONTIUM	0	0.000922151		0.02	0.02223556	111
TELLURIUM		21566.85	91.20		22352.89	94.60
TELLURIUM (HIGH HE)		73736.8	94.30		76685.61	98
TELLURIUM (NO HE)		154013.1	91.30		160421.9	95.10
THALLIUM	0	0.000018975		0.02	0.02015741	101
THORIUM	0	0.00001483		0.02	0.01985402	99.30
TIN	0	0.000399968		0.02	0.02099229	105
TITANIUM	2	2.251518	113	2	2.081174	104
URANIUM	0	0.000009070		0.02	0.02029365	101
VANADIUM	0	0.000097165		0.02	0.02059879	103
ZINC	0	0.001747085		0.02	0.02208807	110

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

4-IN

INTERFERENCE CHECK SAMPLE

SDG:	L1102841	**Analytical Method:**	200.8
Instrument ID:	ICPMS11	**Date:**	05/29/19 23:42
Instrument Run:	052919ICPMS11		

Analyte	True	Found		True	Found	
	ICSA	*ICSA*	*ICSA*	*ICSAB*	*ICSAB*	*ICSAB*
	mg/l	*mg/l*	*% Rec.*	*mg/l*	*mg/l*	*% Rec.*
ALUMINUM	100	106.1601	106	100	105.4047	105
ANTIMONY	0	0.000607853		0.02	0.02601255	130
ARSENIC	0	0.000225373		0.02	0.02110602	106
BARIUM	0	0.000234171		0.02	0.02128274	106
BERYLLIUM	0	0.000036228		0.02	0.02075744	104
BISMUTH (NO HE)		904684	95.80		907453.9	96
BORON	0	0.01191145		0.02	0.02967569	148
CADMIUM	0	0.000141394		0.02	0.02056498	103
CALCIUM	100	103.3519	103	100	102.3036	102
CHROMIUM	0	0.000125546		0.02	0.02081648	104
COBALT	0	0.000315128		0.02	0.02088407	104
COPPER	0	0.001295686		0.02	0.0223756	112
GERMANIUM		5203.24	94.80		5153.903	93.90
GERMANIUM (HIGH HE)		6713.573	97.30		6730.91	97.50
GERMANIUM (NO HE)		34560.01	95.50		34153.16	94.30
IRON	100	104.272	104	100	102.3624	102
LEAD	0	0.000113968		0.02	0.02057166	103
LITHIUM	0	0.000612952		0	0.00058702	
MAGNESIUM	100	104.3334	104	100	105.7124	106
MANGANESE	0	0.000328018		0.02	0.02078313	104
MERCURY	0	0.006004393		0	0.006060288	
MOLYBDENUM	2	2.177868	109	2	2.145835	107
NICKEL	0	0.000347215		0.02	0.02063484	103
POTASSIUM	100	107.1655	107	100	107.1301	107
RHODIUM		132519.9	92.10		132640.2	92.20
SCANDIUM		57409.75	96.70		56699.84	95.60
SCANDIUM (NO HE)		1338637	95		1307559	92.80
SELENIUM	0	0.000241231		0.02	0.02220963	111
SILVER	0	0.000150825		0.02	0.02130157	107
SODIUM	100	100.5177	101	100	102.1081	102
STRONTIUM	0	0.00093715		0.02	0.02290265	115
TELLURIUM		21956.95	92.90		21867.14	92.50
TELLURIUM (HIGH HE)		73503.95	94		74257.56	94.90
TELLURIUM (NO HE)		160219.6	95		159131.5	94.40
THALLIUM	0	0.000065744		0.02	0.02057051	103
THORIUM	0	0.000053898		0.02	0.02005311	100
TIN	0	0.000404805		0.02	0.02133398	107
TITANIUM	2	2.103318	105	2	2.092496	105
URANIUM	0	0.000038245		0.02	0.02034592	102
VANADIUM	0	0.000113902		0.02	0.02086689	104
ZINC	0	0.001538177		0.02	0.02213893	111

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

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1102841-01

SAMPLE NO.:
R3416034-5
R3416034-6

MS Sample / File ID:	R3416034-5 / 20190529184712	**SDG:**	L1102841
MSD Sample / File ID:	R3416034-6 / 20190529185221	**Analytical Batch:**	WG1286583
OS Sample / File ID:	L1102352-01 / 20190529183653	**Matrix:**	WW
Instrument ID:	ICPMS11		
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*	*%*	*%*		*%*	*%*	*%*
Arsenic	0.0500	0.00185	0.0514	0.0506	99.1	97.5	1	70.0 - 130	1.58	20
Cadmium	0.0500	U	0.0496	0.0493	99.1	98.5	1	70.0 - 130	0.609	20
Chromium	0.0500	0.00188	0.0501	0.0492	96.3	94.5	1	70.0 - 130	1.81	20
Cobalt	0.0500	U	0.0484	0.0473	96.8	94.6	1	70.0 - 130	2.33	20
Copper	0.0500	0.00220	0.0492	0.0491	94.1	93.7	1	70.0 - 130	0.309	20
Lead	0.0500	0.000582	0.0488	0.0488	96.4	96.4	1	70.0 - 130	0.0889	20
Nickel	0.0500	0.000770	0.0484	0.0479	95.3	94.3	1	70.0 - 130	1.00	20
Selenium	0.0500	0.00927	0.0582	0.0607	97.8	103	1	70.0 - 130	4.32	20
Silver	0.0500	0.000200	0.0509	0.0505	102	101	1	70.0 - 130	0.882	20
Thallium	0.0500	0.000313	0.0498	0.0490	99.0	97.5	1	70.0 - 130	1.56	20
Tin	0.0500	0.000894	0.0472	0.0464	92.6	91.1	1	70.0 - 130	1.69	20
Zinc	0.0500	0.0321	0.0801	0.0766	96.0	89.1	1	70.0 - 130	4.41	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

L1102841-01

SAMPLE NO.:
R3416034-7
R3416034-8

MS Sample / File ID:	R3416034-7 / 20190529190241	**SDG:**	L1102841
MSD Sample / File ID:	R3416034-8 / 20190529190751	**Analytical Batch:**	WG1286583
OS Sample / File ID:	L1102352-10 / 20190529185731	**Matrix:**	WW
Instrument ID:	ICPMS11		
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*	*%*	*%*		*%*	*%*	*%*
Arsenic	0.0500	0.355	0.436	0.427	162*	143*	1	70.0 - 130	2.22	20
Cadmium	0.0500	U	0.0502	0.0495	100	98.9	1	70.0 - 130	1.54	20
Chromium	0.0500	0.000606	0.0499	0.0483	98.6	95.3	1	70.0 - 130	3.36	20
Cobalt	0.0500	0.000316	0.0495	0.0476	98.4	94.6	1	70.0 - 130	3.92	20
Copper	0.0500	0.00438	0.0525	0.0516	96.2	94.4	1	70.0 - 130	1.72	20
Lead	0.0500	0.00497	0.0547	0.0554	99.5	101	1	70.0 - 130	1.17	20
Nickel	0.0500	0.000508	0.0497	0.0473	98.4	93.7	1	70.0 - 130	4.87	20
Selenium	0.0500	0.000372	0.0520	0.0523	103	104	1	70.0 - 130	0.575	20
Silver	0.0500	0.000282	0.0517	0.0504	103	100	1	70.0 - 130	2.48	20
Thallium	0.0500	U	0.0509	0.0499	102	99.8	1	70.0 - 130	1.89	20
Tin	0.0500	0.000534	0.0501	0.0496	99.2	98.1	1	70.0 - 130	1.03	20
Zinc	0.0500	0.0115	0.0605	0.0604	98.0	97.8	1	70.0 - 130	0.209	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

L1102841-01

SAMPLE NO.:
R3416640-5
R3416640-6

MS Sample / File ID:	R3416640-5 / 20190531121508	**SDG:**	L1102841
MSD Sample / File ID:	R3416640-6 / 20190531121943	**Analytical Batch:**	WG1286583
OS Sample / File ID:	L1102352-01 / 20190531120600	**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	0.000780	0.0536	0.0538	106	106	1	70.0 - 130	0.419	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

L1102841-01

SAMPLE NO.:
R3416034-2
R3416034-3

LCS Sample / File ID:	R3416034-2 / 20190529182635	**SDG:**	L1102841
LCSD Sample / File ID:	R3416034-3 / 20190529183144	**Analytical Batch:**	WG1286583
Instrument ID:	ICPMS11	**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*	*%*	*%*	*%*	*%*	*%*
Arsenic	0.0500	0.0504	0.0523	101	105	85.0 - 115	3.80	20
Cadmium	0.0500	0.0509	0.0516	102	103	85.0 - 115	1.38	20
Chromium	0.0500	0.0504	0.0524	101	105	85.0 - 115	3.98	20
Cobalt	0.0500	0.0502	0.0528	100	106	85.0 - 115	5.12	20
Copper	0.0500	0.0515	0.0518	103	104	85.0 - 115	0.564	20
Lead	0.0500	0.0515	0.0521	103	104	85.0 - 115	1.10	20
Nickel	0.0500	0.0506	0.0543	101	109	85.0 - 115	7.18	20
Selenium	0.0500	0.0537	0.0526	107	105	85.0 - 115	2.13	20
Silver	0.0500	0.0523	0.0540	105	108	85.0 - 115	3.18	20
Thallium	0.0500	0.0513	0.0527	103	105	85.0 - 115	2.70	20
Tin	0.0500	0.0477	0.0487	95.4	97.3	85.0 - 115	2.06	20
Zinc	0.0500	0.0514	0.0543	103	109	85.0 - 115	5.50	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

L1102841-01

SAMPLE NO.:
R3416640-2
R3416640-3

LCS Sample / File ID:	R3416640-2 / 20190531115651	**SDG:**	L1102841
LCSD Sample / File ID:	R3416640-3 / 20190531120125	**Analytical Batch:**	WG1286583
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	0.0548	0.0549	110	110	85.0 - 115	0.111	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

L1102841-01

SAMPLE NO.:
R3416034-4

SD Sample / File ID:	R3416034-4 / 20190529184202	**SDG:**	L1102841
OS Sample / File ID:	L1102352-01 / 20190529183653	**Analytical Batch:**	WG1286583
Lab File ID:	20190529184202	**Dilution Factor:**	5
Instrument ID:	ICPMS11	**Matrix:**	WW
Analytical Method:	200.8		

Analyte	**OS Result** *mg/l*	**SD Result** *mg/l*	**RPD** *%*	**RPD Limits** *%*
Arsenic	0.00185	0.00207	12.2	10
Cadmium	U	ND	0.000	10
Chromium	0.00188	0.00184	1.77	10
Cobalt	U	ND	0.000	10
Copper	0.00220	0.00224	1.87	10
Lead	0.000582	ND	0.000	10
Nickel	0.000770	ND	0.000	10
Selenium	0.00927	0.00835	9.99	10
Silver	0.000200	ND	0.000	10
Thallium	0.000313	ND	0.000	10
Tin	0.000894	ND	0.000	10
Zinc	0.0321	0.0359	12.0	10

*: 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

L1102841-01

SAMPLE NO.:
R3416640-4

SD Sample / File ID:	R3416640-4 / 20190531121034	**SDG:**	L1102841
OS Sample / File ID:	L1102352-01 / 20190531120600	**Analytical Batch:**	WG1286583
Lab File ID:	20190531121034	**Dilution Factor:**	5
Instrument ID:	ICPMS10	**Matrix:**	WW
Analytical Method:	200.8		

Analyte	OS Result	SD Result	RPD	RPD Limits
	mg/l	*mg/l*	*%*	*%*
Antimony	0.000780	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:	L1102841	**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

10C-IN

LINEAR DYNAMIC RANGE

SDG:	L1102841	**Analytical Method:**	200.8
Instrument ID:	ICPMS11	**Date:**	02/25/19 08:29

Analyte	LDR *ppm*
ALUMINUM	90
ANTIMONY	9
ARSENIC	9
BARIUM	4.50
BERYLLIUM	9
BORON	2
CADMIUM	9
CALCIUM	900
CHROMIUM	9
COBALT	9
COPPER	0.20
IRON	90
LEAD	9
MAGNESIUM	900
MANGANESE	9
MOLYBDENUM	9
NICKEL	9
POTASSIUM	900
SELENIUM	9
SILVER	1
SODIUM	900
STRONTIUM	1.80
THALLIUM	9
THORIUM	9
TIN	9
TITANIUM	9
URANIUM	9
VANADIUM	9
ZINC	9

11-IN

INTERNAL STANDARD ASSOCIATION

SDG:	L1102841	**Analytical Method:**	200.8
Instrument ID:	ICPMS10	**Analysis Date:**	05/31/19 09:42
Instrument Run:	053119ICPMS10A		

Analyte	Assoc. Internal Standard 1
ANTIMONY - 121	RHODIUM - 103

11-IN

INTERNAL STANDARD ASSOCIATION

SDG:	L1102841	**Analytical Method:**	200.8
Instrument ID:	ICPMS11	**Analysis Date:**	05/29/19 08:35
Instrument Run:	052919ICPMS11		

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
THALLIUM - 205	BISMUTH (NO HE) - 209
LEAD - 208	BISMUTH (NO HE) - 209

12-IN

ANALYSIS LOG

SDG:	L1102841	**Analytical Method:**	200.8
Instrument ID:	ICPMS10	**Calibration Start Date:**	05/31/19 10:18
Analytical Run:	053119ICPMS10A	**Calibration End Date:**	05/31/19 10:41

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
TUNE	ICPMS10tn05312019942	20190531094219	05/31/19 09:42	1	
CALBLK	ICPMS100531191013	20190531101336	05/31/19 10:13	1	
CAL	STD1	20190531101811	05/31/19 10:18	1	
CAL	STD2	20190531102246	05/31/19 10:22	1	
CAL	STD3	20190531102722	05/31/19 10:27	1	
CAL	STD4	20190531103156	05/31/19 10:31	1	
CAL	STD5	20190531103632	05/31/19 10:36	1	
CAL	STD6	20190531104107	05/31/19 10:41	1	
ICV	ICPMS100531191045	20190531104543	05/31/19 10:45	1	
ICB	ICPMS100531191102	20190531110246	05/31/19 11:02	1	
CCV	ICPMS100531191107	20190531110721	05/31/19 11:07	1	
CCB	ICPMS100531191111	20190531111155	05/31/19 11:11	1	
ICVLL	ICPMS100531191121	20190531112154	05/31/19 11:21	1	
ICSA	ICPMS100531191126	20190531112630	05/31/19 11:26	1	
ICSAB	ICPMS100531191131	20190531113105	05/31/19 11:31	1	
BLANK	R3416640-1	20190531115216	05/31/19 11:52	1	WG1286583
LCS	R3416640-2	20190531115651	05/31/19 11:56	1	WG1286583
LCSD	R3416640-3	20190531120125	05/31/19 12:01	1	WG1286583
OS	L1102352-01	20190531120600	05/31/19 12:06	1	WG1286583
SD	R3416640-4	20190531121034	05/31/19 12:10	5	WG1286583
MS	R3416640-5	20190531121508	05/31/19 12:15	1	WG1286583
MSD	R3416640-6	20190531121943	05/31/19 12:19	1	WG1286583
CCV	ICPMS100531191233	20190531123327	05/31/19 12:33	1	
CCB	ICPMS100531191238	20190531123801	05/31/19 12:38	1	
WW-20190524-002-DAY 22	L1102841-01	20190531124752	05/31/19 12:47	1	WG1286583
CCV	ICPMS100531191257-2	20190531125702-2	05/31/19 12:57	1	
CCB	ICPMS100531191301-2	20190531130136-2	05/31/19 13:01	1	
ICSA	ICPMS100531191306	20190531130611	05/31/19 13:06	1	
ICSAB	ICPMS100531191310	20190531131047	05/31/19 13:10	1	

12-IN

ANALYSIS LOG

SDG:	L1102841	**Analytical Method:**	200.8
Instrument ID:	ICPMS11	**Calibration Start Date:**	05/29/19 09:08
Analytical Run:	052919ICPMS11	**Calibration End Date:**	05/29/19 09:34

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
TUNE	ICPMS11tn05292019835-4	20190529083534-4	05/29/19 08:35	1	
CALBLK	ICPMS110529190903	20190529090341	05/29/19 09:03	1	
CAL	STD1	20190529090851	05/29/19 09:08	1	
CAL	STD2	20190529091403	05/29/19 09:14	1	
CAL	STD3	20190529091914	05/29/19 09:19	1	
CAL	STD4	20190529092424	05/29/19 09:24	1	
CAL	STD5	20190529092936	05/29/19 09:29	1	
CAL	STD6	20190529093447	05/29/19 09:34	1	
ICV	ICPMS110529190939-4	20190529093958-4	05/29/19 09:39	1	
ICB	ICPMS110529190957-4	20190529095749-4	05/29/19 09:57	1	
ICVLL	ICPMS110529191013-4	20190529101321-4	05/29/19 10:13	1	
ICSA	ICPMS110529191018-4	20190529101832-4	05/29/19 10:18	1	
ICSAB	ICPMS110529191023-4	20190529102344-4	05/29/19 10:23	1	
CCV	ICPMS110529191750-2	20190529175022-2	05/29/19 17:50	1	
CCB	ICPMS110529191755-2	20190529175532-2	05/29/19 17:55	1	
ICSA	ICPMS110529191800-2	20190529180043-2	05/29/19 18:00	1	
ICSAB	ICPMS110529191805-2	20190529180555-2	05/29/19 18:05	1	
BLANK	R3416034-1	20190529182125	05/29/19 18:21	1	WG1286583
LCS	R3416034-2	20190529182635	05/29/19 18:26	1	WG1286583
LCSD	R3416034-3	20190529183144	05/29/19 18:31	1	WG1286583
OS	L1102352-01	20190529183653	05/29/19 18:36	1	WG1286583
SD	R3416034-4	20190529184202	05/29/19 18:42	5	WG1286583
MS	R3416034-5	20190529184712	05/29/19 18:47	1	WG1286583
MSD	R3416034-6	20190529185221	05/29/19 18:52	1	WG1286583
OS	L1102352-10	20190529185731	05/29/19 18:57	1	WG1286583
MS	R3416034-7	20190529190241	05/29/19 19:02	1	WG1286583
MSD	R3416034-8	20190529190751	05/29/19 19:07	1	WG1286583
CCV	ICPMS110529192017	20190529201726	05/29/19 20:17	1	
CCB	ICPMS110529192032	20190529203235	05/29/19 20:32	1	
ICSA	ICPMS110529192037	20190529203747	05/29/19 20:37	1	
ICSAB	ICPMS110529192042	20190529204258	05/29/19 20:42	1	
CCV	ICPMS110529192203	20190529220350	05/29/19 22:03	1	
CCB	ICPMS110529192209	20190529220900	05/29/19 22:09	1	
WW-20190524-002-DAY 22	L1102841-01	20190529224002	05/29/19 22:40	1	WG1286583
CCV	ICPMS110529192331	20190529233109	05/29/19 23:31	1	
CCB	ICPMS110529192336	20190529233619	05/29/19 23:36	1	
ICSA	ICPMS110529192342	20190529234203	05/29/19 23:42	1	
ICSAB	ICPMS110529192347	20190529234714	05/29/19 23:47	1	

13-IN

ICP/MS TUNE

Lab File ID:	20190531094219	**SDG:**	L1102841
Instrument ID:	ICPMS10	**Analysis Date/Time**	05/31/19 09:42
Analytical Method:	200.8		

Element - Mass	Avg. Measured Mass	Avg. Peak Width	Height	RSD
	u	u	%	%
IN - 115	115	0.430578	5	1.100014
PB - 206	206	0.43839630	5	1.003180
PB - 207	206.95	0.44163950	5	1.271359
PB - 208	207.95	0.46747110	5	0.92709670
MG - 24	23.95	0.48215370	5	1.806735
MG - 25	24.95	0.49011130	5	1.175755
MG - 26	25.95	0.48986920	5	1.260006
CO - 59	58.95	0.48367690	5	1.084281
BE - 9	8.95	0.47815780	5	2.634520

13-IN

ICP/MS TUNE

Lab File ID:	20190529083534-4	**SDG:**	L1102841
Instrument ID:	ICPMS11	**Analysis Date/Time**	05/29/19 08:35
Analytical Method:	200.8		

Element - Mass	Avg. Measured Mass	Avg. Peak Width	Height	RSD
	u	u	%	%
IN - 115	115	0.47181660	5	0.47486180
PB - 206	206	0.47046390	5	0.89788010
PB - 207	206.95	0.43855330	5	1.197043
PB - 208	208	0.43950050	5	0.26437520
MG - 24	23.95	0.53123060	5	0.75273230
MG - 25	24.95	0.53580770	5	1.690407
MG - 26	25.95	0.53047810	5	1.255024
CO - 59	58.95	0.49049090	5	0.43230530
BE - 9	8.95	0.48669760	5	1.469643

14-IN

ICP/MS INTERNAL STANDARDS RELATIVE INTENSITY

SDG:	L1102841	**Analytical Method:**	200.8
Instrument ID:	ICPMS10	**Start Date:**	05/31/19 10:45
Instrument Run:	053119ICPMS10A	**End Date:**	05/31/19 12:19

Client Sample ID	Lab Sample ID	Analysis Date Time	BISMUTH (NO HE)		GERMANIUM		GERMANIUM (NO HE)	
			% Rec.	Q	% Rec.	Q	% Rec.	Q
ICV	ICPMS100531191045	05/31/19 10:45	100		104		105	
ICB	ICPMS100531191102	05/31/19 11:02	101		103		100	
CCV	ICPMS100531191107	05/31/19 11:07	99.50		106		101	
CCB	ICPMS100531191111	05/31/19 11:11	103		102		102	
ICVLL	ICPMS100531191121	05/31/19 11:21	99.10		102		103	
ICSA	ICPMS100531191126	05/31/19 11:26	104		106		105	
ICSAB	ICPMS100531191131	05/31/19 11:31	105		105		106	
CCV	ICPMS100531191233	05/31/19 12:33	110		106		107	
CCB	ICPMS100531191238	05/31/19 12:38	107		100		103	
CCV	ICPMS100531191257-2	05/31/19 12:57	111		106		111	
CCB	ICPMS100531191301-2	05/31/19 13:01	109		107		105	
ICSA	ICPMS100531191306	05/31/19 13:06	109		109		109	
ICSAB	ICPMS100531191310	05/31/19 13:10	109		110		110	
OS	L1102352-01	05/31/19 12:06	108		105		107	
WW-20190524-002-DAY 22	L1102841-01	05/31/19 12:47	111		110		113	
BLANK	R3416640-1	05/31/19 11:52	110		103		101	
LCS	R3416640-2	05/31/19 11:56	109		104		103	
LCSD	R3416640-3	05/31/19 12:01	110		103		104	
SD	R3416640-4	05/31/19 12:10	108		104		105	
MS	R3416640-5	05/31/19 12:15	108		105		107	
MSD	R3416640-6	05/31/19 12:19	110		108		111	

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ICP/MS INTERNAL STANDARDS RELATIVE INTENSITY

SDG:	L1102841	**Analytical Method:**	200.8
Instrument ID:	ICPMS10	**Start Date:**	05/31/19 10:45
Instrument Run:	053119ICPMS10A	**End Date:**	05/31/19 12:19

Client Sample ID	Lab Sample ID	Analysis Date Time	RHODIUM		SCANDIUM		SCANDIUM (NO HE)	
			% Rec.	Q	% Rec.	Q	% Rec.	Q
ICV	ICPMS100531191045	05/31/19 10:45	103		102		106	
ICB	ICPMS100531191102	05/31/19 11:02	102		101		102	
CCV	ICPMS100531191107	05/31/19 11:07	102		105		105	
CCB	ICPMS100531191111	05/31/19 11:11	100		100		103	
ICVLL	ICPMS100531191121	05/31/19 11:21	102		103		105	
ICSA	ICPMS100531191126	05/31/19 11:26	101		103		106	
ICSAB	ICPMS100531191131	05/31/19 11:31	100		99.60		106	
CCV	ICPMS100531191233	05/31/19 12:33	107		104		108	
CCB	ICPMS100531191238	05/31/19 12:38	102		98.80		103	
CCV	ICPMS100531191257-2	05/31/19 12:57	108		106		109	
CCB	ICPMS100531191301-2	05/31/19 13:01	105		103		105	
ICSA	ICPMS100531191306	05/31/19 13:06	104		104		108	
ICSAB	ICPMS100531191310	05/31/19 13:10	104		103		111	
OS	L1102352-01	05/31/19 12:06	98.30		96.50		98.80	
WW-20190524-002-DAY 22	L1102841-01	05/31/19 12:47	98.10		95.50		103	
BLANK	R3416640-1	05/31/19 11:52	98.80		95.70		96	
LCS	R3416640-2	05/31/19 11:56	101		95.40		97.50	
LCSD	R3416640-3	05/31/19 12:01	99.20		95.50		98	
SD	R3416640-4	05/31/19 12:10	101		98		102	
MS	R3416640-5	05/31/19 12:15	98.80		97.20		99.70	
MSD	R3416640-6	05/31/19 12:19	100		96.80		99.60	

14-IN

ICP/MS INTERNAL STANDARDS RELATIVE INTENSITY

SDG:	L1102841	**Analytical Method:**	200.8
Instrument ID:	ICPMS10	**Start Date:**	05/31/19 10:45
Instrument Run:	053119ICPMS10A	**End Date:**	05/31/19 12:19

Client Sample ID	Lab Sample ID	Analysis Date Time	TELLURIUM		TELLURIUM (HIGH HE)		TELLURIUM (NO HE)	
			% Rec.	Q	% Rec.	Q	% Rec.	Q
ICV	ICPMS100531191045	05/31/19 10:45	103		106		103	
ICB	ICPMS100531191102	05/31/19 11:02	102		103		101	
CCV	ICPMS100531191107	05/31/19 11:07	105		106		103	
CCB	ICPMS100531191111	05/31/19 11:11	99.60		103		101	
ICVLL	ICPMS100531191121	05/31/19 11:21	104		104		103	
ICSA	ICPMS100531191126	05/31/19 11:26	101		103		100	
ICSAB	ICPMS100531191131	05/31/19 11:31	98.60		84.60		101	
CCV	ICPMS100531191233	05/31/19 12:33	106		109		110	
CCB	ICPMS100531191238	05/31/19 12:38	101		105		103	
CCV	ICPMS100531191257-2	05/31/19 12:57	109		109		112	
CCB	ICPMS100531191301-2	05/31/19 13:01	105		106		106	
ICSA	ICPMS100531191306	05/31/19 13:06	103		106		104	
ICSAB	ICPMS100531191310	05/31/19 13:10	103		107		105	
OS	L1102352-01	05/31/19 12:06	97.40		104		103	
WW-20190524-002-DAY 22	L1102841-01	05/31/19 12:47	93.40		98.60		101	
BLANK	R3416640-1	05/31/19 11:52	96.60		102		101	
LCS	R3416640-2	05/31/19 11:56	98.50		105		104	
LCSD	R3416640-3	05/31/19 12:01	97.70		105		104	
SD	R3416640-4	05/31/19 12:10	102		106		106	
MS	R3416640-5	05/31/19 12:15	97.90		104		103	
MSD	R3416640-6	05/31/19 12:19	98.40		104		105	

14-IN

ICP/MS INTERNAL STANDARDS RELATIVE INTENSITY

SDG:	L1102841	**Analytical Method:**	200.8
Instrument ID:	ICPMS11	**Start Date:**	05/29/19 09:39
Instrument Run:	052919ICPMS11	**End Date:**	05/29/19 19:07

Client Sample ID	Lab Sample ID	Analysis Date Time	BISMUTH (NO HE)		GERMANIUM		GERMANIUM (HIGH HE)	
			% Rec.	Q	% Rec.	Q	% Rec.	Q
ICV	ICPMS110529190939-4	05/29/19 09:39	101		101		101	
ICB	ICPMS110529190957-4	05/29/19 09:57	99.80		98.20		97.90	
ICVLL	ICPMS110529191013-4	05/29/19 10:13	98.40		98.80		101	
ICSA	ICPMS110529191018-4	05/29/19 10:18	104		101		104	
ICSAB	ICPMS110529191023-4	05/29/19 10:23	113		104		105	
CCV	ICPMS110529191750-2	05/29/19 17:50	94		92		93.60	
CCB	ICPMS110529191755-2	05/29/19 17:55	93.60		90.40		91.40	
ICSA	ICPMS110529191800-2	05/29/19 18:00	94		92		96.30	
ICSAB	ICPMS110529191805-2	05/29/19 18:05	99.90		92.90		97.40	
CCV	ICPMS110529192017	05/29/19 20:17	94.50		92.70		97	
CCB	ICPMS110529192032	05/29/19 20:32	93.30		92		94	
ICSA	ICPMS110529192037	05/29/19 20:37	92.80		94		97.30	
ICSAB	ICPMS110529192042	05/29/19 20:42	96.50		97		103	
CCV	ICPMS110529192203	05/29/19 22:03	108		106		107	
CCB	ICPMS110529192209	05/29/19 22:09	110		101		105	
CCV	ICPMS110529192331	05/29/19 23:31	93.80		97.50		100	
CCB	ICPMS110529192336	05/29/19 23:36	97.60		94.50		98.20	
ICSA	ICPMS110529192342	05/29/19 23:42	95.80		94.80		97.30	
ICSAB	ICPMS110529192347	05/29/19 23:47	96		93.90		97.50	
OS	L1102352-01	05/29/19 18:36	90.60		91.70		99.20	
OS	L1102352-10	05/29/19 18:57	91.80		94		98.50	
WW-20190524-002-DAY 22	L1102841-01	05/29/19 22:40	93.40		94.90		97.30	
BLANK	R3416034-1	05/29/19 18:21	92		88.30		93.30	
LCS	R3416034-2	05/29/19 18:26	89.40		90.90		95.30	
LCSD	R3416034-3	05/29/19 18:31	91		87.50		95.40	
SD	R3416034-4	05/29/19 18:42	98.20		91.40		98.20	
MS	R3416034-5	05/29/19 18:47	96.30		93.90		102	
MSD	R3416034-6	05/29/19 18:52	94.30		93		98.60	
MS	R3416034-7	05/29/19 19:02	90.10		92.70		103	
MSD	R3416034-8	05/29/19 19:07	89.40		95.90		103	

14-IN

ICP/MS INTERNAL STANDARDS RELATIVE INTENSITY

SDG:	L1102841	**Analytical Method:**	200.8
Instrument ID:	ICPMS11	**Start Date:**	05/29/19 09:39
Instrument Run:	052919ICPMS11	**End Date:**	05/29/19 19:07

Client Sample ID	Lab Sample ID	Analysis Date Time	GERMANIUM (NO HE)		RHODIUM		SCANDIUM	
			% Rec.	Q	% Rec.	Q	% Rec.	Q
ICV	ICPMS110529190939-4	05/29/19 09:39	103		101		101	
ICB	ICPMS110529190957-4	05/29/19 09:57	98.60		98.60		98.60	
ICVLL	ICPMS110529191013-4	05/29/19 10:13	101		100		100	
ICSA	ICPMS110529191018-4	05/29/19 10:18	106		102		103	
ICSAB	ICPMS110529191023-4	05/29/19 10:23	106		103		104	
CCV	ICPMS110529191750-2	05/29/19 17:50	92.30		94.40		91.70	
CCB	ICPMS110529191755-2	05/29/19 17:55	91		92.50		89.60	
ICSA	ICPMS110529191800-2	05/29/19 18:00	94.30		93.20		91.50	
ICSAB	ICPMS110529191805-2	05/29/19 18:05	96.30		94.30		93.50	
CCV	ICPMS110529192017	05/29/19 20:17	92.20		93.70		95.60	
CCB	ICPMS110529192032	05/29/19 20:32	88.90		92.50		91.70	
ICSA	ICPMS110529192037	05/29/19 20:37	93.80		91.70		93.60	
ICSAB	ICPMS110529192042	05/29/19 20:42	96.50		94.70		98.10	
CCV	ICPMS110529192203	05/29/19 22:03	103		106		106	
CCB	ICPMS110529192209	05/29/19 22:09	102		103		104	
CCV	ICPMS110529192331	05/29/19 23:31	93.60		95.80		99.70	
CCB	ICPMS110529192336	05/29/19 23:36	94.30		95.60		98	
ICSA	ICPMS110529192342	05/29/19 23:42	95.50		92.10		96.70	
ICSAB	ICPMS110529192347	05/29/19 23:47	94.30		92.20		95.60	
OS	L1102352-01	05/29/19 18:36	93		90.20		89.10	
OS	L1102352-10	05/29/19 18:57	95.20		90.20		90	
WW-20190524-002-DAY 22	L1102841-01	05/29/19 22:40	94.20		90.10		92.90	
BLANK	R3416034-1	05/29/19 18:21	89.40		89.50		86.90	
LCS	R3416034-2	05/29/19 18:26	88.70		90.70		87.70	
LCSD	R3416034-3	05/29/19 18:31	90.30		89.20		87.50	
SD	R3416034-4	05/29/19 18:42	94.40		95.80		93.90	
MS	R3416034-5	05/29/19 18:47	96.30		93.50		92.60	
MSD	R3416034-6	05/29/19 18:52	93.80		91.80		90.30	
MS	R3416034-7	05/29/19 19:02	93.90		90.20		91.50	
MSD	R3416034-8	05/29/19 19:07	95		92.80		94	

14-IN

ICP/MS INTERNAL STANDARDS RELATIVE INTENSITY

SDG:	L1102841	**Analytical Method:**	200.8
Instrument ID:	ICPMS11	**Start Date:**	05/29/19 09:39
Instrument Run:	052919ICPMS11	**End Date:**	05/29/19 19:07

Client Sample ID	Lab Sample ID	Analysis Date Time	SCANDIUM (NO HE)		TELLURIUM		TELLURIUM (HIGH HE)	
			% Rec.	Q	% Rec.	Q	% Rec.	Q
ICV	ICPMS110529190939-4	05/29/19 09:39	101		102		102	
ICB	ICPMS110529190957-4	05/29/19 09:57	99.10		96.90		98.10	
ICVLL	ICPMS110529191013-4	05/29/19 10:13	102		100		101	
ICSA	ICPMS110529191018-4	05/29/19 10:18	103		101		101	
ICSAB	ICPMS110529191023-4	05/29/19 10:23	106		103		101	
CCV	ICPMS110529191750-2	05/29/19 17:50	91.80		92.10		97.80	
CCB	ICPMS110529191755-2	05/29/19 17:55	88		89.50		94.40	
ICSA	ICPMS110529191800-2	05/29/19 18:00	89.50		90.30		94.30	
ICSAB	ICPMS110529191805-2	05/29/19 18:05	94.60		92.10		94.70	
CCV	ICPMS110529192017	05/29/19 20:17	94.90		95.10		99.20	
CCB	ICPMS110529192032	05/29/19 20:32	88.30		92		95.40	
ICSA	ICPMS110529192037	05/29/19 20:37	95.50		91.20		94.30	
ICSAB	ICPMS110529192042	05/29/19 20:42	97.30		94.60		98	
CCV	ICPMS110529192203	05/29/19 22:03	105		106		110	
CCB	ICPMS110529192209	05/29/19 22:09	104		106		108	
CCV	ICPMS110529192331	05/29/19 23:31	98.30		99.80		101	
CCB	ICPMS110529192336	05/29/19 23:36	98		97.70		98.90	
ICSA	ICPMS110529192342	05/29/19 23:42	95		92.90		94	
ICSAB	ICPMS110529192347	05/29/19 23:47	92.80		92.50		94.90	
OS	L1102352-01	05/29/19 18:36	87.10		88.40		95.80	
OS	L1102352-10	05/29/19 18:57	89.40		88.30		93.70	
WW-20190524-002-DAY 22	L1102841-01	05/29/19 22:40	89.90		88.40		89.90	
BLANK	R3416034-1	05/29/19 18:21	85.10		86.20		91.60	
LCS	R3416034-2	05/29/19 18:26	85.30		88		94.40	
LCSD	R3416034-3	05/29/19 18:31	85.90		87.90		93.90	
SD	R3416034-4	05/29/19 18:42	93.70		93.10		99.20	
MS	R3416034-5	05/29/19 18:47	91.90		91.90		99	
MSD	R3416034-6	05/29/19 18:52	89.10		89.60		96.30	
MS	R3416034-7	05/29/19 19:02	88.30		88.90		94.20	
MSD	R3416034-8	05/29/19 19:07	90.20		91.20		96.40	

14-IN

ICP/MS INTERNAL STANDARDS RELATIVE INTENSITY

SDG:	L1102841	**Analytical Method:**	200.8
Instrument ID:	ICPMS11	**Start Date:**	05/29/19 09:39
Instrument Run:	052919ICPMS11	**End Date:**	05/29/19 19:07

Client Sample ID	Lab Sample ID	Analysis Date Time	TELLURIUM (NO HE)	
			% Rec.	Q
ICV	ICPMS110529190939-4	05/29/19 09:39	103	
ICB	ICPMS110529190957-4	05/29/19 09:57	98	
ICVLL	ICPMS110529191013-4	05/29/19 10:13	99.90	
ICSA	ICPMS110529191018-4	05/29/19 10:18	101	
ICSAB	ICPMS110529191023-4	05/29/19 10:23	105	
CCV	ICPMS110529191750-2	05/29/19 17:50	96.50	
CCB	ICPMS110529191755-2	05/29/19 17:55	93.90	
ICSA	ICPMS110529191800-2	05/29/19 18:00	92.10	
ICSAB	ICPMS110529191805-2	05/29/19 18:05	94.80	
CCV	ICPMS110529192017	05/29/19 20:17	96.10	
CCB	ICPMS110529192032	05/29/19 20:32	92.80	
ICSA	ICPMS110529192037	05/29/19 20:37	91.30	
ICSAB	ICPMS110529192042	05/29/19 20:42	95.10	
CCV	ICPMS110529192203	05/29/19 22:03	109	
CCB	ICPMS110529192209	05/29/19 22:09	107	
CCV	ICPMS110529192331	05/29/19 23:31	97.80	
CCB	ICPMS110529192336	05/29/19 23:36	98	
ICSA	ICPMS110529192342	05/29/19 23:42	95	
ICSAB	ICPMS110529192347	05/29/19 23:47	94.40	
OS	L1102352-01	05/29/19 18:36	90.70	
OS	L1102352-10	05/29/19 18:57	92.50	
WW-20190524-002-DAY 22	L1102841-01	05/29/19 22:40	89.90	
BLANK	R3416034-1	05/29/19 18:21	90.30	
LCS	R3416034-2	05/29/19 18:26	91.50	
LCSD	R3416034-3	05/29/19 18:31	91.30	
SD	R3416034-4	05/29/19 18:42	97.30	
MS	R3416034-5	05/29/19 18:47	95.70	
MSD	R3416034-6	05/29/19 18:52	93.50	
MS	R3416034-7	05/29/19 19:02	91	
MSD	R3416034-8	05/29/19 19:07	92.50	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1102841	**Calibration (begin) date/time:**	05/31/19 10:18
Instrument ID:	ICPMS10	**Calibration (end) date/time:**	05/31/19 10:41
Analytical Method:	200.8	**Analytical Run:**	053119ICPMS10A

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
CHROMIUM	0.0010	.00089851	89.90	0.0020	.002185257	109
COBALT	0.0010	.001050081	105	0.0020	.002085019	104
NICKEL	0.0010	.001163867	116	0.0020	.002152684	108
COPPER	0.0010	.001063161	106	0.0020	.002118259	106
ZINC	0.0010	.000864912	86.50	0.0020	.00258177	129
ARSENIC	0.0010	.001061668	106	0.0020	.001972075	98.60
SILVER	0.0010	.001044424	104	0.0020	.001992631	99.60
CADMIUM	0.0010	.001106617	111	0.0020	.002013186	101
TIN	0.0010	.000979944	98	0.0020	.001907566	95.40
ANTIMONY	0.0010	.001119753	112	0.0020	.002066511	103
THALLIUM	0.0010	.000973741	97.40	0.0020	.001992071	99.60
LEAD	0.0010	.001021763	102	0.0020	.002038876	102
File ID:		20190531101811			20190531102246	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1102841	**Calibration (begin) date/time:**	05/31/19 10:18
Instrument ID:	ICPMS10	**Calibration (end) date/time:**	05/31/19 10:41
Analytical Method:	200.8	**Analytical Run:**	053119ICPMS10A

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
CHROMIUM	0.01	.009454712	94.50	0.05	.05027718	101
COBALT	0.01	.01000119	100	0.05	.04986364	99.70
NICKEL	0.01	.009510354	95.10	0.05	.04998948	100
COPPER	0.01	.01038834	104	0.05	.05148715	103
ZINC	0.01	.01012944	101	0.05	.04942976	98.90
ARSENIC	0.01	.009645422	96.50	0.05	.04945075	98.90
SILVER	0.01	.01009089	101	0.05	.0510787	102
CADMIUM	0.01	.01006422	101	0.05	.0508792	102
TIN	0.01	.01050223	105	0.05	.05079263	102
ANTIMONY	0.01	.009776382	97.80	0.05	.05006712	100
THALLIUM	0.01	.009986463	99.90	0.05	.05040139	101
LEAD	0.01	.009910258	99.10	0.05	.05069815	101
File ID:		20190531102722			20190531103156	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1102841	**Calibration (begin) date/time:**	05/31/19 10:18
Instrument ID:	ICPMS10	**Calibration (end) date/time:**	05/31/19 10:41
Analytical Method:	200.8	**Analytical Run:**	053119ICPMS10A

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
CHROMIUM	0.10	.09873645	98.70	0.20	.2005884	100
COBALT	0.10	.09858414	98.60	0.20	.2007409	100
NICKEL	0.10	.09838125	98.40	0.20	.2008341	100
COPPER	0.10	.1009284	101	0.20	.1991431	99.60
ZINC	0.10	.09890074	98.90	0.20	.2006806	100
ARSENIC	0.10	.09965247	99.70	0.20	.2003288	100
SILVER	0.10	.1016455	102	0.20	.1989029	99.50
CADMIUM	0.10	.1001647	100	0.20	.199694	99.80
TIN	0.10	.1007545	101	0.20	.1994005	99.70
ANTIMONY	0.10	.1003769	100	0.20	.1998047	99.90
THALLIUM	0.10	.1004379	100	0.20	.1996816	99.80
LEAD	0.10	.09971378	99.70	0.20	.1999726	100
File ID:		20190531103632			20190531104107	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1102841	**Calibration (begin) date/time:**	05/31/19 10:18
Instrument ID:	ICPMS10	**Calibration (end) date/time:**	05/31/19 10:41
Analytical Method:	200.8	**Analytical Run:**	053119ICPMS10A

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
SELENIUM	0.0010	.00094172	94.20	0.0020	.001897646	94.90
File ID:		20190531101811			20190531102246	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1102841	**Calibration (begin) date/time:**	05/31/19 10:18
Instrument ID:	ICPMS10	**Calibration (end) date/time:**	05/31/19 10:41
Analytical Method:	200.8	**Analytical Run:**	053119ICPMS10A

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
SELENIUM	0.01	.009893926	98.90	0.05	.04991689	99.80
File ID:		20190531102722			20190531103156	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1102841	**Calibration (begin) date/time:**	05/31/19 10:18
Instrument ID:	ICPMS10	**Calibration (end) date/time:**	05/31/19 10:41
Analytical Method:	200.8	**Analytical Run:**	053119ICPMS10A

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
SELENIUM	0.10	.1022981	102	0.20	.1988783	99.40
File ID:		20190531103632			20190531104107	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1102841	**Calibration (begin) date/time:**	05/29/19 09:08
Instrument ID:	ICPMS11	**Calibration (end) date/time:**	05/29/19 09:34
Analytical Method:	200.8	**Analytical Run:**	052919ICPMS11

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
CHROMIUM	0.0010	.001017997	102	0.0020	.001985903	99.30
COBALT	0.0010	.001051099	105	0.0020	.00211204	106
NICKEL	0.0010	.000968331	96.80	0.0020	.002067858	103
COPPER	0.0010	.000946462	94.60	0.0020	.00206921	103
ZINC	0.0010	.000468419	46.80	0.0020	.001573987	78.70
ARSENIC	0.0010	.001003986	100	0.0020	.002093431	105
SILVER	0.0010	.001022935	102	0.0020	.002141328	107
CADMIUM	0.0010	.001022645	102	0.0020	.002152738	108
TIN	0.0010	.000949282	94.90	0.0020	.001941283	97.10
ANTIMONY	0.0010	.000982643	98.30	0.0020	.002077628	104
THALLIUM	0.0010	.000992425	99.20	0.0020	.002039727	102
LEAD	0.0010	.001009399	101	0.0020	.002113255	106
File ID:		20190529090851			20190529091403	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1102841	**Calibration (begin) date/time:**	05/29/19 09:08
Instrument ID:	ICPMS11	**Calibration (end) date/time:**	05/29/19 09:34
Analytical Method:	200.8	**Analytical Run:**	052919ICPMS11

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
CHROMIUM	0.01	.01015005	102	0.05	.05019193	100
COBALT	0.01	.0103627	104	0.05	.05072796	101
NICKEL	0.01	.01014625	101	0.05	.05073182	101
COPPER	0.01	.01015781	102	0.05	.05036986	101
ZINC	0.01	.01033693	103	0.05	.04984375	99.70
ARSENIC	0.01	.01050767	105	0.05	.05024247	100
SILVER	0.01	.01032288	103	0.05	.0527177	105
CADMIUM	0.01	.01012463	101	0.05	.05194406	104
TIN	0.01	.01014493	101	0.05	.05113101	102
ANTIMONY	0.01	.009786034	97.90	0.05	.05011253	100
THALLIUM	0.01	.009935667	99.40	0.05	.05098749	102
LEAD	0.01	.009991158	99.90	0.05	.05099962	102
File ID:		20190529091914			20190529092424	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1102841	**Calibration (begin) date/time:**	05/29/19 09:08
Instrument ID:	ICPMS11	**Calibration (end) date/time:**	05/29/19 09:34
Analytical Method:	200.8	**Analytical Run:**	052919ICPMS11

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
CHROMIUM	0.10	.100611	101	0.20	.1996391	99.80
COBALT	0.10	.1016008	102	0.20	.1989981	99.50
NICKEL	0.10	.1008346	101	0.20	.1993919	99.70
COPPER	0.10	.1012627	101	0.20	.1992679	99.60
ZINC	0.10	.1016512	102	0.20	.1992036	99.60
ARSENIC	0.10	.1003765	100	0.20	.1997248	99.90
SILVER	0.10	.1023259	102	0.20	.19814	99.10
CADMIUM	0.10	.09929995	99.30	0.20	.1998561	99.90
TIN	0.10	.09924803	99.20	0.20	.2000868	100
ANTIMONY	0.10	.1007694	101	0.20	.1995972	99.80
THALLIUM	0.10	.1024963	102	0.20	.1985078	99.30
LEAD	0.10	.1003864	100	0.20	.1995562	99.80
File ID:		20190529092936			20190529093447	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1102841	**Calibration (begin) date/time:**	05/29/19 09:08
Instrument ID:	ICPMS11	**Calibration (end) date/time:**	05/29/19 09:34
Analytical Method:	200.8	**Analytical Run:**	052919ICPMS11

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
SELENIUM	0.0010	.000793717	79.40	0.0020	.001623429	81.20
File ID:		20190529090851			20190529091403	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1102841	**Calibration (begin) date/time:**	05/29/19 09:08
Instrument ID:	ICPMS11	**Calibration (end) date/time:**	05/29/19 09:34
Analytical Method:	200.8	**Analytical Run:**	052919ICPMS11

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
SELENIUM	0.01	.009180757	91.80	0.05	.04954439	99.10
File ID:		20190529091914			20190529092424	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1102841	**Calibration (begin) date/time:**	05/29/19 09:08
Instrument ID:	ICPMS11	**Calibration (end) date/time:**	05/29/19 09:34
Analytical Method:	200.8	**Analytical Run:**	052919ICPMS11

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
SELENIUM	0.10	.09994052	99.90	0.20	.2001894	100
File ID:		20190529092936			20190529093447	

16B-IN

ICP/MS INITIAL CALIBRATION

SDG:	L1102841	**Calibration (begin) date/time:**	05/31/19 10:18
Instrument ID:	ICPMS10	**Calibration (end) date/time:**	05/31/19 10:41
Analytical Method:	200.8	**Analytical Run:**	053119ICPMS10A

Analyte	Mass	Cal. Type	Weightage	Corr.	Slope	Incpt
CHROMIUM	52	8	5	0.999968	121.7356	0.320335
COBALT	59	8	5	0.999963	194.0539	0.008718
NICKEL	60	8	5	0.99995	51.8691	0.029427
COPPER	63	8	5	0.999956	40.96922	0.008038
ZINC	66	8	5	0.999966	23.30947	0.022294
ARSENIC	75	8	5	0.999993	20.56547	0.001683
SILVER	107	8	5	0.999935	9.209994	0.000223
CADMIUM	111	8	5	0.999989	1.233774	0.000011
TIN	118	8	5	0.999979	2.443218	0.000347
ANTIMONY	121	8	5	0.999996	3.131191	0.000112
THALLIUM	205	8	5	0.999994	1.820748	0.000013
LEAD	208	8	5	0.999992	1.343417	0.00009

Calibration Type

8 = Linear Regression Forced through Blank

Weightage

5 = None

16B-IN

ICP/MS INITIAL CALIBRATION

SDG:	L1102841	**Calibration (begin) date/time:**	05/31/19 10:18
Instrument ID:	ICPMS10	**Calibration (end) date/time:**	05/31/19 10:41
Analytical Method:	200.8	**Analytical Run:**	053119ICPMS10A

Analyte	Mass	Cal. Type	Weightage	Corr.	Slope	Incpt
SELENIUM	78	8	5	0.999905	0.147839	0.000033

Calibration Type

8 = Linear Regression Forced through Blank

Weightage

5 = None

16B-IN

ICP/MS INITIAL CALIBRATION

SDG:	L1102841	**Calibration (begin) date/time:**	05/29/19 09:08
Instrument ID:	ICPMS11	**Calibration (end) date/time:**	05/29/19 09:34
Analytical Method:	200.8	**Analytical Run:**	052919ICPMS11

Analyte	Mass	Cal. Type	Weightage	Corr.	Slope	Incpt
CHROMIUM	52	8	5	0.999993	116.8262	0.281186
COBALT	59	8	5	0.999948	214.1513	0.00862
NICKEL	60	8	5	0.99998	59.25147	0.033648
COPPER	63	8	5	0.99997	41.93699	0.010312
ZINC	66	8	5	0.999941	24.00204	0.042517
ARSENIC	75	8	5	0.999995	18.93885	0.000697
SILVER	107	8	5	0.9998	9.833024	0.000056
CADMIUM	111	8	5	0.999942	1.215482	0.000009
TIN	118	8	5	0.999973	2.384398	0.000301
ANTIMONY	121	8	5	0.999988	2.835855	0.000239
THALLIUM	205	8	5	0.999872	2.086994	0.000021
LEAD	208	8	5	0.999984	1.447089	0.000089

Calibration Type

8 = Linear Regression Forced through Blank

Weightage

5 = None

16B-IN

ICP/MS INITIAL CALIBRATION

SDG:	L1102841	**Calibration (begin) date/time:**	05/29/19 09:08
Instrument ID:	ICPMS11	**Calibration (end) date/time:**	05/29/19 09:34
Analytical Method:	200.8	**Analytical Run:**	052919ICPMS11

Analyte	Mass	Cal. Type	Weightage	Corr.	Slope	Incpt
SELENIUM	78	8	5	0.999994	0.158422	0.00003

Calibration Type

8 = Linear Regression Forced through Blank

Weightage

5 = None

2540 C-2011 Gravimetric Analysis

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
WW-20190524-002-DAY 22

Lab Sample ID:	L1102841-01	**SDG:**	L1102841
Client Sample ID:	WW-20190524-002-DAY 22	**Collected Date/Time:**	05/24/19 14:00
Lab File ID:	09	**Received Date/Time:**	05/27/19 08:45
Instrument ID:	WETBAL10	**Preparation Date/Time:**	05/31/19 19:42
Analytical Batch:	WG1289308	**Analysis Date/Time:**	05/31/19 22:34
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	1840		14.1	50.0	50.0

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416937-1

Lab Sample ID:	R3416937-1	**SDG:**	L1102841
Client Sample ID:	BLANK	**Collected Date/Time:**	
Lab File ID:	01	**Received Date/Time:**	
Instrument ID:	WETBAL10	**Preparation Date/Time:**	05/31/19 19:41
Analytical Batch:	WG1289308	**Analysis Date/Time:**	05/31/19 22:34
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.:
R3416937-3

Lab Sample ID:	R3416937-3	**SDG:**	L1102841
Client Sample ID:	DUP	**Collected Date/Time:**	05/24/19 14:00
Lab File ID:	02	**Received Date/Time:**	05/27/19 08:45
Instrument ID:	WETBAL10	**Preparation Date/Time:**	05/31/19 19:42
Analytical Batch:	WG1289308	**Analysis Date/Time:**	05/31/19 22:34
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	1820		14.1	50	50.0

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416937-2

Lab Sample ID:	R3416937-2	**SDG:**	L1102841
Client Sample ID:	LCS	**Collected Date/Time:**	
Lab File ID:	03	**Received Date/Time:**	
Instrument ID:	WETBAL10	**Preparation Date/Time:**	05/31/19 19:41
Analytical Batch:	WG1289308	**Analysis Date/Time:**	05/31/19 22:34
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	8720		28.2	100	100

3-IN BLANKS

SDG:	L1102841	**Calibration (begin) date/time:**	_____
Instrument ID:	WETBAL10	**Calibration (end) date/time:**	_____
Analytical Method:	2540 C-2011	**Analytical Run:**	WG1289308

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

6-IN

DUPLICATES

L1102841-01

SAMPLE NO.:
R3416937-3

DUP Sample / File ID:	R3416937-3 / 02	**SDG:**	L1102841
OS Sample / File ID:	L1102841-01 / 09	**Analytical Batch:**	WG1289308
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	1840	1820	1.09	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

L1102841-01

SAMPLE NO.:
R3416937-2

LCS Sample / File ID:	R3416937-2 / 03	**SDG:**	L1102841
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1289308
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	8720		99.1		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:	L1102841	**Analytical Method:**	2540 C-2011
Instrument ID:	WETBAL10	**Calibration Start Date:**	_____
Analytical Run:	WG1289308	**Calibration End Date:**	_____

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
BLANK	R3416937-1	01	05/31/19 22:34	1	WG1289308
DUP	R3416937-3	02	05/31/19 22:34	1	WG1289308
LCS	R3416937-2	03	05/31/19 22:34	1	WG1289308
WW-20190524-002-DAY 22	L1102841-01	09	05/31/19 22:34	1	WG1289308

2540 D-2011 Gravimetric Analysis

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
WW-20190524-002-DAY 22

Lab Sample ID:	L1102841-01	**SDG:**	L1102841
Client Sample ID:	WW-20190524-002-DAY 22	**Collected Date/Time:**	05/24/19 14:00
Lab File ID:	12	**Received Date/Time:**	05/27/19 08:45
Instrument ID:	WETBAL3	**Preparation Date/Time:**	05/29/19 13:51
Analytical Batch:	WG1287406	**Analysis Date/Time:**	05/29/19 15:21
Dilution Factor:	1	**Prep Method:**	SM 2540 D
Analytical Method:	2540 D-2011	**Sample Vol Used:**	995 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	0.400	J	0.354	2.53	2.53

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416213-1

Lab Sample ID:	R3416213-1	**SDG:**	L1102841
Client Sample ID:	BLANK	**Collected Date/Time:**	
Lab File ID:	01	**Received Date/Time:**	
Instrument ID:	WETBAL3	**Preparation Date/Time:**	05/29/19 13:50
Analytical Batch:	WG1287406	**Analysis Date/Time:**	05/29/19 15:21
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.:
R3416213-3

Lab Sample ID:	R3416213-3	**SDG:**	L1102841
Client Sample ID:	DUP	**Collected Date/Time:**	05/22/19 08:15
Lab File ID:	02	**Received Date/Time:**	05/22/19 15:44
Instrument ID:	WETBAL3	**Preparation Date/Time:**	05/29/19 13:51
Analytical Batch:	WG1287406	**Analysis Date/Time:**	05/29/19 15:21
Dilution Factor:	1	**Prep Method:**	SM 2540 D
Analytical Method:	2540 D-2011	**Sample Vol Used:**	3 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	11500		117	833	833

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416213-2

Lab Sample ID:	R3416213-2	**SDG:**	L1102841
Client Sample ID:	LCS	**Collected Date/Time:**	
Lab File ID:	03	**Received Date/Time:**	
Instrument ID:	WETBAL3	**Preparation Date/Time:**	05/29/19 13:50
Analytical Batch:	WG1287406	**Analysis Date/Time:**	05/29/19 15:21
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	792		14.0	100	100

3-IN BLANKS

SDG:	L1102841	**Calibration (begin) date/time:**	_____
Instrument ID:	WETBAL3	**Calibration (end) date/time:**	_____
Analytical Method:	2540 D-2011	**Analytical Run:**	WG1287406

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

6-IN

DUPLICATES

L1102841-01

SAMPLE NO.:
R3416213-3

DUP Sample / File ID:	R3416213-3 / 02	**SDG:**	L1102841
OS Sample / File ID:	L1101482-01 / 05	**Analytical Batch:**	WG1287406
Instrument ID:	WETBAL3	**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	11200	11500	2.64	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

L1102841-01

SAMPLE NO.:
R3416213-2

LCS Sample / File ID:	R3416213-2 / 03	**SDG:**	L1102841
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1287406
Instrument ID:	WETBAL3	**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	792		102		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:	L1102841	**Analytical Method:**	2540 D-2011
Instrument ID:	WETBAL3	**Calibration Start Date:**	_____
Analytical Run:	WG1287406	**Calibration End Date:**	_____

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
BLANK	R3416213-1	01	05/29/19 15:21	1	WG1287406
DUP	R3416213-3	02	05/29/19 15:21	1	WG1287406
LCS	R3416213-2	03	05/29/19 15:21	1	WG1287406
OS	L1101482-01	05	05/29/19 15:21	1	WG1287406
WW-20190524-002-DAY 22	L1102841-01	12	05/29/19 15:21	1	WG1287406

300.0 Wet Chemistry

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
WW-20190524-002-DAY 22

Lab Sample ID:	L1102841-01	**SDG:**	L1102841
Client Sample ID:	WW-20190524-002-DAY 22	**Collected Date/Time:**	05/24/19 14:00
Lab File ID:	41.0000.TXT	**Received Date/Time:**	05/27/19 08:45
Instrument ID:	IC-15	**Preparation Date/Time:**	05/28/19 20:21
Analytical Batch:	WG1287349	**Analysis Date/Time:**	05/28/19 20:21
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	451		0.519	1.00	10.0

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415485-1

Lab Sample ID:	R3415485-1	**SDG:**	L1102841
Client Sample ID:	BLANK	**Collected Date/Time:**	
Lab File ID:	10.0000.TXT	**Received Date/Time:**	
Instrument ID:	IC-15	**Preparation Date/Time:**	05/28/19 12:01
Analytical Batch:	WG1287349	**Analysis Date/Time:**	05/28/19 12:01
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.:
R3415485-2

Lab Sample ID:	R3415485-2	**SDG:**	L1102841
Client Sample ID:	LCS	**Collected Date/Time:**	
Lab File ID:	11.0000.TXT	**Received Date/Time:**	
Instrument ID:	IC-15	**Preparation Date/Time:**	05/28/19 12:16
Analytical Batch:	WG1287349	**Analysis Date/Time:**	05/28/19 12:16
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	40.0		0.0519	1	1.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415485-3

Lab Sample ID:	R3415485-3	**SDG:**	L1102841
Client Sample ID:	DUP	**Collected Date/Time:**	05/13/19 10:08
Lab File ID:	16.0000.TXT	**Received Date/Time:**	05/18/19 08:45
Instrument ID:	IC-15	**Preparation Date/Time:**	05/28/19 14:01
Analytical Batch:	WG1287349	**Analysis Date/Time:**	05/28/19 14:01
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	11.2		0.0519	1	1.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415485-8

Lab Sample ID:	R3415485-8	**SDG:**	L1102841
Client Sample ID:	DUP	**Collected Date/Time:**	05/21/19 11:55
Lab File ID:	48.0000.TXT	**Received Date/Time:**	05/22/19 08:45
Instrument ID:	IC-15	**Preparation Date/Time:**	05/29/19 10:11
Analytical Batch:	WG1287349	**Analysis Date/Time:**	05/29/19 10:11
Dilution Factor:	5	**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	101		0.0519	1	1.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415485-4

Lab Sample ID:	R3415485-4	**SDG:**	L1102841
Client Sample ID:	MS	**Collected Date/Time:**	05/13/19 10:08
Lab File ID:	17.0000.TXT	**Received Date/Time:**	05/18/19 08:45
Instrument ID:	IC-15	**Preparation Date/Time:**	05/28/19 14:16
Analytical Batch:	WG1287349	**Analysis Date/Time:**	05/28/19 14:16
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	62.4		0.0519	1	1.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415485-7

Lab Sample ID:	R3415485-7	**SDG:**	L1102841
Client Sample ID:	MS	**Collected Date/Time:**	05/21/19 11:55
Lab File ID:	34.0000.TXT	**Received Date/Time:**	05/22/19 08:45
Instrument ID:	IC-15	**Preparation Date/Time:**	05/28/19 18:36
Analytical Batch:	WG1287349	**Analysis Date/Time:**	05/28/19 18:36
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	147	E	0.0519	1	1.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415485-5

Lab Sample ID:	R3415485-5	**SDG:**	L1102841
Client Sample ID:	MSD	**Collected Date/Time:**	05/13/19 10:08
Lab File ID:	18.0000.TXT	**Received Date/Time:**	05/18/19 08:45
Instrument ID:	IC-15	**Preparation Date/Time:**	05/28/19 14:31
Analytical Batch:	WG1287349	**Analysis Date/Time:**	05/28/19 14:31
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	62.2		0.0519	1	1.00

2-IN

CALIBRATION VERIFICATION

SDG:	L1102841	**Calibration (begin) date/time:**	05/16/19 11:37
Instrument ID:	IC-15	**Calibration (end) date/time:**	05/16/19 12:52
Analytical Method:	300.0	**Analytical Run:**	052819
Concentration Units:	mg/l		

	ICV				**CCV**				**CCV**			
Sample ID:	IC-150528191146				IC-150528191446				IC-150528191752			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
CHLORIDE	50	50.9023	102		50	49.5858	99.20		50	49.6624	99.30	

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

2-IN

CALIBRATION VERIFICATION

SDG:	L1102841	**Calibration (begin) date/time:**	05/16/19 11:37
Instrument ID:	IC-15	**Calibration (end) date/time:**	05/16/19 12:52
Analytical Method:	300.0	**Analytical Run:**	052819
Concentration Units:	mg/l		

	CCV				**CCV**				**CCV**			
Sample ID:	IC-150528192051				IC-150529190926				IC-150529191026			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
CHLORIDE	50	49.731	99.50		50	50.8242	102		50	50.5885	101	

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

3-IN BLANKS

SDG:	L1102841	**Calibration (begin) date/time:**	05/16/19 11:37
Instrument ID:	IC-15	**Calibration (end) date/time:**	05/16/19 12:52
Analytical Method:	300.0	**Analytical Run:**	052819

Sample ID:	**BLANK Result**	**BLANK Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**
File ID:	10.0000.TXT		20.0000.TXT		32.0000.TXT		44.0000.TXT	
Analyte	mg/l		mg/l		mg/l		mg/l	
CHLORIDE	U		-0.06930	U	-0.004100	U	-0.05730	U

3-IN BLANKS

SDG:	L1102841	**Calibration (begin) date/time:**	05/16/19 11:37
Instrument ID:	IC-15	**Calibration (end) date/time:**	05/16/19 12:52
Analytical Method:	300.0	**Analytical Run:**	052819

Sample ID:	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**
File ID:	46.0000.TXT		50.0000.TXT	
Analyte	mg/l		mg/l	
CHLORIDE	-0.06660	U	-0.03880	U

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1102841-01

SAMPLE NO.:
R3415485-4
R3415485-5

MS Sample / File ID:	R3415485-4 / 17.0000.TXT	**SDG:**	L1102841
MSD Sample / File ID:	R3415485-5 / 18.0000.TXT	**Analytical Batch:**	WG1287349
OS Sample / File ID:	L1100385-01 / 15.0000.TXT	**Matrix:**	WW
Instrument ID:	IC-15		
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	11.2	62.4	62.2	102	102	1	80.0 - 120	0.249	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

L1102841-01

SAMPLE NO.:
R3415485-7

MS Sample / File ID:	R3415485-7 / 34.0000.TXT	**SDG:**	L1102841
MSD Sample / File ID:	_____	**Analytical Batch:**	WG1287349
OS Sample / File ID:	L1101309-01 / 30.0000.TXT	**Matrix:**	WW
Instrument ID:	IC-15		
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	101	147		91.3		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

L1102841-01

SAMPLE NO.:
R3415485-3

DUP Sample / File ID:	R3415485-3 / 16.0000.TXT	**SDG:**	L1102841
OS Sample / File ID:	L1100385-01 / 15.0000.TXT	**Analytical Batch:**	WG1287349
Instrument ID:	IC-15	**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	11.2	11.2	0.473	20

*: Value outside the established quality control limits.

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

6-IN

DUPLICATES

L1102841-01

SAMPLE NO.:
R3415485-8

DUP Sample / File ID:	R3415485-8 / 48.0000.TXT	**SDG:**	L1102841
OS Sample / File ID:	L1101309-01 / 47.0000.TXT	**Analytical Batch:**	WG1287349
Instrument ID:	IC-15	**Dilution Factor:**	5
Analytical Method:	300.0	**Matrix:**	WW

Analyte	**OS Result**	**DUP Result**	**RPD**	**RPD Limits**
	mg/l	*mg/l*	*mg/l*	*mg/l*
Chloride	100	101	0.0693	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

L1102841-01

SAMPLE NO.:
R3415485-2

LCS Sample / File ID:	R3415485-2 / 11.0000.TXT	**SDG:**	L1102841
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1287349
Instrument ID:	IC-15	**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	40.0		100		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:	L1102841	**Analytical Method:**	300.0
Instrument ID:	IC-15	**Calibration Start Date:**	05/16/19 11:37
Analytical Run:	051619	**Calibration End Date:**	05/16/19 12:52

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
CAL	STD 1	02.0000.TXT	05/16/19 11:37	1	
CAL	STD 2	03.0000.TXT	05/16/19 11:52	1	
CAL	STD 3	04.0000.TXT	05/16/19 12:07	1	
CAL	STD 4	05.0000.TXT	05/16/19 12:22	1	
CAL	STD 5	06.0000.TXT	05/16/19 12:37	1	
CAL	STD 6	07.0000.TXT	05/16/19 12:52	1	

12-IN

ANALYSIS LOG

SDG:	L1102841	**Analytical Method:**	300.0
Instrument ID:	IC-15	**Calibration Start Date:**	05/16/19 11:37
Analytical Run:	052819	**Calibration End Date:**	05/16/19 12:52

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
ICV	IC-150528191146	09.0000.TXT	05/28/19 11:46	1	
BLANK	R3415485-1	10.0000.TXT	05/28/19 12:01	1	WG1287349
LCS	R3415485-2	11.0000.TXT	05/28/19 12:16	1	WG1287349
RL	IC-150528191231	12.0000.TXT	05/28/19 12:31	1	
OS	L1100385-01	15.0000.TXT	05/28/19 13:46	1	WG1287349
DUP	R3415485-3	16.0000.TXT	05/28/19 14:01	1	WG1287349
MS	R3415485-4	17.0000.TXT	05/28/19 14:16	1	WG1287349
MSD	R3415485-5	18.0000.TXT	05/28/19 14:31	1	WG1287349
CCV	IC-150528191446	19.0000.TXT	05/28/19 14:46	1	
CCB	IC-150528191501	20.0000.TXT	05/28/19 15:01	1	
OS	L1101309-01	30.0000.TXT	05/28/19 17:37	1	WG1287349
CCV	IC-150528191752	31.0000.TXT	05/28/19 17:52	1	
CCB	IC-150528191807	32.0000.TXT	05/28/19 18:07	1	
MS	R3415485-7	34.0000.TXT	05/28/19 18:36	1	WG1287349
WW-20190524-002-DAY 22	L1102841-01	41.0000.TXT	05/28/19 20:21	10	WG1287349
CCV	IC-150528192051	43.0000.TXT	05/28/19 20:51	1	
CCB	IC-150528192106	44.0000.TXT	05/28/19 21:06	1	
CCV	IC-150529190926	45.0000.TXT	05/29/19 09:26	1	
CCB	IC-150529190941	46.0000.TXT	05/29/19 09:41	1	
OS	L1101309-01	47.0000.TXT	05/29/19 09:56	5	WG1287349
DUP	R3415485-8	48.0000.TXT	05/29/19 10:11	5	WG1287349
CCV	IC-150529191026	49.0000.TXT	05/29/19 10:26	1	
CCB	IC-150529191040	50.0000.TXT	05/29/19 10:40	1	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1102841	**Calibration (begin) date/time:**	05/16/19 11:37
Instrument ID:	IC-15	**Calibration (end) date/time:**	05/16/19 12:52
Analytical Method:	300.0	**Analytical Run:**	052819

Analyte	**Std Conc**	**Result**	**Rec.** %	**Std Conc**	**Result**	**Rec.** %
CHLORIDE	1	.9652	96.50	5	5.1619	103
File ID:		02.0000.TXT			03.0000.TXT	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1102841	**Calibration (begin) date/time:**	05/16/19 11:37
Instrument ID:	IC-15	**Calibration (end) date/time:**	05/16/19 12:52
Analytical Method:	300.0	**Analytical Run:**	052819

Analyte	**Std Conc**	**Result**	**Rec.** %	**Std Conc**	**Result**	**Rec.** %
CHLORIDE	10	10.2023	102	25	24.5609	98.20
File ID:		04.0000.TXT			05.0000.TXT	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1102841	**Calibration (begin) date/time:**	05/16/19 11:37
Instrument ID:	IC-15	**Calibration (end) date/time:**	05/16/19 12:52
Analytical Method:	300.0	**Analytical Run:**	052819

Analyte	**Std Conc**	**Result**	**Rec.** %	**Std Conc**	**Result**	**Rec.** %
CHLORIDE	50	49.8647	99.70	100	100.245	100
File ID:		06.0000.TXT			07.0000.TXT	

16C-IN

GENERAL CHEMISTRY
INITIAL CALIBRATION

SDG:	L1102841	**Calibration (begin) date/time:**	05/16/19 11:37
Instrument ID:	IC-15	**Calibration (end) date/time:**	05/16/19 12:52
Analytical Method:	300.0	**Analytical Run:**	052819

Analyte	Cal. Type	Weightage	Corr.	Coef1	Coef2	Slope	Incpt	% RSD
CHLORIDE	5	1	0.99994			0.07	0.01	3.207

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-20190524-002-DAY 22

Lab Sample ID:	L1102841-01	**SDG:**	L1102841
Client Sample ID:	WW-20190524-002-DAY 22	**Collected Date/Time:**	05/24/19 14:00
Lab File ID:	20190529101200	**Received Date/Time:**	05/27/19 08:45
Instrument ID:	FS3100-01	**Preparation Date/Time:**	05/29/19 10:12
Analytical Batch:	WG1287198	**Analysis Date/Time:**	05/29/19 10:12
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	0.0880	J	0.0317	0.100	0.100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415723-1

Lab Sample ID:	R3415723-1	**SDG:**	L1102841
Client Sample ID:	BLANK	**Collected Date/Time:**	
Lab File ID:	20190529092300	**Received Date/Time:**	
Instrument ID:	FS3100-01	**Preparation Date/Time:**	05/29/19 09:23
Analytical Batch:	WG1287198	**Analysis Date/Time:**	05/29/19 09:23
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	U		0.0317	0.10	0.100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415723-3

Lab Sample ID:	R3415723-3	**SDG:**	L1102841
Client Sample ID:	DUP	**Collected Date/Time:**	05/20/19 07:00
Lab File ID:	20190529092700	**Received Date/Time:**	05/21/19 08:45
Instrument ID:	FS3100-01	**Preparation Date/Time:**	05/29/19 09:27
Analytical Batch:	WG1287198	**Analysis Date/Time:**	05/29/19 09:27
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	0.000		0.0317	0.10	0.100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415723-5

Lab Sample ID:	R3415723-5	**SDG:**	L1102841
Client Sample ID:	DUP	**Collected Date/Time:**	05/21/19 12:56
Lab File ID:	20190529095600	**Received Date/Time:**	05/22/19 08:45
Instrument ID:	FS3100-01	**Preparation Date/Time:**	05/29/19 09:56
Analytical Batch:	WG1287198	**Analysis Date/Time:**	05/29/19 09:56
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	0.768		0.0317	0.10	0.100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415723-2

Lab Sample ID:	R3415723-2	**SDG:**	L1102841
Client Sample ID:	LCS	**Collected Date/Time:**	
Lab File ID:	20190529092400	**Received Date/Time:**	
Instrument ID:	FS3100-01	**Preparation Date/Time:**	05/29/19 09:24
Analytical Batch:	WG1287198	**Analysis Date/Time:**	05/29/19 09:24
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	6.75		0.0317	0.10	0.100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415723-4

Lab Sample ID:	R3415723-4	**SDG:**	L1102841
Client Sample ID:	MS	**Collected Date/Time:**	05/22/19 08:00
Lab File ID:	20190529093000	**Received Date/Time:**	05/23/19 08:45
Instrument ID:	FS3100-01	**Preparation Date/Time:**	05/29/19 09:30
Analytical Batch:	WG1287198	**Analysis Date/Time:**	05/29/19 09:30
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	4.97		0.0317	0.10	0.100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415723-6

Lab Sample ID:	R3415723-6	**SDG:**	L1102841
Client Sample ID:	MS	**Collected Date/Time:**	05/21/19 13:54
Lab File ID:	20190529100400	**Received Date/Time:**	05/22/19 08:45
Instrument ID:	FS3100-01	**Preparation Date/Time:**	05/29/19 10:04
Analytical Batch:	WG1287198	**Analysis Date/Time:**	05/29/19 10:04
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	5.50		0.0317	0.10	0.100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415723-7

Lab Sample ID:	R3415723-7	**SDG:**	L1102841
Client Sample ID:	MSD	**Collected Date/Time:**	05/21/19 13:54
Lab File ID:	20190529100500	**Received Date/Time:**	05/22/19 08:45
Instrument ID:	FS3100-01	**Preparation Date/Time:**	05/29/19 10:05
Analytical Batch:	WG1287198	**Analysis Date/Time:**	05/29/19 10:05
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	5.46		0.0317	0.10	0.100

2-IN

CALIBRATION VERIFICATION

SDG:	L1102841	**Calibration (begin) date/time:**	05/28/19 09:54
Instrument ID:	FS3100-01	**Calibration (end) date/time:**	05/28/19 10:02
Analytical Method:	350.1	**Analytical Run:**	052919_1
Concentration Units:	mg/l		

	ICV				**CCV**				**CCV**			
Sample ID:	FS3100-010529190921				FS3100-010529190938				FS3100-010529190959			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
AMMONIA NITROGEN	5	4.569	91.40		5	4.706	94.10		5	4.545	90.90	

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

2-IN

CALIBRATION VERIFICATION

SDG:	L1102841	**Calibration (begin) date/time:**	05/28/19 09:54
Instrument ID:	FS3100-01	**Calibration (end) date/time:**	05/28/19 10:02
Analytical Method:	350.1	**Analytical Run:**	052919_1
Concentration Units:	mg/l		

CCV

Sample ID: FS3100-010529191015

Analyte	True	Found	%R	%RSD
AMMONIA NITROGEN	5	4.629	92.60	

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

3-IN BLANKS

SDG:	L1102841	**Calibration (begin) date/time:**	05/28/19 09:54
Instrument ID:	FS3100-01	**Calibration (end) date/time:**	05/28/19 10:02
Analytical Method:	350.1	**Analytical Run:**	052919_1

Sample ID:	**BLANK Result**	**BLANK Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**
File ID:	20190529092300		20190529094000		20190529100100		20190529101600	
Analyte	mg/l		mg/l		mg/l		mg/l	
AMMONIA NITROGEN	U		-0.08800		-0.08600		-0.08800	

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1102841-01

SAMPLE NO.:
R3415723-4

MS Sample / File ID:	R3415723-4 / 20190529093000	**SDG:**	L1102841
MSD Sample / File ID:	_____	**Analytical Batch:**	WG1287198
OS Sample / File ID:	L1100763-02 / 20190529092900	**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	0.309	4.97		93.2		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

L1102841-01

SAMPLE NO.:
R3415723-6
R3415723-7

MS Sample / File ID:	R3415723-6 / 20190529100400	**SDG:**	L1102841
MSD Sample / File ID:	R3415723-7 / 20190529100500	**Analytical Batch:**	WG1287198
OS Sample / File ID:	L1101527-02 / 20190529095700	**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	0.937	5.50	5.46	91.2	90.5	1	90.0 - 110	0.639	10

*: Value outside the established quality control limits.

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

6-IN

DUPLICATES

L1102841-01

SAMPLE NO.:
R3415723-3

DUP Sample / File ID:	R3415723-3 / 20190529092700	**SDG:**	L1102841
OS Sample / File ID:	L1100763-01 / 20190529092600	**Analytical Batch:**	WG1287198
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	0.000	0.000	10

*: Value outside the established quality control limits.

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

6-IN

DUPLICATES

L1102841-01

SAMPLE NO.:
R3415723-5

DUP Sample / File ID:	R3415723-5 / 20190529095600	**SDG:**	L1102841
OS Sample / File ID:	L1101527-01 / 20190529095400	**Analytical Batch:**	WG1287198
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	0.764	0.768	0.522	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

L1102841-01

SAMPLE NO.:
R3415723-2

LCS Sample / File ID:	R3415723-2 / 20190529092400	**SDG:**	L1102841
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1287198
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	6.75		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:	L1102841	**Analytical Method:**	350.1
Instrument ID:	FS3100-01	**Calibration Start Date:**	05/28/19 09:54
Analytical Run:	052819_1	**Calibration End Date:**	05/28/19 10:02

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
CAL	10.0	20190528095400	05/28/19 09:54	1	
CAL	5.00	20190528095600	05/28/19 09:56	1	
CAL	2.50	20190528095700	05/28/19 09:57	1	
CAL	1.00	20190528095900	05/28/19 09:59	1	
CAL	0.10	20190528100000	05/28/19 10:00	1	
CAL	0.00	20190528100200	05/28/19 10:02	1	

12-IN

ANALYSIS LOG

SDG:	L1102841	**Analytical Method:**	350.1
Instrument ID:	FS3100-01	**Calibration Start Date:**	05/28/19 09:54
Analytical Run:	052919_1	**Calibration End Date:**	05/28/19 10:02

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
ICV	FS3100-010529190921	20190529092100	05/29/19 09:21	1	
BLANK	R3415723-1	20190529092300	05/29/19 09:23	1	WG1287198
LCS	R3415723-2	20190529092400	05/29/19 09:24	1	WG1287198
OS	L1100763-01	20190529092600	05/29/19 09:26	1	WG1287198
DUP	R3415723-3	20190529092700	05/29/19 09:27	1	WG1287198
OS	L1100763-02	20190529092900	05/29/19 09:29	1	WG1287198
MS	R3415723-4	20190529093000	05/29/19 09:30	1	WG1287198
CCV	FS3100-010529190938	20190529093800	05/29/19 09:38	1	
CCB	FS3100-010529190940	20190529094000	05/29/19 09:40	1	
OS	L1101527-01	20190529095400	05/29/19 09:54	1	WG1287198
DUP	R3415723-5	20190529095600	05/29/19 09:56	1	WG1287198
OS	L1101527-02	20190529095700	05/29/19 09:57	1	WG1287198
CCV	FS3100-010529190959	20190529095900	05/29/19 09:59	1	
CCB	FS3100-010529191001	20190529100100	05/29/19 10:01	1	
MS	R3415723-6	20190529100400	05/29/19 10:04	1	WG1287198
MSD	R3415723-7	20190529100500	05/29/19 10:05	1	WG1287198
WW-20190524-002-DAY 22	L1102841-01	20190529101200	05/29/19 10:12	1	WG1287198
CCV	FS3100-010529191015	20190529101500	05/29/19 10:15	1	
CCB	FS3100-010529191016	20190529101600	05/29/19 10:16	1	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1102841	**Calibration (begin) date/time:**	05/28/19 09:54
Instrument ID:	FS3100-01	**Calibration (end) date/time:**	05/28/19 10:02
Analytical Method:	350.1	**Analytical Run:**	052919_1

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
AMMONIA NITROGEN	10	9.923	99.20	5	5.113	102
File ID:		20190528095400			20190528095600	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1102841	**Calibration (begin) date/time:**	05/28/19 09:54
Instrument ID:	FS3100-01	**Calibration (end) date/time:**	05/28/19 10:02
Analytical Method:	350.1	**Analytical Run:**	052919_1

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
AMMONIA NITROGEN	2.50	2.587	103	1	.989	98.90
File ID:		20190528095700			20190528095900	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1102841	**Calibration (begin) date/time:**	05/28/19 09:54
Instrument ID:	FS3100-01	**Calibration (end) date/time:**	05/28/19 10:02
Analytical Method:	350.1	**Analytical Run:**	052919_1

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
AMMONIA NITROGEN	0.10	.074	74	0	-.086	
File ID:		20190528100000			20190528100200	

16C-IN

GENERAL CHEMISTRY
INITIAL CALIBRATION

SDG:	L1102841	**Calibration (begin) date/time:**	05/28/19 09:54
Instrument ID:	FS3100-01	**Calibration (end) date/time:**	05/28/19 10:02
Analytical Method:	350.1	**Analytical Run:**	052919_1

Analyte	Cal. Type	Weightage	Corr.	Coef1	Coef2	Slope	Incpt	% RSD
AMMONIA NITROGEN	0	5	0.99977			81999	7148.5	

Calibration Type

0 = Linear Regression

Weightage

5 = None

351.2 Wet Chemistry

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
WW-20190524-002-DAY 22

Lab Sample ID:	L1102841-01	**SDG:**	L1102841
Client Sample ID:	WW-20190524-002-DAY 22	**Collected Date/Time:**	05/24/19 14:00
Lab File ID:	20190530115621	**Received Date/Time:**	05/27/19 08:45
Instrument ID:	LACHAT6	**Preparation Date/Time:**	05/29/19 14:14
Analytical Batch:	WG1287203	**Analysis Date/Time:**	05/30/19 11:56
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	0.795	B	0.0350	0.250	0.250

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416235-1

Lab Sample ID:	R3416235-1	**SDG:**	L1102841
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	20190530112742	**Received Date/Time:**	_____
Instrument ID:	LACHAT6	**Preparation Date/Time:**	05/29/19 14:09
Analytical Batch:	WG1287203	**Analysis Date/Time:**	05/30/19 11:27
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	0.195	J	0.0350	0.25	0.250

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416235-3

Lab Sample ID:	R3416235-3	**SDG:**	L1102841
Client Sample ID:	DUP	**Collected Date/Time:**	05/22/19 11:30
Lab File ID:	20190530115021	**Received Date/Time:**	05/24/19 09:30
Instrument ID:	LACHAT6	**Preparation Date/Time:**	05/29/19 14:31
Analytical Batch:	WG1287203	**Analysis Date/Time:**	05/30/19 11:50
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	1.46	J3	0.0350	0.25	0.250

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416235-6

Lab Sample ID:	R3416235-6	**SDG:**	L1102841
Client Sample ID:	DUP	**Collected Date/Time:**	05/24/19 14:00
Lab File ID:	20190530115731	**Received Date/Time:**	05/27/19 08:45
Instrument ID:	LACHAT6	**Preparation Date/Time:**	05/29/19 14:14
Analytical Batch:	WG1287203	**Analysis Date/Time:**	05/30/19 11:57
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	0.796		0.0350	0.25	0.250

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416235-2

Lab Sample ID:	R3416235-2	**SDG:**	L1102841
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	20190530112854	**Received Date/Time:**	_____
Instrument ID:	LACHAT6	**Preparation Date/Time:**	05/29/19 14:09
Analytical Batch:	WG1287203	**Analysis Date/Time:**	05/30/19 11:28
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	9.85		0.0350	0.25	0.250

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416235-4

Lab Sample ID:	R3416235-4	**SDG:**	L1102841
Client Sample ID:	MS	**Collected Date/Time:**	05/22/19 11:30
Lab File ID:	20190530115132	**Received Date/Time:**	05/24/19 09:30
Instrument ID:	LACHAT6	**Preparation Date/Time:**	05/29/19 14:31
Analytical Batch:	WG1287203	**Analysis Date/Time:**	05/30/19 11:51
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	5.52		0.0350	0.25	0.250

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416235-7

Lab Sample ID:	R3416235-7	**SDG:**	L1102841
Client Sample ID:	MS	**Collected Date/Time:**	05/24/19 14:00
Lab File ID:	20190530115843	**Received Date/Time:**	05/27/19 08:45
Instrument ID:	LACHAT6	**Preparation Date/Time:**	05/29/19 14:14
Analytical Batch:	WG1287203	**Analysis Date/Time:**	05/30/19 11:58
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	5.84		0.0350	0.25	0.250

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416235-5

Lab Sample ID:	R3416235-5	**SDG:**	L1102841
Client Sample ID:	MSD	**Collected Date/Time:**	05/22/19 11:30
Lab File ID:	20190530115244	**Received Date/Time:**	05/24/19 09:30
Instrument ID:	LACHAT6	**Preparation Date/Time:**	05/29/19 14:31
Analytical Batch:	WG1287203	**Analysis Date/Time:**	05/30/19 11:52
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	5.41		0.0350	0.25	0.250

2-IN

CALIBRATION VERIFICATION

SDG:	L1102841	**Calibration (begin) date/time:**	05/30/19 10:38
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	05/30/19 10:46
Analytical Method:	351.2	**Analytical Run:**	R053019_1
Concentration Units:	mg/L		

	ICV				**CCV**				**CCV**			
Sample ID:	LACHAT6053019112631				LACHAT6053019113938				LACHAT6053019115356			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
KJELDAHL NITROGEN, TKN	10	10.80	108		10	10.00	100		10	10.10	101	

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

2-IN

CALIBRATION VERIFICATION

SDG:	L1102841	**Calibration (begin) date/time:**	05/30/19 10:38
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	05/30/19 10:46
Analytical Method:	351.2	**Analytical Run:**	R053019_1
Concentration Units:	mg/L		

CCV

Sample ID: LACHAT6053019120106

Analyte	True	Found	%R	%RSD
KJELDAHL NITROGEN, TKN	10	10.10	101	

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

3-IN BLANKS

SDG:	L1102841	**Calibration (begin) date/time:**	05/30/19 10:38
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	05/30/19 10:46
Analytical Method:	351.2	**Analytical Run:**	R053019_1

Sample ID:	**BLANK Result**	**BLANK Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**
File ID:	20190530112742		20190530114050		20190530115508		20190530120218	
Analyte	mg/l		mg/L		mg/L		mg/L	
KJELDAHL NITROGEN, TKN	0.195	J	0.06130		0.09380		0.1430	

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1102841-01

SAMPLE NO.:
R3416235-4
R3416235-5

MS Sample / File ID:	R3416235-4 / 20190530115132	**SDG:**	L1102841
MSD Sample / File ID:	R3416235-5 / 20190530115244	**Analytical Batch:**	WG1287203
OS Sample / File ID:	L1102344-01 / 20190530114909	**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	0.373	5.52	5.41	103	101	1	90.0 - 110	2.01	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

L1102841-01

SAMPLE NO.:
R3416235-7

MS Sample / File ID:	R3416235-7 / 20190530115843	**SDG:**	L1102841
MSD Sample / File ID:	_____	**Analytical Batch:**	WG1287203
OS Sample / File ID:	L1102841-01 / 20190530115621	**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	0.795	5.84		101		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

L1102841-01

SAMPLE NO.:
R3416235-3

DUP Sample / File ID:	R3416235-3 / 20190530115021	**SDG:**	L1102841
OS Sample / File ID:	L1102344-01 / 20190530114909	**Analytical Batch:**	WG1287203
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	0.373	1.46	119*	20

*: Value outside the established quality control limits.

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

6-IN

DUPLICATES

L1102841-01

SAMPLE NO.:
R3416235-6

DUP Sample / File ID:	R3416235-6 / 20190530115731	**SDG:**	L1102841
OS Sample / File ID:	L1102841-01 / 20190530115621	**Analytical Batch:**	WG1287203
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	0.795	0.796	0.126	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

L1102841-01

SAMPLE NO.:
R3416235-2

LCS Sample / File ID:	R3416235-2 / 20190530112854	**SDG:**	L1102841
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1287203
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	9.85		98.5		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:	L1102841	**Analytical Method:**	351.2
Instrument ID:	LACHAT6	**Calibration Start Date:**	05/30/19 10:38
Analytical Run:	CAL053019_2	**Calibration End Date:**	05/30/19 10:46

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
CAL	20.0	20190530103823	05/30/19 10:38	1	
CAL	10.0	20190530103934	05/30/19 10:39	1	
CAL	5.0	20190530104046	05/30/19 10:40	1	
CAL	2.5	20190530104158	05/30/19 10:41	1	
CAL	1.0	20190530104310	05/30/19 10:43	1	
CAL	0.5	20190530104422	05/30/19 10:44	1	
CAL	0.25	20190530104534	05/30/19 10:45	1	
CAL	0.0	20190530104645	05/30/19 10:46	1	

12-IN

ANALYSIS LOG

SDG:	L1102841	**Analytical Method:**	351.2
Instrument ID:	LACHAT6	**Calibration Start Date:**	05/30/19 10:38
Analytical Run:	R053019_1	**Calibration End Date:**	05/30/19 10:46

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
ICV	LACHAT6053019112631	20190530112631	05/30/19 11:26	1	
BLANK	R3416235-1	20190530112742	05/30/19 11:27	1	WG1287203
LCS	R3416235-2	20190530112854	05/30/19 11:28	1	WG1287203
CCV	LACHAT6053019113938	20190530113938	05/30/19 11:39	1	
CCB	LACHAT6053019114050	20190530114050	05/30/19 11:40	1	
OS	L1102344-01	20190530114909	05/30/19 11:49	1	WG1287203
DUP	R3416235-3	20190530115021	05/30/19 11:50	1	WG1287203
MS	R3416235-4	20190530115132	05/30/19 11:51	1	WG1287203
MSD	R3416235-5	20190530115244	05/30/19 11:52	1	WG1287203
CCV	LACHAT6053019115356	20190530115356	05/30/19 11:53	1	
CCB	LACHAT6053019115508	20190530115508	05/30/19 11:55	1	
WW-20190524-002-DAY 22	L1102841-01	20190530115621	05/30/19 11:56	1	WG1287203
DUP	R3416235-6	20190530115731	05/30/19 11:57	1	WG1287203
MS	R3416235-7	20190530115843	05/30/19 11:58	1	WG1287203
CCV	LACHAT6053019120106	20190530120106	05/30/19 12:01	1	
CCB	LACHAT6053019120218	20190530120218	05/30/19 12:02	1	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1102841	**Calibration (begin) date/time:**	05/30/19 10:38
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	05/30/19 10:46
Analytical Method:	351.2	**Analytical Run:**	R053019_1

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/L	mg/L	%	mg/L	mg/L	%
KJELDAHL NITROGEN, TKN	20	19.71834	98.60	10	9.74234	97.40
File ID:		20190530103823			20190530103934	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1102841	**Calibration (begin) date/time:**	05/30/19 10:38
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	05/30/19 10:46
Analytical Method:	351.2	**Analytical Run:**	R053019_1

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/L	mg/L	%	mg/L	mg/L	%
KJELDAHL NITROGEN, TKN	5	4.81234	96.20	2.50	2.84324	114
File ID:		20190530104046			20190530104158	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1102841	**Calibration (begin) date/time:**	05/30/19 10:38
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	05/30/19 10:46
Analytical Method:	351.2	**Analytical Run:**	R053019_1

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/L	mg/L	%	mg/L	mg/L	%
KJELDAHL NITROGEN, TKN	1	1.17574	118	0.50	.59864	120
File ID:		20190530104310			20190530104422	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1102841	**Calibration (begin) date/time:**	05/30/19 10:38
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	05/30/19 10:46
Analytical Method:	351.2	**Analytical Run:**	R053019_1

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/L	mg/L	%	mg/L	mg/L	%
KJELDAHL NITROGEN, TKN	0.25	.14334	57.30	0	-.0034667	
File ID:		20190530104534			20190530104645	

16C-IN

GENERAL CHEMISTRY
INITIAL CALIBRATION

SDG:	L1102841	**Calibration (begin) date/time:**	05/30/19 10:38
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	05/30/19 10:46
Analytical Method:	351.2	**Analytical Run:**	R053019_1

Analyte	Cal. Type	Weightage	Corr.	Coef1	Coef2	Slope	Incpt	% RSD
KJELDAHL NITROGEN, TKN	5	1	0.99968			0.29	-0.00166	

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-20190524-002-DAY 22

Lab Sample ID:	L1102841-01	**SDG:**	L1102841
Client Sample ID:	WW-20190524-002-DAY 22	**Collected Date/Time:**	05/24/19 14:00
Lab File ID:	20190530120901	**Received Date/Time:**	05/27/19 08:45
Instrument ID:	LACHAT3	**Preparation Date/Time:**	05/29/19 14:14
Analytical Batch:	WG1288444	**Analysis Date/Time:**	05/30/19 12:09
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	0.324	B	0.0350	0.100	0.100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416257-1

Lab Sample ID:	R3416257-1	**SDG:**	L1102841
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	20190530115733	**Received Date/Time:**	_____
Instrument ID:	LACHAT3	**Preparation Date/Time:**	05/29/19 14:09
Analytical Batch:	WG1288444	**Analysis Date/Time:**	05/30/19 11:57
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	0.0638	J	0.0350	0.10	0.100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416257-2

Lab Sample ID:	R3416257-2	**SDG:**	L1102841
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	20190530115849	**Received Date/Time:**	_____
Instrument ID:	LACHAT3	**Preparation Date/Time:**	05/29/19 14:09
Analytical Batch:	WG1288444	**Analysis Date/Time:**	05/30/19 11:58
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	1.88		0.0350	0.10	0.100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416257-3

Lab Sample ID:	R3416257-3	**SDG:**	L1102841
Client Sample ID:	DUP	**Collected Date/Time:**	05/22/19 11:30
Lab File ID:	20190530120512	**Received Date/Time:**	05/24/19 09:30
Instrument ID:	LACHAT3	**Preparation Date/Time:**	05/29/19 14:31
Analytical Batch:	WG1288444	**Analysis Date/Time:**	05/30/19 12:05
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	0.364		0.0350	0.10	0.100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416257-6

Lab Sample ID:	R3416257-6	**SDG:**	L1102841
Client Sample ID:	DUP	**Collected Date/Time:**	05/24/19 14:00
Lab File ID:	20190530121252	**Received Date/Time:**	05/27/19 08:45
Instrument ID:	LACHAT3	**Preparation Date/Time:**	05/29/19 14:14
Analytical Batch:	WG1288444	**Analysis Date/Time:**	05/30/19 12:12
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	0.288		0.0350	0.10	0.100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416257-4

Lab Sample ID:	R3416257-4	**SDG:**	L1102841
Client Sample ID:	MS	**Collected Date/Time:**	05/22/19 11:30
Lab File ID:	20190530120629	**Received Date/Time:**	05/24/19 09:30
Instrument ID:	LACHAT3	**Preparation Date/Time:**	05/29/19 14:31
Analytical Batch:	WG1288444	**Analysis Date/Time:**	05/30/19 12:06
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	2.91		0.0350	0.10	0.100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416257-7

Lab Sample ID:	R3416257-7	**SDG:**	L1102841
Client Sample ID:	MS	**Collected Date/Time:**	05/24/19 14:00
Lab File ID:	20190530121409	**Received Date/Time:**	05/27/19 08:45
Instrument ID:	LACHAT3	**Preparation Date/Time:**	05/29/19 14:14
Analytical Batch:	WG1288444	**Analysis Date/Time:**	05/30/19 12:14
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	2.86		0.0350	0.10	0.100

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416257-5

Lab Sample ID:	R3416257-5	**SDG:**	L1102841
Client Sample ID:	MSD	**Collected Date/Time:**	05/22/19 11:30
Lab File ID:	20190530120745	**Received Date/Time:**	05/24/19 09:30
Instrument ID:	LACHAT3	**Preparation Date/Time:**	05/29/19 14:31
Analytical Batch:	WG1288444	**Analysis Date/Time:**	05/30/19 12:07
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	2.94		0.0350	0.10	0.100

2-IN

CALIBRATION VERIFICATION

SDG:	L1102841	**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:**	R053019_2
Concentration Units:	mg/L		

	ICV				**CCV**				**CCV**			
Sample ID:	LACHAT3053019115615				LACHAT3053019121018				LACHAT3053019121915			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
PHOSPHORUS,TOTAL	2.50	2.530	101		2.50	2.520	101		2.50	2.520	101	

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

3-IN BLANKS

SDG:	L1102841	**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:**	R053019_2

Sample ID:	**BLANK Result**	**BLANK Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**
File ID:	20190530115733		20190530121135		20190530122032	
Analyte	mg/l		mg/L		mg/L	
PHOSPHORUS,TOTAL	0.0638	J	0.06060		0.05740	

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1102841-01

SAMPLE NO.:
R3416257-4
R3416257-5

MS Sample / File ID:	R3416257-4 / 20190530120629	**SDG:**	L1102841
MSD Sample / File ID:	R3416257-5 / 20190530120745	**Analytical Batch:**	WG1288444
OS Sample / File ID:	L1102344-01 / 20190530120355	**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	0.397	2.91	2.94	101	102	1	90.0 - 110	1.03	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

L1102841-01

SAMPLE NO.:
R3416257-7

MS Sample / File ID:	R3416257-7 / 20190530121409	**SDG:**	L1102841
MSD Sample / File ID:	_____	**Analytical Batch:**	WG1288444
OS Sample / File ID:	L1102841-01 / 20190530120901	**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	0.324	2.86		101		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

L1102841-01

SAMPLE NO.:
R3416257-3

DUP Sample / File ID:	R3416257-3 / 20190530120512	**SDG:**	L1102841
OS Sample / File ID:	L1102344-01 / 20190530120355	**Analytical Batch:**	WG1288444
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	0.397	0.364	8.67	20

*: Value outside the established quality control limits.

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

6-IN

DUPLICATES

L1102841-01

SAMPLE NO.:
R3416257-6

DUP Sample / File ID:	R3416257-6 / 20190530121252	**SDG:**	L1102841
OS Sample / File ID:	L1102841-01 / 20190530120901	**Analytical Batch:**	WG1288444
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	0.324	0.288	11.8	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

L1102841-01

SAMPLE NO.:
R3416257-2

LCS Sample / File ID:	R3416257-2 / 20190530115849	**SDG:**	L1102841
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1288444
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	1.88		94.0		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:	L1102841	**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:	L1102841	**Analytical Method:**	365.4
Instrument ID:	LACHAT3	**Calibration Start Date:**	05/14/19 15:36
Analytical Run:	R053019_2	**Calibration End Date:**	05/14/19 15:43

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
ICV	LACHAT3053019115615	20190530115615	05/30/19 11:56	1	
BLANK	R3416257-1	20190530115733	05/30/19 11:57	1	WG1288444
LCS	R3416257-2	20190530115849	05/30/19 11:58	1	WG1288444
OS	L1102344-01	20190530120355	05/30/19 12:03	1	WG1288444
DUP	R3416257-3	20190530120512	05/30/19 12:05	1	WG1288444
MS	R3416257-4	20190530120629	05/30/19 12:06	1	WG1288444
MSD	R3416257-5	20190530120745	05/30/19 12:07	1	WG1288444
WW-20190524-002-DAY 22	L1102841-01	20190530120901	05/30/19 12:09	1	WG1288444
CCV	LACHAT3053019121018	20190530121018	05/30/19 12:10	1	
CCB	LACHAT3053019121135	20190530121135	05/30/19 12:11	1	
DUP	R3416257-6	20190530121252	05/30/19 12:12	1	WG1288444
MS	R3416257-7	20190530121409	05/30/19 12:14	1	WG1288444
CCV	LACHAT3053019121915	20190530121915	05/30/19 12:19	1	
CCB	LACHAT3053019122032	20190530122032	05/30/19 12:20	1	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1102841	**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:**	R053019_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:	L1102841	**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:**	R053019_2

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

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1102841	**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:**	R053019_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:	L1102841	**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:**	R053019_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-20190524-002-DAY 22

Lab Sample ID:	L1102841-01	**SDG:**	L1102841
Client Sample ID:	WW-20190524-002-DAY 22	**Collected Date/Time:**	05/24/19 14:00
Lab File ID:	20190530143230	**Received Date/Time:**	05/27/19 08:45
Instrument ID:	DR6000-1	**Preparation Date/Time:**	05/30/19 10:26
Analytical Batch:	WG1285903	**Analysis Date/Time:**	05/30/19 14:32
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	52.2		3.00	10.0	10.0

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416300-1

Lab Sample ID:	R3416300-1	**SDG:**	L1102841
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	20190530142646	**Received Date/Time:**	_____
Instrument ID:	DR6000-1	**Preparation Date/Time:**	05/30/19 10:26
Analytical Batch:	WG1285903	**Analysis Date/Time:**	05/30/19 14:26
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.:
R3416300-2

Lab Sample ID:	R3416300-2	**SDG:**	L1102841
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	20190530142711	**Received Date/Time:**	_____
Instrument ID:	DR6000-1	**Preparation Date/Time:**	05/30/19 10:26
Analytical Batch:	WG1285903	**Analysis Date/Time:**	05/30/19 14:27
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	206		3.00	10	10.0

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416300-3

Lab Sample ID:	R3416300-3	**SDG:**	L1102841
Client Sample ID:	DUP	**Collected Date/Time:**	05/15/19 16:18
Lab File ID:	20190530142749	**Received Date/Time:**	05/18/19 08:45
Instrument ID:	DR6000-1	**Preparation Date/Time:**	05/30/19 10:26
Analytical Batch:	WG1285903	**Analysis Date/Time:**	05/30/19 14:27
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	42.6		3.00	10	10.0

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416300-6

Lab Sample ID:	R3416300-6	**SDG:**	L1102841
Client Sample ID:	DUP	**Collected Date/Time:**	05/25/19 14:00
Lab File ID:	20190530143245	**Received Date/Time:**	05/27/19 08:45
Instrument ID:	DR6000-1	**Preparation Date/Time:**	05/30/19 10:26
Analytical Batch:	WG1285903	**Analysis Date/Time:**	05/30/19 14:32
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	42.7		3.00	10	10.0

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416300-4

Lab Sample ID:	R3416300-4	**SDG:**	L1102841
Client Sample ID:	MS	**Collected Date/Time:**	05/16/19 09:30
Lab File ID:	20190530142825	**Received Date/Time:**	05/18/19 08:45
Instrument ID:	DR6000-1	**Preparation Date/Time:**	05/30/19 10:26
Analytical Batch:	WG1285903	**Analysis Date/Time:**	05/30/19 14:28
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	415		3.00	10	10.0

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416300-5

Lab Sample ID:	R3416300-5	**SDG:**	L1102841
Client Sample ID:	MSD	**Collected Date/Time:**	05/16/19 09:30
Lab File ID:	20190530142831	**Received Date/Time:**	05/18/19 08:45
Instrument ID:	DR6000-1	**Preparation Date/Time:**	05/30/19 10:26
Analytical Batch:	WG1285903	**Analysis Date/Time:**	05/30/19 14:28
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	414		3.00	10	10.0

2-IN

CALIBRATION VERIFICATION

SDG:	L1102841	**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:**	WG1285903
Concentration Units:	mg/L		

	ICV				**CCV**				**CCV**			
Sample ID:	DR6000-1053019142635				DR6000-1053019142927				DR6000-1053019143125			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
COD	400	404.39	101		400	405.04	101		400	405.82	101	

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

2-IN

CALIBRATION VERIFICATION

SDG:	L1102841	**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:**	WG1285903
Concentration Units:	mg/L		

CCV

Sample ID: DR6000-1053019143257

Analyte	True	Found	%R	%RSD
COD	400	409.9	102	

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

3-IN BLANKS

SDG:	L1102841	**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:**	WG1285903

Sample ID:	**BLANK Result**	**BLANK Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**
File ID:	20190530142646		20190530142938		20190530143134		20190530143308	
Analyte	mg/l		mg/L		mg/L		mg/L	
COD	U		-3.358		-1.096		-0.9590	

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1102841-01

SAMPLE NO.:
R3416300-4
R3416300-5

MS Sample / File ID:	R3416300-4 / 20190530142825	**SDG:**	L1102841
MSD Sample / File ID:	R3416300-5 / 20190530142831	**Analytical Batch:**	WG1285903
OS Sample / File ID:	L1100440-03 / 20190530142803	**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	26.7	415	414	97.1	96.9	1	80.0 - 120	0.147	20

*: Value outside the established quality control limits.

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

6-IN

DUPLICATES

L1102841-01

SAMPLE NO.:
R3416300-3

DUP Sample / File ID:	R3416300-3 / 20190530142749	**SDG:**	L1102841
OS Sample / File ID:	L1100440-02 / 20190530142738	**Analytical Batch:**	WG1285903
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	40.2	42.6	5.81	20

*: Value outside the established quality control limits.

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

6-IN

DUPLICATES

L1102841-01

SAMPLE NO.:
R3416300-6

DUP Sample / File ID:	R3416300-6 / 20190530143245	**SDG:**	L1102841
OS Sample / File ID:	L1102843-01 / 20190530143239	**Analytical Batch:**	WG1285903
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	42.2	42.7	1.28	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

L1102841-01

SAMPLE NO.:
R3416300-2

LCS Sample / File ID:	R3416300-2 / 20190530142711	**SDG:**	L1102841
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1285903
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	206		92.7		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:	L1102841	**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:	L1102841	**Analytical Method:**	410.4
Instrument ID:	DR6000-1	**Calibration Start Date:**	02/21/19 11:00
Analytical Run:	WG1285903	**Calibration End Date:**	02/21/19 11:00

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
ICV	DR6000-1053019142635	20190530142635	05/30/19 14:26	1	
BLANK	R3416300-1	20190530142646	05/30/19 14:26	1	WG1285903
LCS	R3416300-2	20190530142711	05/30/19 14:27	1	WG1285903
OS	L1100440-02	20190530142738	05/30/19 14:27	1	WG1285903
DUP	R3416300-3	20190530142749	05/30/19 14:27	1	WG1285903
OS	L1100440-03	20190530142803	05/30/19 14:28	1	WG1285903
MS	R3416300-4	20190530142825	05/30/19 14:28	1	WG1285903
MSD	R3416300-5	20190530142831	05/30/19 14:28	1	WG1285903
CCV	DR6000-1053019142927	20190530142927	05/30/19 14:29	1	
CCB	DR6000-1053019142938	20190530142938	05/30/19 14:29	1	
CCV	DR6000-1053019143125	20190530143125	05/30/19 14:31	1	
CCB	DR6000-1053019143134	20190530143134	05/30/19 14:31	1	
WW-20190524-002-DAY 22	L1102841-01	20190530143230	05/30/19 14:32	1	WG1285903
OS	L1102843-01	20190530143239	05/30/19 14:32	1	WG1285903
DUP	R3416300-6	20190530143245	05/30/19 14:32	1	WG1285903
CCV	DR6000-1053019143257	20190530143257	05/30/19 14:32	1	
CCB	DR6000-1053019143308	20190530143308	05/30/19 14:33	1	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1102841	**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:**	WG1285903

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:	L1102841	**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:**	WG1285903

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:	L1102841	**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:**	WG1285903

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:	L1102841	**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:**	WG1285903

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-20190524-002-DAY 22

Lab Sample ID:	L1102841-01	**SDG:**	L1102841
Client Sample ID:	WW-20190524-002-DAY 22	**Collected Date/Time:**	05/24/19 14:00
Lab File ID:	20190528133906	**Received Date/Time:**	05/27/19 08:45
Instrument ID:	DR6000-1	**Preparation Date/Time:**	05/28/19 13:39
Analytical Batch:	WG1287291	**Analysis Date/Time:**	05/28/19 13:39
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.:
R3415412-1

Lab Sample ID:	R3415412-1	**SDG:**	L1102841
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	20190528132954	**Received Date/Time:**	_____
Instrument ID:	DR6000-1	**Preparation Date/Time:**	05/28/19 13:29
Analytical Batch:	WG1287291	**Analysis Date/Time:**	05/28/19 13:29
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.:
R3415412-2

Lab Sample ID:	R3415412-2	**SDG:**	L1102841
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	20190528133013	**Received Date/Time:**	_____
Instrument ID:	DR6000-1	**Preparation Date/Time:**	05/28/19 13:30
Analytical Batch:	WG1287291	**Analysis Date/Time:**	05/28/19 13:30
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	0.513		0.00650	0.05	0.0500

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415412-3

Lab Sample ID:	R3415412-3	**SDG:**	L1102841
Client Sample ID:	DUP	**Collected Date/Time:**	05/22/19 08:30
Lab File ID:	20190528133054	**Received Date/Time:**	05/24/19 08:45
Instrument ID:	DR6000-1	**Preparation Date/Time:**	05/28/19 13:30
Analytical Batch:	WG1287291	**Analysis Date/Time:**	05/28/19 13:30
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	0.000		0.00650	0.05	0.0500

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415412-6

Lab Sample ID:	R3415412-6	**SDG:**	L1102841
Client Sample ID:	DUP	**Collected Date/Time:**	05/23/19 14:10
Lab File ID:	20190528133534	**Received Date/Time:**	05/25/19 08:45
Instrument ID:	DR6000-1	**Preparation Date/Time:**	05/28/19 13:35
Analytical Batch:	WG1287291	**Analysis Date/Time:**	05/28/19 13:35
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.:
R3415412-4

Lab Sample ID:	R3415412-4	**SDG:**	L1102841
Client Sample ID:	MS	**Collected Date/Time:**	05/23/19 12:10
Lab File ID:	20190528133408	**Received Date/Time:**	05/25/19 08:45
Instrument ID:	DR6000-1	**Preparation Date/Time:**	05/28/19 13:34
Analytical Batch:	WG1287291	**Analysis Date/Time:**	05/28/19 13:34
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	1.04		0.00650	0.05	0.0500

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415412-5

Lab Sample ID:	R3415412-5	**SDG:**	L1102841
Client Sample ID:	MSD	**Collected Date/Time:**	05/23/19 12:10
Lab File ID:	20190528133430	**Received Date/Time:**	05/25/19 08:45
Instrument ID:	DR6000-1	**Preparation Date/Time:**	05/28/19 13:34
Analytical Batch:	WG1287291	**Analysis Date/Time:**	05/28/19 13:34
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	1.05		0.00650	0.05	0.0500

2-IN

CALIBRATION VERIFICATION

SDG:	L1102841	**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:**	WG1287291
Concentration Units:	mg/L		

	ICV				**CCV**				**CCV**			
Sample ID:	DR6000-1052819132943				DR6000-1052819133239				DR6000-1052819133614			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
REACTIVE SULFIDE	1	1.053	105		1	1.049	105		1	1.042	104	
SULFIDE	1	1.053	105		1	1.049	105		1	1.042	104	

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

2-IN

CALIBRATION VERIFICATION

SDG:	L1102841	**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:**	WG1287291
Concentration Units:	mg/L		

CCV

Sample ID: DR6000-1052819133931

Analyte	True	Found	%R	%RSD
REACTIVE SULFIDE	1	1.036	104	
SULFIDE	1	1.036	104	

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

3-IN BLANKS

SDG:	L1102841	**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:**	WG1287291

Sample ID:	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**	**BLANK Result**	**BLANK Qual**
File ID:	20190528133246		20190528133622		20190528133938		20190528132954	
Analyte	mg/L		mg/L		mg/L		mg/l	
REACTIVE SULFIDE	-0.02900		-0.03400		-0.03700			
SULFIDE	-0.02900		-0.03400		-0.03700		U	

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1102841-01

SAMPLE NO.:
R3415412-4
R3415412-5

MS Sample / File ID:	R3415412-4 / 20190528133408	**SDG:**	L1102841
MSD Sample / File ID:	R3415412-5 / 20190528133430	**Analytical Batch:**	WG1287291
OS Sample / File ID:	L1102630-03 / 20190528133352	**Matrix:**	WW
Instrument ID:	DR6000-1		
Analytical Method:	4500S2 D-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*	*%*	*%*		*%*	*%*	*%*
Sulfide	1.00	ND	1.04	1.05	104	105	1	80.0 - 120	0.671	20

*: Value outside the established quality control limits.

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

6-IN

DUPLICATES

L1102841-01

SAMPLE NO.:
R3415412-3

DUP Sample / File ID:	R3415412-3 / 20190528133054	**SDG:**	L1102841
OS Sample / File ID:	L1102157-10 / 20190528133049	**Analytical Batch:**	WG1287291
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.

6-IN

DUPLICATES

L1102841-01

SAMPLE NO.:
R3415412-6

DUP Sample / File ID:	R3415412-6 / 20190528133534	**SDG:**	L1102841
OS Sample / File ID:	L1102630-06 / 20190528133529	**Analytical Batch:**	WG1287291
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	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.

7-IN

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY

L1102841-01

SAMPLE NO.:
R3415412-2

LCS Sample / File ID:	R3415412-2 / 20190528133013	**SDG:**	L1102841
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1287291
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	0.513		103		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:	L1102841	**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:	L1102841	**Analytical Method:**	4500S2 D-2011
Instrument ID:	DR6000-1	**Calibration Start Date:**	02/20/19 14:30
Analytical Run:	WG1287291	**Calibration End Date:**	02/20/19 14:30

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
ICV	DR6000-1052819132943	20190528132943	05/28/19 13:29	1	
BLANK	R3415412-1	20190528132954	05/28/19 13:29	1	WG1287291
LCS	R3415412-2	20190528133013	05/28/19 13:30	1	WG1287291
OS	L1102157-10	20190528133049	05/28/19 13:30	1	WG1287291
DUP	R3415412-3	20190528133054	05/28/19 13:30	1	WG1287291
CCV	DR6000-1052819133239	20190528133239	05/28/19 13:32	1	
CCB	DR6000-1052819133246	20190528133246	05/28/19 13:32	1	
OS	L1102630-03	20190528133352	05/28/19 13:33	1	WG1287291
MS	R3415412-4	20190528133408	05/28/19 13:34	1	WG1287291
MSD	R3415412-5	20190528133430	05/28/19 13:34	1	WG1287291
OS	L1102630-06	20190528133529	05/28/19 13:35	1	WG1287291
DUP	R3415412-6	20190528133534	05/28/19 13:35	1	WG1287291
CCV	DR6000-1052819133614	20190528133614	05/28/19 13:36	1	
CCB	DR6000-1052819133622	20190528133622	05/28/19 13:36	1	
WW-20190524-002-DAY 22	L1102841-01	20190528133906	05/28/19 13:39	1	WG1287291
CCV	DR6000-1052819133931	20190528133931	05/28/19 13:39	1	
CCB	DR6000-1052819133938	20190528133938	05/28/19 13:39	1	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1102841	**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:**	WG1287291

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:	L1102841	**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:**	WG1287291

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:	L1102841	**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:**	WG1287291

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:	L1102841	**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:**	WG1287291

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

3B-OR

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY

L1102841-01

SAMPLE NO.:
R3415832-5
R3415832-6

LCS Sample / File ID:	R3415832-5 / 0528_47LFB	**SDG:**	L1102841
LCSD Sample / File ID:	R3415832-6 / 0528_59LFBD	**Analytical Batch:**	WG1287037
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	0.000324	0.000318	130	127	70.0 - 130	1.87	20
1,2-Dibromo-3-Chloropropane	0.000250	0.000323	0.000308	129	123	70.0 - 130	4.75	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

L1102841-01

SAMPLE NO.:
R3415832-4

DUP Sample / File ID:	R3415832-4 / 0528_37	**SDG:**	L1102841
OS Sample / File ID:	L1101734-02 / 0528_38	**Analytical Batch:**	WG1287037
Lab File ID:	0528_37	**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.:
R3415832-1

Lab Sample ID:	R3415832-1	**SDG:**	L1102841
Lab File ID:	0528_32	**Preparation Date/Time:**	05/27/19 09:04
Instrument ID:	SVGC23	**Analysis Date/Time:**	05/28/19 18:37
Analytical Batch:	WG1287037	**Dilution Factor:**	1
Analytical Method:	504.1	**Matrix:**	WW

Sample ID	**Lab Sample ID**	**Instrument**	**File ID**	**Analysis** *date/time*
DUP	R3415832-4	SVGC23	0528_37	05/28/19 19:39
OS	L1101734-02	SVGC23	0528_38	05/28/19 19:51
LCS	R3415832-5	SVGC23	0528_47LFB	05/28/19 21:37
WW-20190524-002-DAY 22	L1102841-01	SVGC23	0528_56	05/28/19 23:25
LCSD	R3415832-6	SVGC23	0528_59LFBD	05/29/19 00:02

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
WW-20190524-002-DAY 22

Lab Sample ID:	L1102841-01	**SDG:**	L1102841
Client Sample ID:	WW-20190524-002-DAY 22	**Collected Date/Time:**	05/24/19 14:00
Lab File ID:	0528_56	**Received Date/Time:**	05/27/19 08:45
Instrument ID:	SVGC23	**Preparation Date/Time:**	05/28/19 08:45
Analytical Batch:	WG1287037	**Analysis Date/Time:**	05/28/19 23:25
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:	L1102841	**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:	L1102841	**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:	L1102841	**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:	L1102841	**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:	L1102841	**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:	L1102841	**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:	L1102841	**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:	0528_30-1	**Analysis date/time:**	05/28/19 18:13
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	0.0002719	123	70 - 130
ETHYLENE DIBROMIDE	0.000250	0.0002918	129	70 - 130

7D-OR

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1102841	**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:	0528_30-1	**Analysis date/time:**	05/28/19 18:13
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	0.0002719	109	70 - 130
ETHYLENE DIBROMIDE	0.000250	0.0002918	117	70 - 130

7D-OR

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1102841	**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:	0528_47-1	**Analysis date/time:**	05/28/19 21:37
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	0.0002790	129	70 - 130
ETHYLENE DIBROMIDE	0.000250	0.0002956	130	70 - 130

7D-OR

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1102841	**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:	0528_47-1	**Analysis date/time:**	05/28/19 21:37
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	0.0002790	112	70 - 130
ETHYLENE DIBROMIDE	0.000250	0.0002956	118	70 - 130

7D-OR

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1102841	**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:	0528_59-1	**Analysis date/time:**	05/29/19 00:02
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	0.0002731	123	70 - 130
ETHYLENE DIBROMIDE	0.000250	0.0002900	127	70 - 130

7D-OR

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1102841	**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:	0528_59-1	**Analysis date/time:**	05/29/19 00:02
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	0.0002731	109	70 - 130
ETHYLENE DIBROMIDE	0.000250	0.0002900	116	70 - 130

8B-OR

ANALYTICAL SEQUENCE

SDG:	L1102841	**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	
CCV	SVGC230528190528_30-1471812	0528_30-1	05/28/19 18:13	1	
BLANK	R3415832-1	0528_32	05/28/19 18:37	1	WG1287037
DUP	R3415832-4	0528_37	05/28/19 19:39	1	WG1287037
OS	L1101734-02	0528_38	05/28/19 19:51	1	WG1287037
CCV	SVGC230528190528_47-1471812	0528_47-1	05/28/19 21:37	1	
LCS	R3415832-5	0528_47LFB	05/28/19 21:37	1	WG1287037
WW-20190524-002-DAY 22	L1102841-01	0528_56	05/28/19 23:25	1	WG1287037
CCV	SVGC230528190528_59-1471812	0528_59-1	05/29/19 00:02	1	
LCSD	R3415832-6	0528_59LFBD	05/29/19 00:02	1	WG1287037

10A-OR

SINGLE COMPONENT ANALYSIS IDENTIFICATION

SAMPLE NO.:
R3415832-1

Lab Sample ID:	R3415832-1	**SDG:**	L1102841
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	0528_32	**Received Date/Time:**	_____
Instrument ID:	SVGC23	**Preparation Date/Time:**	05/27/19 09:04
Analytical Batch:	WG1287037	**Analysis Date/Time:**	05/28/19 18:37
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.:
R3415832-4

Lab Sample ID:	R3415832-4	**SDG:**	L1102841
Client Sample ID:	DUP	**Collected Date/Time:**	05/22/19 08:05
Lab File ID:	0528_37	**Received Date/Time:**	05/23/19 08:00
Instrument ID:	SVGC23	**Preparation Date/Time:**	05/27/19 09:05
Analytical Batch:	WG1287037	**Analysis Date/Time:**	05/28/19 19:39
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.:
R3415832-5

Lab Sample ID:	R3415832-5	**SDG:**	L1102841
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	0528_47LFB	**Received Date/Time:**	_____
Instrument ID:	SVGC23	**Preparation Date/Time:**	05/27/19 09:04
Analytical Batch:	WG1287037	**Analysis Date/Time:**	05/28/19 21:37
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	0.000324	9.23
1,2-Dibromo-3-Chloropropane	1	3.12	0.000323	14.6

10A-OR

SINGLE COMPONENT ANALYSIS IDENTIFICATION

SAMPLE NO.:
R3415832-6

Lab Sample ID:	R3415832-6	**SDG:**	L1102841
Client Sample ID:	LCSD	**Collected Date/Time:**	_____
Lab File ID:	0528_59LFBD	**Received Date/Time:**	_____
Instrument ID:	SVGC23	**Preparation Date/Time:**	05/27/19 09:04
Analytical Batch:	WG1287037	**Analysis Date/Time:**	05/29/19 00:02
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	0.000318	9.05
1,2-Dibromo-3-Chloropropane	1	3.12	0.000308	12

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415832-1

Lab Sample ID:	R3415832-1	**SDG:**	L1102841
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	0528_32	**Received Date/Time:**	_____
Instrument ID:	SVGC23	**Preparation Date/Time:**	05/27/19 09:04
Analytical Batch:	WG1287037	**Analysis Date/Time:**	05/28/19 18:37
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	0.000010	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.:
R3415832-4

Lab Sample ID:	R3415832-4	**SDG:**	L1102841
Client Sample ID:	DUP	**Collected Date/Time:**	05/22/19 08:05
Lab File ID:	0528_37	**Received Date/Time:**	05/23/19 08:00
Instrument ID:	SVGC23	**Preparation Date/Time:**	05/27/19 09:05
Analytical Batch:	WG1287037	**Analysis Date/Time:**	05/28/19 19:39
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.:
R3415832-5

Lab Sample ID:	R3415832-5	**SDG:**	L1102841
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	0528_47LFB	**Received Date/Time:**	_____
Instrument ID:	SVGC23	**Preparation Date/Time:**	05/27/19 09:04
Analytical Batch:	WG1287037	**Analysis Date/Time:**	05/28/19 21:37
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	0.000324		0.00000240	0.000010	0.0000100
1,2-Dibromo-3-Chloropropane	96-12-8	3.12	0.000323		0.00000430	0.000020	0.0000200

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415832-6

Lab Sample ID:	R3415832-6	**SDG:**	L1102841
Client Sample ID:	LCSD	**Collected Date/Time:**	_____
Lab File ID:	0528_59LFBD	**Received Date/Time:**	_____
Instrument ID:	SVGC23	**Preparation Date/Time:**	05/27/19 09:04
Analytical Batch:	WG1287037	**Analysis Date/Time:**	05/29/19 00:02
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	0.000318		0.00000240	0.000010	0.0000100
1,2-Dibromo-3-Chloropropane	96-12-8	3.12	0.000308		0.00000430	0.000020	0.0000200

5310 B-2011 Wet Chemistry

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
WW-20190524-002-DAY 22

Lab Sample ID:	L1102841-01	**SDG:**	L1102841
Client Sample ID:	WW-20190524-002-DAY 22	**Collected Date/Time:**	05/24/19 14:00
Lab File ID:	20190529044841	**Received Date/Time:**	05/27/19 08:45
Instrument ID:	TOC5	**Preparation Date/Time:**	05/29/19 04:48
Analytical Batch:	WG1287482	**Analysis Date/Time:**	05/29/19 04:48
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)		6.58		0.102	1.00	1.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415644-1

Lab Sample ID:	R3415644-1	**SDG:**	L1102841
Client Sample ID:	BLANK	**Collected Date/Time:**	
Lab File ID:	20190528185551	**Received Date/Time:**	
Instrument ID:	TOC5	**Preparation Date/Time:**	05/28/19 18:55
Analytical Batch:	WG1287482	**Analysis Date/Time:**	05/28/19 18:55
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)		0.382	J	0.102	1	1.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415644-2

Lab Sample ID:	R3415644-2	**SDG:**	L1102841
Client Sample ID:	LCS	**Collected Date/Time:**	
Lab File ID:	20190528193607	**Received Date/Time:**	
Instrument ID:	TOC5	**Preparation Date/Time:**	05/28/19 19:36
Analytical Batch:	WG1287482	**Analysis Date/Time:**	05/28/19 19:36
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)		75.5		0.102	1	1.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415644-3

Lab Sample ID:	R3415644-3	**SDG:**	L1102841
Client Sample ID:	DUP	**Collected Date/Time:**	05/21/19 13:55
Lab File ID:	20190528205120	**Received Date/Time:**	05/23/19 08:00
Instrument ID:	TOC5	**Preparation Date/Time:**	05/28/19 20:51
Analytical Batch:	WG1287482	**Analysis Date/Time:**	05/28/19 20:51
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)		1.45		0.102	1	1.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415644-6

Lab Sample ID:	R3415644-6	**SDG:**	L1102841
Client Sample ID:	DUP	**Collected Date/Time:**	05/22/19 08:35
Lab File ID:	20190529011320	**Received Date/Time:**	05/24/19 08:45
Instrument ID:	TOC5	**Preparation Date/Time:**	05/29/19 01:13
Analytical Batch:	WG1287482	**Analysis Date/Time:**	05/29/19 01:13
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)		0.812	J	0.102	1	1.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415644-4

Lab Sample ID:	R3415644-4	**SDG:**	L1102841
Client Sample ID:	MS	**Collected Date/Time:**	05/21/19 13:00
Lab File ID:	20190528234548	**Received Date/Time:**	05/23/19 08:00
Instrument ID:	TOC5	**Preparation Date/Time:**	05/28/19 23:45
Analytical Batch:	WG1287482	**Analysis Date/Time:**	05/28/19 23:45
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)		53.7		0.102	1	1.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415644-7

Lab Sample ID:	R3415644-7	**SDG:**	L1102841
Client Sample ID:	MS	**Collected Date/Time:**	05/21/19 14:50
Lab File ID:	20190529033757	**Received Date/Time:**	05/24/19 08:45
Instrument ID:	TOC5	**Preparation Date/Time:**	05/29/19 03:37
Analytical Batch:	WG1287482	**Analysis Date/Time:**	05/29/19 03:37
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)		53.0		0.102	1	1.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415644-5

Lab Sample ID:	R3415644-5	**SDG:**	L1102841
Client Sample ID:	MSD	**Collected Date/Time:**	05/21/19 13:00
Lab File ID:	20190529000926	**Received Date/Time:**	05/23/19 08:00
Instrument ID:	TOC5	**Preparation Date/Time:**	05/29/19 00:09
Analytical Batch:	WG1287482	**Analysis Date/Time:**	05/29/19 00:09
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)		53.6		0.102	1	1.00

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415644-8

Lab Sample ID:	R3415644-8	**SDG:**	L1102841
Client Sample ID:	MSD	**Collected Date/Time:**	05/21/19 14:50
Lab File ID:	20190529040041	**Received Date/Time:**	05/24/19 08:45
Instrument ID:	TOC5	**Preparation Date/Time:**	05/29/19 04:00
Analytical Batch:	WG1287482	**Analysis Date/Time:**	05/29/19 04:00
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)		53.0		0.102	1	1.00

2-IN

CALIBRATION VERIFICATION

SDG:	L1102841	**Calibration (begin) date/time:**	03/15/19 15:22
Instrument ID:	TOC5	**Calibration (end) date/time:**	03/15/19 17:10
Analytical Method:	5310 B-2011	**Analytical Run:**	052419
Concentration Units:	mg/L		

	ICV				**SSCCV**				**CCV**			
Sample ID:	TOC50528191841				TOC50528192144				TOC50528192224			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
TOC (TOTAL ORGANIC CARBON)	50	50.77	102		75	75.56	101		50	50.27	101	

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

2-IN

CALIBRATION VERIFICATION

SDG:	L1102841	**Calibration (begin) date/time:**	03/15/19 15:22
Instrument ID:	TOC5	**Calibration (end) date/time:**	03/15/19 17:10
Analytical Method:	5310 B-2011	**Analytical Run:**	052419
Concentration Units:	mg/L		

	SSCCV				**CCV**				**SSCCV**			
Sample ID:	TOC50529190136				TOC50529190214				TOC50529190531			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
TOC (TOTAL ORGANIC CARBON)	75	75.30	100		50	50.32	101		75	75.83	101	

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

2-IN

CALIBRATION VERIFICATION

SDG:	L1102841	**Calibration (begin) date/time:**	03/15/19 15:22
Instrument ID:	TOC5	**Calibration (end) date/time:**	03/15/19 17:10
Analytical Method:	5310 B-2011	**Analytical Run:**	052419
Concentration Units:	mg/L		

CCV

Sample ID: TOC50529190609

Analyte	True	Found	%R	%RSD
TOC (TOTAL ORGANIC CARBON)	50	50.62	101	

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

3-IN BLANKS

SDG:	L1102841	**Calibration (begin) date/time:**	03/15/19 15:22
Instrument ID:	TOC5	**Calibration (end) date/time:**	03/15/19 17:10
Analytical Method:	5310 B-2011	**Analytical Run:**	052419

Sample ID:	**BLANK Result**	**BLANK Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**
File ID:	20190528185551		20190528223814		20190529022849		20190529062439	
Analyte	mg/l		mg/L		mg/L		mg/L	
TOC (TOTAL ORGANIC CARBON)	0.382	J	0.3709	U	0.3764	U	0.3722	U

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1102841-01

SAMPLE NO.:
R3415644-4
R3415644-5

MS Sample / File ID:	R3415644-4 / 20190528234548	**SDG:**	L1102841
MSD Sample / File ID:	R3415644-5 / 20190529000926	**Analytical Batch:**	WG1287482
OS Sample / File ID:	L1102018-08 / 20190528232247	**Matrix:**	WW
Instrument ID:	TOC5		
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	1.38	53.7	53.6	105	104	1	80.0 - 120	0.224	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

L1102841-01

SAMPLE NO.:
R3415644-7
R3415644-8

MS Sample / File ID:	R3415644-7 / 20190529033757	**SDG:**	L1102841
MSD Sample / File ID:	R3415644-8 / 20190529040041	**Analytical Batch:**	WG1287482
OS Sample / File ID:	L1102145-24 / 20190529031545	**Matrix:**	WW
Instrument ID:	TOC5		
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	0.963	53.0	53.0	104	104	1	80.0 - 120	0.000	20

*: Value outside the established quality control limits.

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

6-IN

DUPLICATES

L1102841-01

SAMPLE NO.:
R3415644-3

DUP Sample / File ID:	R3415644-3 / 20190528205120	**SDG:**	L1102841
OS Sample / File ID:	L1102018-03 / 20190528203621	**Analytical Batch:**	WG1287482
Instrument ID:	TOC5	**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)	1.50	1.45	3.46	20

*: Value outside the established quality control limits.

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

6-IN

DUPLICATES

L1102841-01

SAMPLE NO.:
R3415644-6

DUP Sample / File ID:	R3415644-6 / 20190529011320	**SDG:**	L1102841
OS Sample / File ID:	L1102145-02 / 20190529005347	**Analytical Batch:**	WG1287482
Instrument ID:	TOC5	**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)	0.798	0.812	1.75	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

L1102841-01

SAMPLE NO.:
R3415644-2

LCS Sample / File ID:	R3415644-2 / 20190528193607	**SDG:**	L1102841
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1287482
Instrument ID:	TOC5	**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	75.5		101		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:	L1102841	**Analytical Method:**	5310 B-2011
Instrument ID:	TOC5	**Calibration Start Date:**	03/15/19 15:22
Analytical Run:	031519_2	**Calibration End Date:**	03/15/19 17:10

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
CAL	0	20190315152226	03/15/19 15:22	1	
CAL	0.5	20190315154238	03/15/19 15:42	1	
CAL	1	20190315155525	03/15/19 15:55	1	
CAL	5	20190315161536	03/15/19 16:15	1	
CAL	25	20190315163256	03/15/19 16:32	1	
CAL	50	20190315165008	03/15/19 16:50	1	
CAL	100	20190315171019	03/15/19 17:10	1	

12-IN

ANALYSIS LOG

SDG:	L1102841	**Analytical Method:**	5310 B-2011
Instrument ID:	TOC5	**Calibration Start Date:**	03/15/19 15:22
Analytical Run:	052419	**Calibration End Date:**	03/15/19 17:10

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
RL	TOC50524190954	20190524095400	05/24/19 09:54	1	
ICV	TOC50528191841	20190528184152	05/28/19 18:41	1	
BLANK	R3415644-1	20190528185551	05/28/19 18:55	1	WG1287482
LCS	R3415644-2	20190528193607	05/28/19 19:36	1	WG1287482
OS	L1102018-03	20190528203621	05/28/19 20:36	1	WG1287482
DUP	R3415644-3	20190528205120	05/28/19 20:51	1	WG1287482
SSCCV	TOC50528192144	20190528214412	05/28/19 21:44	1	
CCV	TOC50528192224	20190528222419	05/28/19 22:24	1	
CCB	TOC50528192238	20190528223814	05/28/19 22:38	1	
OS	L1102018-08	20190528232247	05/28/19 23:22	1	WG1287482
MS	R3415644-4	20190528234548	05/28/19 23:45	1	WG1287482
MSD	R3415644-5	20190529000926	05/29/19 00:09	1	WG1287482
OS	L1102145-02	20190529005347	05/29/19 00:53	1	WG1287482
DUP	R3415644-6	20190529011320	05/29/19 01:13	1	WG1287482
SSCCV	TOC50529190136	20190529013645	05/29/19 01:36	1	
CCV	TOC50529190214	20190529021422	05/29/19 02:14	1	
CCB	TOC50529190228	20190529022849	05/29/19 02:28	1	
OS	L1102145-24	20190529031545	05/29/19 03:15	1	WG1287482
MS	R3415644-7	20190529033757	05/29/19 03:37	1	WG1287482
MSD	R3415644-8	20190529040041	05/29/19 04:00	1	WG1287482
WW-20190524-002-DAY 22	L1102841-01	20190529044841	05/29/19 04:48	1	WG1287482
SSCCV	TOC50529190531	20190529053147	05/29/19 05:31	1	
CCV	TOC50529190609	20190529060904	05/29/19 06:09	1	
CCB	TOC50529190624	20190529062439	05/29/19 06:24	1	
RL	TOC50529190804	20190529080454	05/29/19 08:04	1	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1102841	**Calibration (begin) date/time:**	03/15/19 15:22
Instrument ID:	TOC5	**Calibration (end) date/time:**	03/15/19 17:10
Analytical Method:	5310 B-2011	**Analytical Run:**	052419

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
TOC (TOTAL ORGANIC CARBON)	0	.28113		0.50	.8100415	162
File ID:		20190315152226			20190315154238	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1102841	**Calibration (begin) date/time:**	03/15/19 15:22
Instrument ID:	TOC5	**Calibration (end) date/time:**	03/15/19 17:10
Analytical Method:	5310 B-2011	**Analytical Run:**	052419

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
TOC (TOTAL ORGANIC CARBON)	1	1.264607	126	5	4.944357	98.90
File ID:		20190315155525			20190315161536	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1102841	**Calibration (begin) date/time:**	03/15/19 15:22
Instrument ID:	TOC5	**Calibration (end) date/time:**	03/15/19 17:10
Analytical Method:	5310 B-2011	**Analytical Run:**	052419

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
TOC (TOTAL ORGANIC CARBON)	25	24.59944	98.40	50	49.0034	98
File ID:		20190315163256			20190315165008	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1102841	**Calibration (begin) date/time:**	03/15/19 15:22
Instrument ID:	TOC5	**Calibration (end) date/time:**	03/15/19 17:10
Analytical Method:	5310 B-2011	**Analytical Run:**	052419

Analyte	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%
TOC (TOTAL ORGANIC CARBON)	100	100.597	101
File ID:		20190315171019	

16C-IN

GENERAL CHEMISTRY
INITIAL CALIBRATION

SDG:	L1102841	**Calibration (begin) date/time:**	03/15/19 15:22
Instrument ID:	TOC5	**Calibration (end) date/time:**	03/15/19 17:10
Analytical Method:	5310 B-2011	**Analytical Run:**	052419

Analyte	Cal. Type	Weightage	Corr.	Coef1	Coef2	Slope	Incpt	% RSD
TOC (TOTAL ORGANIC CARBON)	0	5	0.999896			8.13085	-1.064326	

Calibration Type

0 = Linear Regression

Weightage

5 = None

624.1 Volatile Organic Compounds (GC/MS)

2A-OR

SURROGATE RECOVERY

Analytical Method: 624.1 **SDG:** L1102841
Matrix: WW

Sample ID	Lab Sample ID	Instrument	File ID	DMC-1 % Rec.	DMC-2 % Rec.	DMC-3 % Rec.	TOT Out
WW-20190524-002-DAY 22	L1102841-01	VOCMS6	0529_16	102	91.1	94.7	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:** L1102841
Matrix: WW

Sample ID	Lab Sample ID	Instrument	File ID	DMC-1 % Rec.	DMC-2 % Rec.	DMC-3 % Rec.	TOT Out
MS	R3415931-5	VOCMS6	0529_29	101	95.7	99.7	0
MSD	R3415931-6	VOCMS6	0529_30	102	98.3	101	0
BLANK	R3415931-4	VOCMS6	0529_07	101	96.6	93.3	0
LCS	R3415931-1	VOCMS6	0529_03	100	96.8	101	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.

3A-OR

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1102841-01

SAMPLE NO.:
R3415931-5
R3415931-6

MS Sample / File ID:	R3415931-5 / 0529_29	**SDG:**	L1102841
MSD Sample / File ID:	R3415931-6 / 0529_30	**Analytical Batch:**	WG1287848
OS Sample / File ID:	L1102043-22 / 0529_28	**Matrix:**	WW
Instrument ID:	VOCMS6		
Analytical Method:	624.1		

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*	*mg/l*	*%*	*%*		*%*	*%*	*%*
Bromochloromethane	0.0250	U	0.186	0.165	74.4	66.1	10	53.0 - 138	11.8	20
Carbon disulfide	0.0250	0.00648	0.204	0.189	79.1	73.0	10	10.0 - 147	7.73	20
Acetone	0.125	U	0.866	0.806	69.3	64.5	10	10.0 - 139	7.18	20
Acrylonitrile	0.125	U	1.04	0.965	83.1	77.2	10	40.0 - 160	7.34	60
Benzene	0.0250	U	0.211	0.195	84.4	78.1	10	37.0 - 151	7.80	61
Bromobenzene	0.0250	U	0.203	0.190	81.4	75.8	10	51.0 - 137	7.04	20
Bromodichloromethane	0.0250	U	0.208	0.194	83.2	77.6	10	35.0 - 155	6.99	56
Bromoform	0.0250	U	0.212	0.198	84.6	79.3	10	45.0 - 169	6.47	42
Bromomethane	0.0250	U	0.0847	0.0931	33.9	37.2	10	0.100 - 206	9.40	61
n-Butylbenzene	0.0250	U	0.204	0.182	81.5	72.9	10	50.0 - 144	11.2	20
sec-Butylbenzene	0.0250	U	0.200	0.186	80.2	74.3	10	48.0 - 143	7.61	20
tert-Butylbenzene	0.0250	U	0.211	0.193	84.5	77.1	10	50.0 - 142	9.12	20
Carbon tetrachloride	0.0250	7.08	6.68	6.24	0.000*	0.000*	10	70.0 - 140	6.81	41
Chlorobenzene	0.0250	U	0.222	0.207	89.0	83.0	10	37.0 - 160	6.96	53
Chlorodibromomethane	0.0250	U	0.220	0.205	87.8	81.9	10	53.0 - 149	6.94	50
Chloroethane	0.0250	U	0.186	0.175	74.4	69.8	10	14.0 - 230	6.43	78
Chloroform	0.0250	0.0265	0.232	0.220	82.4	77.4	10	51.0 - 138	5.45	54
Chloromethane	0.0250	U	0.130	0.126	51.8	50.3	10	0.100 - 273	3.01	60
2-Chlorotoluene	0.0250	U	0.201	0.187	80.5	74.8	10	48.0 - 142	7.41	20
4-Chlorotoluene	0.0250	U	0.208	0.191	83.3	76.5	10	52.0 - 139	8.58	20
Dibromomethane	0.0250	U	0.199	0.184	79.4	73.7	10	53.0 - 138	7.41	20
1,2-Dichlorobenzene	0.0250	U	0.217	0.201	86.7	80.5	10	18.0 - 190	7.42	57
1,3-Dichlorobenzene	0.0250	U	0.213	0.191	85.1	76.5	10	59.0 - 156	10.6	43
1,4-Dichlorobenzene	0.0250	U	0.198	0.184	79.4	73.8	10	18.0 - 190	7.32	57
Dichlorodifluoromethane	0.0250	U	0.288	0.261	115	104	10	20.0 - 160	9.68	20
2-Hexanone	0.125	U	1.11	1.04	88.9	83.4	10	36.0 - 145	6.44	20
1,1-Dichloroethane	0.0250	U	0.212	0.201	84.7	80.5	10	59.0 - 155	5.08	40
1,2-Dichloroethane	0.0250	U	0.189	0.174	75.5	69.6	10	49.0 - 155	8.14	49
1,1-Dichloroethene	0.0250	U	0.233	0.214	93.1	85.7	10	0.100 - 234	8.30	32
cis-1,2-Dichloroethene	0.0250	U	0.219	0.202	87.6	80.9	10	43.0 - 142	8.03	20
trans-1,2-Dichloroethene	0.0250	U	0.220	0.212	88.0	84.7	10	54.0 - 156	3.81	45
1,2-Dichloropropane	0.0250	U	0.208	0.198	83.1	79.2	10	0.100 - 210	4.73	55
1,1-Dichloropropene	0.0250	U	0.222	0.203	88.9	81.3	10	42.0 - 146	8.93	20
cis-1,3-Dichloropropene	0.0250	U	0.206	0.194	82.4	77.5	10	0.100 - 227	6.12	58
trans-1,3-Dichloropropene	0.0250	U	0.219	0.200	87.4	80.0	10	17.0 - 183	8.81	86
2,2-Dichloropropane	0.0250	U	0.207	0.191	82.9	76.2	10	43.0 - 139	8.39	20
Ethylbenzene	0.0250	U	0.226	0.213	90.3	85.3	10	37.0 - 162	5.73	63
Isopropylbenzene	0.0250	U	0.217	0.201	86.8	80.4	10	48.0 - 141	7.66	20
p-Isopropyltoluene	0.0250	U	0.202	0.183	80.6	73.3	10	49.0 - 146	9.46	20
2-Butanone (MEK)	0.125	U	0.909	0.840	72.7	67.2	10	12.0 - 149	7.87	20
Methylene Chloride	0.0250	U	0.200	0.189	79.9	75.5	10	0.100 - 221	5.73	28
4-Methyl-2-pentanone (MIBK)	0.125	U	1.04	0.983	83.5	78.6	10	44.0 - 160	6.06	20
Methyl tert-butyl ether	0.0250	U	0.203	0.187	81.3	74.7	10	42.0 - 142	8.36	20

*: 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

L1102841-01

SAMPLE NO.:
R3415931-5
R3415931-6

MS Sample / File ID:	R3415931-5 / 0529_29	**SDG:**	L1102841
MSD Sample / File ID:	R3415931-6 / 0529_30	**Analytical Batch:**	WG1287848
OS Sample / File ID:	L1102043-22 / 0529_28	**Matrix:**	WW
Instrument ID:	VOCMS6		
Analytical Method:	624.1		

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*	*mg/l*	*%*	*%*		*%*	*%*	*%*
o-Xylene	0.0250	U	0.218	0.202	87.2	80.8	10	44.0 - 146	7.61	20
m&p-Xylene	0.0500	U	0.425	0.396	85.1	79.2	10	41.0 - 147	7.16	20
1,3-Dichloropropene	0.0500	U	0.425	0.394	85.0	78.8	10	0.100 - 227	7.57	30
n-Propylbenzene	0.0250	U	0.210	0.190	84.1	75.9	10	47.0 - 144	10.3	20
Styrene	0.0250	U	0.220	0.207	87.9	82.9	10	47.0 - 147	5.79	20
1,1,1,2-Tetrachloroethane	0.0250	U	0.222	0.208	88.8	83.3	10	52.0 - 140	6.41	20
1,1,2,2-Tetrachloroethane	0.0250	U	0.211	0.197	84.2	78.7	10	46.0 - 157	6.73	61
Tetrachloroethene	0.0250	U	0.234	0.216	93.6	86.4	10	64.0 - 148	7.93	39
Toluene	0.0250	U	0.219	0.204	87.5	81.6	10	47.0 - 150	7.03	41
1,1,2-Trichlorotrifluoroethane	0.0250	U	0.245	0.229	98.0	91.4	10	40.0 - 151	6.94	20
1,2,3-Trichlorobenzene	0.0250	U	0.186	0.175	74.2	69.9	10	45.0 - 145	6.00	20
1,2,4-Trichlorobenzene	0.0250	U	0.200	0.181	80.0	72.4	10	49.0 - 147	9.93	20
1,1,1-Trichloroethane	0.0250	U	0.228	0.212	91.3	84.8	10	56.0 - 162	7.43	36
1,1,2-Trichloroethane	0.0250	U	0.218	0.201	87.4	80.4	10	52.0 - 150	8.28	45
Trichloroethene	0.0250	U	0.215	0.200	86.1	79.8	10	70.0 - 157	7.59	48
Trichlorofluoromethane	0.0250	U	0.233	0.213	93.1	85.0	10	17.0 - 181	9.10	84
1,2,3-Trichloropropane	0.0250	U	0.217	0.204	86.7	81.6	10	54.0 - 143	6.03	20
1,2,4-Trimethylbenzene	0.0250	U	0.206	0.189	82.2	75.5	10	41.0 - 146	8.48	20
1,3,5-Trimethylbenzene	0.0250	U	0.199	0.181	79.7	72.6	10	44.0 - 143	9.36	20
Vinyl chloride	0.0250	U	0.221	0.206	88.4	82.5	10	0.100 - 251	6.97	66
Xylenes, Total	0.0750	U	0.643	0.598	85.7	79.7	10	41.0 - 148	7.25	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

L1102841-01

SAMPLE NO.:
R3415931-1

LCS Sample / File ID:	R3415931-1 / 0529_03	**SDG:**	L1102841
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1287848
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*		*%*	*%*	*%*	*%*	*%*
Bromochloromethane	0.0250	0.0191		76.2		76.0 - 122		
Acetone	0.125	0.103		82.0		10.0 - 160		
Carbon disulfide	0.0250	0.0164		65.7		55.0 - 127		
Acrylonitrile	0.125	0.109		87.4		60.0 - 140		
Benzene	0.0250	0.0214		85.5		65.0 - 135		
Bromobenzene	0.0250	0.0217		86.9		79.0 - 120		
Bromodichloromethane	0.0250	0.0218		87.3		70.0 - 135		
Bromoform	0.0250	0.0238		95.0		70.0 - 130		
Bromomethane	0.0250	0.00745		29.8		15.0 - 185		
n-Butylbenzene	0.0250	0.0227		90.7		72.0 - 126		
sec-Butylbenzene	0.0250	0.0221		88.2		74.0 - 121		
tert-Butylbenzene	0.0250	0.0228		91.1		75.0 - 122		
Carbon tetrachloride	0.0250	0.0230		91.9		70.0 - 130		
Chlorobenzene	0.0250	0.0230		91.9		65.0 - 135		
Chlorodibromomethane	0.0250	0.0239		95.8		70.0 - 135		
Chloroethane	0.0250	0.0186		74.4		40.0 - 160		
Chloroform	0.0250	0.0216		86.4		70.0 - 135		
Chloromethane	0.0250	0.0130		51.9		0.100 - 205		
2-Chlorotoluene	0.0250	0.0220		88.0		74.0 - 122		
4-Chlorotoluene	0.0250	0.0232		92.8		79.0 - 120		
Dibromomethane	0.0250	0.0212		84.7		78.0 - 120		
1,2-Dichlorobenzene	0.0250	0.0247		98.7		65.0 - 135		
1,3-Dichlorobenzene	0.0250	0.0237		94.8		70.0 - 130		
1,4-Dichlorobenzene	0.0250	0.0222		88.8		65.0 - 135		
Dichlorodifluoromethane	0.0250	0.0256		102		49.0 - 155		
1,1-Dichloroethane	0.0250	0.0214		85.6		70.0 - 130		
1,2-Dichloroethane	0.0250	0.0198		79.1		70.0 - 130		
1,1-Dichloroethene	0.0250	0.0187		74.8		50.0 - 150		
cis-1,2-Dichloroethene	0.0250	0.0227		90.6		73.0 - 120		
2-Hexanone	0.125	0.120		95.9		58.0 - 147		
trans-1,2-Dichloroethene	0.0250	0.0234		93.5		70.0 - 130		
1,2-Dichloropropane	0.0250	0.0216		86.5		35.0 - 165		
1,1-Dichloropropene	0.0250	0.0226		90.5		71.0 - 129		
cis-1,3-Dichloropropene	0.0250	0.0226		90.6		25.0 - 175		
trans-1,3-Dichloropropene	0.0250	0.0238		95.1		50.0 - 150		
2,2-Dichloropropane	0.0250	0.0224		89.5		60.0 - 125		
Ethylbenzene	0.0250	0.0236		94.4		60.0 - 140		
Isopropylbenzene	0.0250	0.0229		91.8		75.0 - 120		
p-Isopropyltoluene	0.0250	0.0223		89.0		74.0 - 126		
2-Butanone (MEK)	0.125	0.0985		78.8		37.0 - 158		
Methylene Chloride	0.0250	0.0204		81.7		60.0 - 140		
4-Methyl-2-pentanone (MIBK)	0.125	0.112		89.6		59.0 - 143		

*: 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

L1102841-01

SAMPLE NO.:
R3415931-1

LCS Sample / File ID:	R3415931-1 / 0529_03	**SDG:**	L1102841
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1287848
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*		*%*	*%*	*%*	*%*	*%*
Methyl tert-butyl ether	0.0250	0.0219		87.7		64.0 - 123		
o-Xylene	0.0250	0.0230		91.8		78.0 - 120		
m&p-Xylene	0.0500	0.0450		89.9		77.0 - 120		
n-Propylbenzene	0.0250	0.0225		90.1		79.0 - 120		
Styrene	0.0250	0.0237		94.8		78.0 - 124		
1,3-Dichloropropene	0.0500	0.0464		92.8		25.0 - 175		
1,1,1,2-Tetrachloroethane	0.0250	0.0235		94.2		75.0 - 122		
1,1,2,2-Tetrachloroethane	0.0250	0.0235		94.1		60.0 - 140		
Tetrachloroethene	0.0250	0.0248		99.3		70.0 - 130		
Toluene	0.0250	0.0224		89.4		70.0 - 130		
1,1,2-Trichlorotrifluoroethane	0.0250	0.0209		83.4		61.0 - 136		
1,2,3-Trichlorobenzene	0.0250	0.0221		88.3		61.0 - 133		
1,2,4-Trichlorobenzene	0.0250	0.0234		93.5		69.0 - 129		
1,1,1-Trichloroethane	0.0250	0.0226		90.3		70.0 - 130		
1,1,2-Trichloroethane	0.0250	0.0229		91.8		70.0 - 130		
Trichloroethene	0.0250	0.0224		89.6		65.0 - 135		
Trichlorofluoromethane	0.0250	0.0219		87.7		50.0 - 150		
1,2,3-Trichloropropane	0.0250	0.0236		94.5		72.0 - 124		
1,2,4-Trimethylbenzene	0.0250	0.0230		92.0		75.0 - 120		
1,3,5-Trimethylbenzene	0.0250	0.0216		86.4		75.0 - 120		
Vinyl chloride	0.0250	0.0227		91.0		5.00 - 195		
Xylenes, Total	0.0750	0.0680		90.7		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.:
R3415931-4

Lab Sample ID:	R3415931-4	**SDG:**	L1102841
Lab File ID:	0529_07	**Preparation Date/Time:**	05/29/19 12:48
Instrument ID:	VOCMS6	**Analysis Date/Time:**	05/29/19 12:48
Analytical Batch:	WG1287848	**Dilution Factor:**	1
Analytical Method:	624.1	**Matrix:**	WW

Sample ID	Lab Sample ID	Instrument	File ID	Analysis *date/time*
LCS	R3415931-1	VOCMS6	0529_03	05/29/19 11:29
WW-20190524-002-DAY 22	L1102841-01	VOCMS6	0529_16	05/29/19 16:05
OS	L1102043-22	VOCMS6	0529_28	05/29/19 20:06
MS	R3415931-5	VOCMS6	0529_29	05/29/19 20:25
MSD	R3415931-6	VOCMS6	0529_30	05/29/19 20:45

5A-OR

GC/MS INSTRUMENT PERFORMANCE CHECK

Lab File ID:	0502_01-6	**SDG:**	L1102841
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:**	L1102841
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:	0529_01T-1	**SDG:**	L1102841
Instrument ID:	VOCMS6	**Analytical Method:**	624.1
Analysis Date/Time:	05/29/19 10:49		

Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
95	174	50	200	97
96	95	5	9	6
173	174	0	2	1
174	95	50	200	103
175	174	5	9	8
176	174	95	105	96
177	176	5	10	7

Sample ID	Lab Sample ID	File ID	Analysis date/time
ICV	VOCMS60529190529_02-1471443	0529_02-1	05/29/19 11:09
LCS	R3415931-1	0529_03	05/29/19 11:29
BLANK	R3415931-4	0529_07	05/29/19 12:48
WW-20190524-002-DAY 22	L1102841-01	0529_16	05/29/19 16:05
OS	L1102043-22	0529_28	05/29/19 20:06
MS	R3415931-5	0529_29	05/29/19 20:25
MSD	R3415931-6	0529_30	05/29/19 20:45

8A-OR

INTERNAL STANDARD AND RETENTION TIME

SDG:	L1102841	**Analytical Method:**	624.1
Instrument ID:	VOCMS6	**Calibration Start Date:**	05/02/19 15:57
Std File:	0529_02-1	**Calibration End Date:**	05/08/19 10:30
		Std Analysis Date:	05/29/19 11:09

Sample ID	File ID	1,4-DCB		8260-CB		8260-FB	
		Response	*RT*	*Response*	*RT*	*Response*	*RT*
STANDARD		73541	8	71987	6.32	175567	4.38
UPPER LIMIT		147082		143974		351134	
LOWER LIMIT		36771		35994		87784	
LCS R3415931-1 WG1287848 1x	0529_03	72817	8	72750	6.32	177796	4.39
BLANK R3415931-4 WG1287848 1x	0529_07	69747	8.01	68984	6.32	177092	4.39
L1102841-01 WG1287848 1x	0529_16	66440	8.01	68573	6.33	174664	4.40
OS L1102043-22 WG1287848 10x	0529_28	66789	8	67451	6.32	174769	4.39
MS R3415931-5 WG1287848 10x	0529_29	73783	8	72824	6.31	180775	4.38
MSD R3415931-6 WG1287848 10x	0529_30	73634	8	72133	6.32	179632	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-20190524-002-DAY 22

Lab Sample ID:	L1102841-01	**SDG:**	L1102841
Client Sample ID:	WW-20190524-002-DAY 22	**Collected Date/Time:**	05/24/19 14:00
Lab File ID:	0529_16	**Received Date/Time:**	05/27/19 08:45
Instrument ID:	VOCMS6	**Preparation Date/Time:**	05/29/19 16:05
Analytical Batch:	WG1287848	**Analysis Date/Time:**	05/29/19 16:05
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	2.98	0.0545		0.0100	0.0500	0.0500
Acrylonitrile	107-13-1	0	U		0.00187	0.0100	0.0100
Benzene	71-43-2	4.18	0.000814	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-20190524-002-DAY 22

Lab Sample ID:	L1102841-01	**SDG:**	L1102841
Client Sample ID:	WW-20190524-002-DAY 22	**Collected Date/Time:**	05/24/19 14:00
Lab File ID:	0529_16	**Received Date/Time:**	05/27/19 08:45
Instrument ID:	VOCMS6	**Preparation Date/Time:**	05/29/19 16:05
Analytical Batch:	WG1287848	**Analysis Date/Time:**	05/29/19 16:05
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	3.10	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	5.35	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	0	U		0.000719	0.00200	0.00200
Xylenes, Total	1330-20-7	0	U		0.00106	0.00300	0.00300

6A-OR

GC/MS INITIAL CALIBRATION DATA

SDG: L1102841 **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: L1102841 **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

6A-OR

GC/MS INITIAL CALIBRATION DATA

SDG: L1102841 **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	

6A-OR

GC/MS INITIAL CALIBRATION DATA

SDG: L1102841 **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			

7A-OR

GC/MS CONTINUING CALIBRATION VERIFICATION

SDG:	L1102841	**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:	L1102841	**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:	L1102841	**Calibration (begin) date/time:**	05/02/19 15:57
Instrument ID:	VOCMS6	**Calibration (end) date/time:**	05/08/19 10:30
Lab File ID:	0529_02-1	**Analysis date/time:**	05/29/19 11:09
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	0.75600320		5.49		0.0250	0.02362643	94.50	75 - 122
1,1,1-TRICHLOROETHANE	0.577552	0.53183210		7.92		0.0250	0.02302095	92.10	70 - 130
1,1,2,2-TETRACHLOROETHANE	1.255178	1.159590		7.62		0.0250	0.02309613	92.40	60 - 140
1,1,2-TRICHLOROETHANE	0.772869	0.70396720		8.92		0.0250	0.02277122	91.10	70 - 130
1,1,2-TRICHLOROTRIFLUOROETHANE	0.323112	0.32423040		0.3460		0.0250	0.02508656	100	61 - 136
1,1-DICHLOROETHANE	0.764494	0.65552910		14.30		0.0250	0.0214367	85.70	70 - 130
1,1-DICHLOROETHENE	0.294194	0.27292240		7.23		0.0250	0.0231924	92.80	50 - 150
1,1-DICHLOROPROPENE	0.462111	0.43555160		5.75		0.0250	0.02356313	94.30	71 - 129
1,2,3-TRICHLOROBENZENE	0.880250	0.74970540		14.80		0.0250	0.02129239	85.20	61 - 133
1,2,3-TRICHLOROPROPANE	0.317617	0.29186880		8.11		0.0250	0.0229733	91.90	72 - 124
1,2,4-TRICHLOROBENZENE	0.944079	0.854546		9.48		0.0250	0.02262909	90.50	69 - 129
1,2,4-TRIMETHYLBENZENE	2.886817	2.565892		11.10		0.0250	0.02222077	88.90	75 - 120
1,2-DICHLOROBENZENE	1.612531	1.522612		5.58		0.0250	0.02360593	94.40	65 - 135
1,2-DICHLOROETHANE	0.567192	0.444479		21.60		0.0250	0.01959122	78.40	70 - 130
1,2-DICHLOROPROPANE	0.285811	0.240242		15.90		0.0250	0.02101407	84.10	35 - 165
1,3,5-TRIMETHYLBENZENE	3.178738	2.689225		15.40		0.0250	0.0211501	84.60	75 - 120
1,3-DICHLOROBENZENE	1.683441	1.557405		7.49		0.0250	0.0231283	92.50	70 - 130
1,4-DICHLOROBENZENE	1.815799	1.567639		13.70		0.0250	0.02158332	86.30	65 - 135
2,2-DICHLOROPROPANE	0.564853	0.51366380		9.06		0.0250	0.02273442	90.90	60 - 125
2-BUTANONE (MEK)	0.385006	0.31054730		19.30		0.1250	0.1008256	80.70	37 - 158
2-CHLOROTOLUENE	2.863576	2.459903		14.10		0.0250	0.02147579	85.90	74 - 122
2-HEXANONE	0.637494	0.61874820		2.94		0.1250	0.1213244	97.10	58 - 147
4-CHLOROTOLUENE	2.582533	2.332783		9.67		0.0250	0.02258232	90.30	79 - 120
4-METHYL-2-PENTANONE (MIBK)	1.904896	1.722267		9.59		0.1250	0.1130158	90.40	59 - 143
ACETONE	0.208346	0.163526		21.50		0.1250	0.09810979	78.50	10 - 160
ACRYLONITRILE	0.241468	0.21712910		10.10		0.1250	0.1124004	89.90	60 - 140
BENZENE	1.511622	1.314944		13		0.0250	0.02174724	87	65 - 135
BROMOBENZENE	1.693283	1.443418		14.80		0.0250	0.02131094	85.20	79 - 120
BROMOCHLOROMETHANE	0.229347	0.18446470		19.60		0.0250	0.02010764	80.40	76 - 122
BROMODICHLOROMETHANE	0.470843	0.40895890		13.10		0.0250	0.02171416	86.90	65 - 135
BROMOFORM	0.794804	0.74596580		6.14		0.0250	0.02346384	93.90	70 - 130
BROMOMETHANE	0.226440	0.04475010		80.20		0.0250	0.004940616	19.80	15 - 185
CARBON DISULFIDE	0.920436	0.76796570		16.60		0.0250	0.02085874	83.40	55 - 127
CARBON TETRACHLORIDE	0.556278	0.52509190		5.61		0.0250	0.02359843	94.40	70 - 130
CHLOROBENZENE	2.296120	2.127789		7.33		0.0250	0.02316722	92.70	65 - 135
CHLORODIBROMOMETHANE	0.862847	0.81564950		5.47		0.0250	0.02363252	94.50	70 - 135
CHLOROETHANE	0.260494	0.189550		27.20		0.0250	0.0181914	72.80	40 - 160
CHLOROFORM	0.675771	0.59226440		12.40		0.0250	0.02191068	87.60	70 - 130
CHLOROMETHANE	0.518631	0.24509750		52.70		0.0250	0.01181464	47.30	0.0010 - 205
CIS-1,2-DICHLOROETHENE	0.374766	0.34318980		8.43		0.0250	0.02289359	91.60	73 - 120
CIS-1,3-DICHLOROPROPENE	0.538837	0.48094320		10.70		0.0250	0.02231397	89.30	25 - 175
CYCLOHEXANE	0.425707	0.39032030		8.31		0.0250	0.02292188	91.70	70 - 130
DIBROMOMETHANE	0.250236	0.21119960		15.60		0.0250	0.02110008	84.40	78 - 120
DICHLORODIFLUOROMETHANE	0.356865	0.36875450		3.33		0.0250	0.02583295	103	49 - 155
ETHYLBENZENE	1.262567	1.201052		4.87		0.0250	0.02378195	95.10	60 - 140
ISOPROPYLBENZENE	3.891659	3.565533		8.38		0.0250	0.02290496	91.60	75 - 120
M&P-XYLENE	1.581862	1.422199		10.10		0.05	0.04495333	89.90	77 - 120

7A-OR

GC/MS CONTINUING CALIBRATION VERIFICATION

SDG:	L1102841	**Calibration (begin) date/time:**	05/02/19 15:57
Instrument ID:	VOCMS6	**Calibration (end) date/time:**	05/08/19 10:30
Lab File ID:	0529_02-1	**Analysis date/time:**	05/29/19 11:09
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	0.44341750		16.10		0.1250	0.1048986	83.90	70 - 130
METHYL CYCLOHEXANE	0.551607	0.44478150		19.40		0.0250	0.02015844	80.60	70 - 130
METHYL TERT-BUTYL ETHER	0.984809	0.85510380		13.20		0.0250	0.02170735	86.80	64 - 123
METHYLENE CHLORIDE	0.356367	0.28921340		18.80		0.0250	0.02028903	81.20	60 - 140
N-BUTYLBENZENE	2.403045	2.124077		11.60		0.0250	0.02209776	88.40	72 - 126
N-PROPYLBENZENE	4.414562	3.934206		10.90		0.0250	0.02227971	89.10	79 - 120
O-XYLENE	1.495639	1.368807		8.48		0.0250	0.02287997	91.50	78 - 120
P-ISOPROPYLTOLUENE	3.002866	2.628490		12.50		0.0250	0.02188318	87.50	74 - 126
SEC-BUTYLBENZENE	3.528852	3.046112		13.70		0.0250	0.02158005	86.30	74 - 121
STYRENE	2.260868	2.213386		2.10		0.0250	0.02447496	97.90	78 - 124
TERT-BUTYLBENZENE	2.464572	2.172019		11.90		0.0250	0.02203242	88.10	75 - 122
TETRACHLOROETHENE	0.817634	0.82376650		0.75		0.0250	0.02518752	101	70 - 130
TOLUENE	3.898506	3.554926		8.81		0.0250	0.02279672	91.20	70 - 130
TRANS-1,2-DICHLOROETHENE	0.313131	0.28694230		8.36		0.0250	0.02290909	91.60	70 - 130
TRANS-1,3-DICHLOROPROPENE	1.118360	1.074621		3.91		0.0250	0.02402224	96.10	50 - 150
TRICHLOROETHENE	0.384716	0.35184740		8.54		0.0250	0.02286411	91.50	65 - 135
TRICHLOROFLUOROMETHANE	0.530897	0.49146730		7.43		0.0250	0.02314325	92.60	50 - 150
VINYL CHLORIDE	0.456530	0.41968710		8.07		0.0250	0.02298242	91.90	5 - 195
XYLENES, TOTAL	0	1.374725		0		0.0750	0.0678333	90.40	77 - 120
1,2-DICHLOROETHANE-D4	0.350493	0.35012840		0.1040		0.0160	0.01598336	99.90	70 - 130
4-BROMOFLUOROBENZENE	0.947552	0.91458180		3.48		0.0160	0.01544328	96.50	70 - 130
TOLUENE-D8	2.471118	2.462806		0.3360		0.0160	0.01594618	99.70	70 - 130

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415931-4

Lab Sample ID:	R3415931-4	**SDG:**	L1102841
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	0529_07	**Received Date/Time:**	_____
Instrument ID:	VOCMS6	**Preparation Date/Time:**	05/29/19 12:48
Analytical Batch:	WG1287848	**Analysis Date/Time:**	05/29/19 12:48
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
Bromochloromethane	74-97-5	0	U		0.000520	0.0050	0.00500
Bromodichloromethane	75-27-4	0	U		0.000380	0.0010	0.00100
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
Carbon disulfide	75-15-0	0	U		0.000275	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 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
Cyclohexane	110-82-7	0	U		0.000390	0.0010	0.00100
Chloroform	67-66-3	0	U		0.000324	0.0050	0.00500
Chloromethane	74-87-3	0	U		0.000276	0.0025	0.00250
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
Methyl Acetate	79-20-9	0	U		0.00430	0.02	0.0200
Isopropylbenzene	98-82-8	0	U		0.000326	0.0010	0.00100
Methyl Cyclohexane	108-87-2	0	U		0.000380	0.0010	0.00100
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

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415931-4

Lab Sample ID:	R3415931-4	**SDG:**	L1102841
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	0529_07	**Received Date/Time:**	_____
Instrument ID:	VOCMS6	**Preparation Date/Time:**	05/29/19 12:48
Analytical Batch:	WG1287848	**Analysis Date/Time:**	05/29/19 12:48
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
Tetrachloroethene	127-18-4	0	U		0.000372	0.0010	0.00100
Toluene	108-88-3	0	U		0.000412	0.0010	0.00100
1,1,2-Trichlorotrifluoroethane	76-13-1	0	U		0.000303	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
Trichloroethene	79-01-6	0	U		0.000398	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
1,2,4-Trimethylbenzene	95-63-6	0	U		0.000373	0.0010	0.00100
o-Xylene	95-47-6	0	U		0.000341	0.0010	0.00100
1,3,5-Trimethylbenzene	108-67-8	0	U		0.000387	0.0010	0.00100
m&p-Xylene	1330-20-7	0	U		0.000719	0.0020	0.00200
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
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.:
R3415931-1

Lab Sample ID:	R3415931-1	**SDG:**	L1102841
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	0529_03	**Received Date/Time:**	_____
Instrument ID:	VOCMS6	**Preparation Date/Time:**	05/29/19 11:29
Analytical Batch:	WG1287848	**Analysis Date/Time:**	05/29/19 11:29
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*
Bromochloromethane	74-97-5	3.80	0.0191		0.000520	0.0010	0.00100
Acetone	67-64-1	2.98	0.103		0.0100	0.05	0.0500
Carbon disulfide	75-15-0	2.65	0.0164		0.000275	0.0010	0.00100
Acrylonitrile	107-13-1	3.42	0.109		0.00187	0.01	0.0100
Benzene	71-43-2	4.16	0.0214		0.000331	0.0010	0.00100
Bromobenzene	108-86-1	7.25	0.0217		0.000352	0.0010	0.00100
Bromodichloromethane	75-27-4	4.81	0.0218		0.000380	0.0010	0.00100
Bromoform	75-25-2	6.80	0.0238		0.000469	0.0010	0.00100
Bromomethane	74-83-9	2.10	0.00745		0.000866	0.0050	0.00500
n-Butylbenzene	104-51-8	8.19	0.0227		0.000361	0.0010	0.00100
sec-Butylbenzene	135-98-8	7.76	0.0221		0.000365	0.0010	0.00100
tert-Butylbenzene	98-06-6	7.62	0.0228		0.000399	0.0010	0.00100
Carbon tetrachloride	56-23-5	3.92	0.0230		0.000379	0.0010	0.00100
Chlorobenzene	108-90-7	6.33	0.0230		0.000348	0.0010	0.00100
Chlorodibromomethane	124-48-1	5.82	0.0239		0.000327	0.0010	0.00100
Chloroethane	75-00-3	2.19	0.0186		0.000453	0.0050	0.00500
Chloroform	67-66-3	3.83	0.0216		0.000324	0.0050	0.00500
Chloromethane	74-87-3	1.83	0.0130		0.000276	0.0025	0.00250
2-Chlorotoluene	95-49-8	7.37	0.0220		0.000375	0.0010	0.00100
4-Chlorotoluene	106-43-4	7.50	0.0232		0.000351	0.0010	0.00100
Dibromomethane	74-95-3	4.74	0.0212		0.000346	0.0010	0.00100
1,2-Dichlorobenzene	95-50-1	8.34	0.0247		0.000349	0.0010	0.00100
1,3-Dichlorobenzene	541-73-1	7.95	0.0237		0.000220	0.0010	0.00100
1,4-Dichlorobenzene	106-46-7	8.01	0.0222		0.000274	0.0010	0.00100
Dichlorodifluoromethane	75-71-8	1.64	0.0256		0.000551	0.0050	0.00500
1,1-Dichloroethane	75-34-3	3.39	0.0214		0.000259	0.0010	0.00100
1,2-Dichloroethane	107-06-2	4.27	0.0198		0.000361	0.0010	0.00100
1,1-Dichloroethene	75-35-4	2.62	0.0187		0.000398	0.0010	0.00100
cis-1,2-Dichloroethene	156-59-2	3.69	0.0227		0.000260	0.0010	0.00100
2-Hexanone	591-78-6	6.08	0.120		0.00382	0.01	0.0100
trans-1,2-Dichloroethene	156-60-5	3.05	0.0234		0.000396	0.0010	0.00100
1,2-Dichloropropane	78-87-5	4.79	0.0216		0.000306	0.0010	0.00100
1,1-Dichloropropene	563-58-6	4.02	0.0226		0.000352	0.0010	0.00100
cis-1,3-Dichloropropene	10061-01-5	5.19	0.0226		0.000418	0.0010	0.00100
trans-1,3-Dichloropropene	10061-02-6	5.58	0.0238		0.000419	0.0010	0.00100
2,2-Dichloropropane	594-20-7	3.75	0.0224		0.000321	0.0010	0.00100
Ethylbenzene	100-41-4	6.33	0.0236		0.000384	0.0010	0.00100
Isopropylbenzene	98-82-8	6.94	0.0229		0.000326	0.0010	0.00100
p-Isopropyltoluene	99-87-6	7.86	0.0223		0.000350	0.0010	0.00100
2-Butanone (MEK)	78-93-3	3.98	0.0985		0.00393	0.01	0.0100
Methylene Chloride	75-09-2	2.96	0.0204		0.00100	0.0050	0.00500
4-Methyl-2-pentanone (MIBK)	108-10-1	5.54	0.112		0.00214	0.01	0.0100
Methyl tert-butyl ether	1634-04-4	3.09	0.0219		0.000367	0.0010	0.00100

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415931-1

Lab Sample ID:	R3415931-1	**SDG:**	L1102841
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	0529_03	**Received Date/Time:**	_____
Instrument ID:	VOCMS6	**Preparation Date/Time:**	05/29/19 11:29
Analytical Batch:	WG1287848	**Analysis Date/Time:**	05/29/19 11:29
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*
o-Xylene	95-47-6	6.72	0.0230		0.000341	0.0010	0.00100
m&p-Xylene	1330-20-7	6.42	0.0450		0.000719	0.0020	0.00200
n-Propylbenzene	103-65-1	7.24	0.0225		0.000349	0.0010	0.00100
Styrene	100-42-5	6.76	0.0237		0.000307	0.0010	0.00100
1,3-Dichloropropene	542-75-6	5.58	0.0464		0.000837	0.0020	0.00200
1,1,1,2-Tetrachloroethane	630-20-6	6.36	0.0235		0.000385	0.0010	0.00100
1,1,2,2-Tetrachloroethane	79-34-5	7.29	0.0235		0.000130	0.0010	0.00100
Tetrachloroethene	127-18-4	5.59	0.0248		0.000372	0.0010	0.00100
Toluene	108-88-3	5.34	0.0224		0.000412	0.0010	0.00100
1,1,2-Trichlorotrifluoroethane	76-13-1	2.63	0.0209		0.000303	0.0010	0.00100
1,2,3-Trichlorobenzene	87-61-6	9.95	0.0221		0.000230	0.0010	0.00100
1,2,4-Trichlorobenzene	120-82-1	9.53	0.0234		0.000355	0.0010	0.00100
1,1,1-Trichloroethane	71-55-6	3.96	0.0226		0.000319	0.0010	0.00100
1,1,2-Trichloroethane	79-00-5	5.69	0.0229		0.000383	0.0010	0.00100
Trichloroethene	79-01-6	4.49	0.0224		0.000398	0.0010	0.00100
Trichlorofluoromethane	75-69-4	2.29	0.0219		0.00120	0.0050	0.00500
1,2,3-Trichloropropane	96-18-4	7.40	0.0236		0.000807	0.0010	0.00100
1,2,4-Trimethylbenzene	95-63-6	7.67	0.0230		0.000373	0.0010	0.00100
1,3,5-Trimethylbenzene	108-67-8	7.38	0.0216		0.000387	0.0010	0.00100
Vinyl chloride	75-01-4	1.87	0.0227		0.000259	0.0010	0.00100
Xylenes, Total	1330-20-7	6.72	0.0680		0.00106	0.0030	0.00300

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415931-5

Lab Sample ID:	R3415931-5	**SDG:**	L1102841
Client Sample ID:	MS	**Collected Date/Time:**	05/22/19 09:05
Lab File ID:	0529_29	**Received Date/Time:**	05/23/19 08:45
Instrument ID:	VOCMS6	**Preparation Date/Time:**	05/29/19 20:25
Analytical Batch:	WG1287848	**Analysis Date/Time:**	05/29/19 20:25
Dilution Factor:	10	**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*
Bromochloromethane	74-97-5	3.80	0.186		0.00520	0.0010	0.0100
Carbon disulfide	75-15-0	2.65	0.204		0.00275	0.0010	0.0100
Acetone	67-64-1	2.97	0.866		0.100	0.05	0.500
Acrylonitrile	107-13-1	3.42	1.04		0.0187	0.01	0.100
Benzene	71-43-2	4.16	0.211		0.00331	0.0010	0.0100
Bromobenzene	108-86-1	7.25	0.203		0.00352	0.0010	0.0100
Bromodichloromethane	75-27-4	4.81	0.208		0.00380	0.0010	0.0100
Bromoform	75-25-2	6.80	0.212		0.00469	0.0010	0.0100
Bromomethane	74-83-9	2.10	0.0847		0.00866	0.0050	0.0500
n-Butylbenzene	104-51-8	8.19	0.204		0.00361	0.0010	0.0100
sec-Butylbenzene	135-98-8	7.75	0.200		0.00365	0.0010	0.0100
tert-Butylbenzene	98-06-6	7.62	0.211		0.00399	0.0010	0.0100
Carbon tetrachloride	56-23-5	3.92	6.68	E V	0.00379	0.0010	0.0100
Chlorobenzene	108-90-7	6.33	0.222		0.00348	0.0010	0.0100
Chlorodibromomethane	124-48-1	5.82	0.220		0.00327	0.0010	0.0100
Chloroethane	75-00-3	2.19	0.186		0.00453	0.0050	0.0500
Chloroform	67-66-3	3.82	0.232		0.00324	0.0050	0.0500
Chloromethane	74-87-3	1.83	0.130		0.00276	0.0025	0.0250
2-Chlorotoluene	95-49-8	7.37	0.201		0.00375	0.0010	0.0100
4-Chlorotoluene	106-43-4	7.49	0.208		0.00351	0.0010	0.0100
Dibromomethane	74-95-3	4.74	0.199		0.00346	0.0010	0.0100
1,2-Dichlorobenzene	95-50-1	8.34	0.217		0.00349	0.0010	0.0100
1,3-Dichlorobenzene	541-73-1	7.95	0.213		0.00220	0.0010	0.0100
1,4-Dichlorobenzene	106-46-7	8.01	0.198		0.00274	0.0010	0.0100
Dichlorodifluoromethane	75-71-8	1.64	0.288		0.00551	0.0050	0.0500
2-Hexanone	591-78-6	6.08	1.11		0.0382	0.01	0.100
1,1-Dichloroethane	75-34-3	3.39	0.212		0.00259	0.0010	0.0100
1,2-Dichloroethane	107-06-2	4.27	0.189		0.00361	0.0010	0.0100
1,1-Dichloroethene	75-35-4	2.61	0.233		0.00398	0.0010	0.0100
cis-1,2-Dichloroethene	156-59-2	3.69	0.219		0.00260	0.0010	0.0100
trans-1,2-Dichloroethene	156-60-5	3.05	0.220		0.00396	0.0010	0.0100
1,2-Dichloropropane	78-87-5	4.79	0.208		0.00306	0.0010	0.0100
1,1-Dichloropropene	563-58-6	4.02	0.222		0.00352	0.0010	0.0100
cis-1,3-Dichloropropene	10061-01-5	5.19	0.206		0.00418	0.0010	0.0100
trans-1,3-Dichloropropene	10061-02-6	5.58	0.219		0.00419	0.0010	0.0100
2,2-Dichloropropane	594-20-7	3.75	0.207		0.00321	0.0010	0.0100
Ethylbenzene	100-41-4	6.32	0.226		0.00384	0.0010	0.0100
Isopropylbenzene	98-82-8	6.94	0.217		0.00326	0.0010	0.0100
p-Isopropyltoluene	99-87-6	7.86	0.202		0.00350	0.0010	0.0100
2-Butanone (MEK)	78-93-3	3.98	0.909		0.0393	0.01	0.100
Methylene Chloride	75-09-2	2.96	0.200		0.0100	0.0050	0.0500
4-Methyl-2-pentanone (MIBK)	108-10-1	5.54	1.04		0.0214	0.01	0.100
Methyl tert-butyl ether	1634-04-4	3.09	0.203		0.00367	0.0010	0.0100

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415931-5

Lab Sample ID:	R3415931-5	**SDG:**	L1102841
Client Sample ID:	MS	**Collected Date/Time:**	05/22/19 09:05
Lab File ID:	0529_29	**Received Date/Time:**	05/23/19 08:45
Instrument ID:	VOCMS6	**Preparation Date/Time:**	05/29/19 20:25
Analytical Batch:	WG1287848	**Analysis Date/Time:**	05/29/19 20:25
Dilution Factor:	10	**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*
o-Xylene	95-47-6	6.72	0.218		0.00341	0.0010	0.0100
m&p-Xylene	1330-20-7	6.42	0.425		0.00719	0.0020	0.0200
1,3-Dichloropropene	542-75-6	5.58	0.425		0.00837	0.0020	0.0200
n-Propylbenzene	103-65-1	7.24	0.210		0.00349	0.0010	0.0100
Styrene	100-42-5	6.76	0.220		0.00307	0.0010	0.0100
1,1,1,2-Tetrachloroethane	630-20-6	6.36	0.222		0.00385	0.0010	0.0100
1,1,2,2-Tetrachloroethane	79-34-5	7.29	0.211		0.00130	0.0010	0.0100
Tetrachloroethene	127-18-4	5.59	0.234		0.00372	0.0010	0.0100
Toluene	108-88-3	5.33	0.219		0.00412	0.0010	0.0100
1,1,2-Trichlorotrifluoroethane	76-13-1	2.63	0.245		0.00303	0.0010	0.0100
1,2,3-Trichlorobenzene	87-61-6	9.95	0.186		0.00230	0.0010	0.0100
1,2,4-Trichlorobenzene	120-82-1	9.52	0.200		0.00355	0.0010	0.0100
1,1,1-Trichloroethane	71-55-6	3.96	0.228		0.00319	0.0010	0.0100
1,1,2-Trichloroethane	79-00-5	5.69	0.218		0.00383	0.0010	0.0100
Trichloroethene	79-01-6	4.48	0.215		0.00398	0.0010	0.0100
Trichlorofluoromethane	75-69-4	2.29	0.233		0.0120	0.0050	0.0500
1,2,3-Trichloropropane	96-18-4	7.40	0.217		0.00807	0.0010	0.0100
1,2,4-Trimethylbenzene	95-63-6	7.67	0.206		0.00373	0.0010	0.0100
1,3,5-Trimethylbenzene	108-67-8	7.37	0.199		0.00387	0.0010	0.0100
Vinyl chloride	75-01-4	1.86	0.221		0.00259	0.0010	0.0100
Xylenes, Total	1330-20-7	6.72	0.643		0.0106	0.0030	0.0300

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415931-6

Lab Sample ID:	R3415931-6	**SDG:**	L1102841
Client Sample ID:	MSD	**Collected Date/Time:**	05/22/19 09:05
Lab File ID:	0529_30	**Received Date/Time:**	05/23/19 08:45
Instrument ID:	VOCMS6	**Preparation Date/Time:**	05/29/19 20:45
Analytical Batch:	WG1287848	**Analysis Date/Time:**	05/29/19 20:45
Dilution Factor:	10	**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*
Bromochloromethane	74-97-5	3.81	0.165		0.00520	0.0010	0.0100
Carbon disulfide	75-15-0	2.66	0.189		0.00275	0.0010	0.0100
Acetone	67-64-1	2.98	0.806		0.100	0.05	0.500
Acrylonitrile	107-13-1	3.42	0.965		0.0187	0.01	0.100
Benzene	71-43-2	4.16	0.195		0.00331	0.0010	0.0100
Bromobenzene	108-86-1	7.25	0.190		0.00352	0.0010	0.0100
Bromodichloromethane	75-27-4	4.82	0.194		0.00380	0.0010	0.0100
Bromoform	75-25-2	6.80	0.198		0.00469	0.0010	0.0100
Bromomethane	74-83-9	2.10	0.0931		0.00866	0.0050	0.0500
n-Butylbenzene	104-51-8	8.19	0.182		0.00361	0.0010	0.0100
sec-Butylbenzene	135-98-8	7.76	0.186		0.00365	0.0010	0.0100
tert-Butylbenzene	98-06-6	7.62	0.193		0.00399	0.0010	0.0100
Carbon tetrachloride	56-23-5	3.92	6.24	E V	0.00379	0.0010	0.0100
Chlorobenzene	108-90-7	6.33	0.207		0.00348	0.0010	0.0100
Chlorodibromomethane	124-48-1	5.82	0.205		0.00327	0.0010	0.0100
Chloroethane	75-00-3	2.20	0.175		0.00453	0.0050	0.0500
Chloroform	67-66-3	3.83	0.220		0.00324	0.0050	0.0500
Chloromethane	74-87-3	1.83	0.126		0.00276	0.0025	0.0250
2-Chlorotoluene	95-49-8	7.38	0.187		0.00375	0.0010	0.0100
4-Chlorotoluene	106-43-4	7.50	0.191		0.00351	0.0010	0.0100
Dibromomethane	74-95-3	4.74	0.184		0.00346	0.0010	0.0100
1,2-Dichlorobenzene	95-50-1	8.34	0.201		0.00349	0.0010	0.0100
1,3-Dichlorobenzene	541-73-1	7.95	0.191		0.00220	0.0010	0.0100
1,4-Dichlorobenzene	106-46-7	8.02	0.184		0.00274	0.0010	0.0100
Dichlorodifluoromethane	75-71-8	1.64	0.261		0.00551	0.0050	0.0500
2-Hexanone	591-78-6	6.08	1.04		0.0382	0.01	0.100
1,1-Dichloroethane	75-34-3	3.39	0.201		0.00259	0.0010	0.0100
1,2-Dichloroethane	107-06-2	4.27	0.174		0.00361	0.0010	0.0100
1,1-Dichloroethene	75-35-4	2.62	0.214		0.00398	0.0010	0.0100
cis-1,2-Dichloroethene	156-59-2	3.69	0.202		0.00260	0.0010	0.0100
trans-1,2-Dichloroethene	156-60-5	3.05	0.212		0.00396	0.0010	0.0100
1,2-Dichloropropane	78-87-5	4.79	0.198		0.00306	0.0010	0.0100
1,1-Dichloropropene	563-58-6	4.02	0.203		0.00352	0.0010	0.0100
cis-1,3-Dichloropropene	10061-01-5	5.19	0.194		0.00418	0.0010	0.0100
trans-1,3-Dichloropropene	10061-02-6	5.59	0.200		0.00419	0.0010	0.0100
2,2-Dichloropropane	594-20-7	3.75	0.191		0.00321	0.0010	0.0100
Ethylbenzene	100-41-4	6.33	0.213		0.00384	0.0010	0.0100
Isopropylbenzene	98-82-8	6.94	0.201		0.00326	0.0010	0.0100
p-Isopropyltoluene	99-87-6	7.86	0.183		0.00350	0.0010	0.0100
2-Butanone (MEK)	78-93-3	3.99	0.840		0.0393	0.01	0.100
Methylene Chloride	75-09-2	2.96	0.189		0.0100	0.0050	0.0500
4-Methyl-2-pentanone (MIBK)	108-10-1	5.54	0.983		0.0214	0.01	0.100
Methyl tert-butyl ether	1634-04-4	3.09	0.187		0.00367	0.0010	0.0100

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415931-6

Lab Sample ID:	R3415931-6	**SDG:**	L1102841
Client Sample ID:	MSD	**Collected Date/Time:**	05/22/19 09:05
Lab File ID:	0529_30	**Received Date/Time:**	05/23/19 08:45
Instrument ID:	VOCMS6	**Preparation Date/Time:**	05/29/19 20:45
Analytical Batch:	WG1287848	**Analysis Date/Time:**	05/29/19 20:45
Dilution Factor:	10	**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*
o-Xylene	95-47-6	6.73	0.202		0.00341	0.0010	0.0100
m&p-Xylene	1330-20-7	6.42	0.396		0.00719	0.0020	0.0200
1,3-Dichloropropene	542-75-6	5.59	0.394		0.00837	0.0020	0.0200
n-Propylbenzene	103-65-1	7.24	0.190		0.00349	0.0010	0.0100
Styrene	100-42-5	6.76	0.207		0.00307	0.0010	0.0100
1,1,1,2-Tetrachloroethane	630-20-6	6.36	0.208		0.00385	0.0010	0.0100
1,1,2,2-Tetrachloroethane	79-34-5	7.29	0.197		0.00130	0.0010	0.0100
Tetrachloroethene	127-18-4	5.59	0.216		0.00372	0.0010	0.0100
Toluene	108-88-3	5.34	0.204		0.00412	0.0010	0.0100
1,1,2-Trichlorotrifluoroethane	76-13-1	2.63	0.229		0.00303	0.0010	0.0100
1,2,3-Trichlorobenzene	87-61-6	9.95	0.175		0.00230	0.0010	0.0100
1,2,4-Trichlorobenzene	120-82-1	9.53	0.181		0.00355	0.0010	0.0100
1,1,1-Trichloroethane	71-55-6	3.96	0.212		0.00319	0.0010	0.0100
1,1,2-Trichloroethane	79-00-5	5.69	0.201		0.00383	0.0010	0.0100
Trichloroethene	79-01-6	4.49	0.200		0.00398	0.0010	0.0100
Trichlorofluoromethane	75-69-4	2.29	0.213		0.0120	0.0050	0.0500
1,2,3-Trichloropropane	96-18-4	7.41	0.204		0.00807	0.0010	0.0100
1,2,4-Trimethylbenzene	95-63-6	7.68	0.189		0.00373	0.0010	0.0100
1,3,5-Trimethylbenzene	108-67-8	7.38	0.181		0.00387	0.0010	0.0100
Vinyl chloride	75-01-4	1.87	0.206		0.00259	0.0010	0.0100
Xylenes, Total	1330-20-7	6.73	0.598		0.0106	0.0030	0.0300

8015M SVOC-GC-GLYCOLS

2A-OR

SURROGATE RECOVERY

Analytical Method: 8015M **SDG:** L1102841
Matrix: WW

Sample ID	Lab Sample ID	Instrument	File ID	DMC-1 % Rec.	TOT Out
WW-20190524-002-DAY 22	L1102841-01	SVGC10	0528_12b	76.0	0
OS	L1102843-01	SVGC10	0528_13b	80.4	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:** L1102841
Matrix: WW

Sample ID	Lab Sample ID	Instrument	File ID	DMC-1 % Rec.	TOT Out
MS	R3415674-4	SVGC10	0528_14b	80.2	0
MSD	R3415674-5	SVGC10	0528_15b	80.4	0
BLANK	R3415674-1	SVGC10	0528_06b	67.4	0
LCS	R3415674-2	SVGC10	0528_07b	73.2	0
LCSD	R3415674-3	SVGC10	0528_08b	71.3	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

L1102841-01

SAMPLE NO.:
R3415674-4
R3415674-5

MS Sample / File ID:	R3415674-4 / 0528_14b	**SDG:**	L1102841
MSD Sample / File ID:	R3415674-5 / 0528_15b	**Analytical Batch:**	WG1287559
OS Sample / File ID:	L1102843-01 / 0528_13b	**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	96.1	94.9	107	105	1	62.0 - 136	1.26	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

L1102841-01

SAMPLE NO.:
R3415674-2
R3415674-3

LCS Sample / File ID:	R3415674-2 / 0528_07b	**SDG:**	L1102841
LCSD Sample / File ID:	R3415674-3 / 0528_08b	**Analytical Batch:**	WG1287559
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	93.6	96.3	104	107	80.0 - 120	2.84	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.:
R3415674-1

Lab Sample ID:	R3415674-1	**SDG:**	L1102841
Lab File ID:	0528_06b	**Preparation Date/Time:**	05/28/19 18:07
Instrument ID:	SVGC10	**Analysis Date/Time:**	05/28/19 23:28
Analytical Batch:	WG1287559	**Dilution Factor:**	1
Analytical Method:	8015M	**Matrix:**	WW

Sample ID	**Lab Sample ID**	**Instrument**	**File ID**	**Analysis** *date/time*
LCS	R3415674-2	SVGC10	0528_07b	05/28/19 23:46
LCSD	R3415674-3	SVGC10	0528_08b	05/29/19 00:04
WW-20190524-002-DAY 22	L1102841-01	SVGC10	0528_12b	05/29/19 01:15
OS	L1102843-01	SVGC10	0528_13b	05/29/19 01:33
MS	R3415674-4	SVGC10	0528_14b	05/29/19 01:51
MSD	R3415674-5	SVGC10	0528_15b	05/29/19 02:09

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
WW-20190524-002-DAY 22

Lab Sample ID:	L1102841-01	**SDG:**	L1102841
Client Sample ID:	WW-20190524-002-DAY 22	**Collected Date/Time:**	05/24/19 14:00
Lab File ID:	0528_12b	**Received Date/Time:**	05/27/19 08:45
Instrument ID:	SVGC10	**Preparation Date/Time:**	05/28/19 18:08
Analytical Batch:	WG1287559	**Analysis Date/Time:**	05/29/19 01:15
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:	L1102841	**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:	L1102841	**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:	L1102841	**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:	L1102841	**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_04b	**Analysis date/time:**	05/28/19 22:52
Analytical Method:	8015M	**Sample ID:**	CCV

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
ETHYLENE GLYCOL	30	32.80	109	80 - 120
1,3-PROPANEDIOL	30	29.12	97.10	50 - 150

7C-OR

CONTINUING CALIBRATION VERIFICATION
SINGLE COMPONENT ANALYTES

SDG:	L1102841	**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_09b	**Analysis date/time:**	05/29/19 00:21
Analytical Method:	8015M	**Sample ID:**	CCV

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
ETHYLENE GLYCOL	30	32.41	108	80 - 120
1,3-PROPANEDIOL	30	28.38	94.60	50 - 150

7C-OR

CONTINUING CALIBRATION VERIFICATION
SINGLE COMPONENT ANALYTES

SDG:	L1102841	**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_17b	**Analysis date/time:**	05/29/19 02:44
Analytical Method:	8015M	**Sample ID:**	CCV

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
ETHYLENE GLYCOL	30	31.71	106	80 - 120
1,3-PROPANEDIOL	30	27.49	91.60	50 - 150

8B-OR

ANALYTICAL SEQUENCE

SDG:	L1102841	**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	SVGC10052819b0528_04b465874	0528_04b	05/28/19 22:52	1	
BLANK	R3415674-1	0528_06b	05/28/19 23:28	1	WG1287559
LCS	R3415674-2	0528_07b	05/28/19 23:46	1	WG1287559
LCSD	R3415674-3	0528_08b	05/29/19 00:04	1	WG1287559
CCV	SVGC10052819b0528_09b465874	0528_09b	05/29/19 00:21	1	
WW-20190524-002-DAY 22	L1102841-01	0528_12b	05/29/19 01:15	1	WG1287559
OS	L1102843-01	0528_13b	05/29/19 01:33	1	WG1287559
MS	R3415674-4	0528_14b	05/29/19 01:51	1	WG1287559
MSD	R3415674-5	0528_15b	05/29/19 02:09	1	WG1287559
CCV	SVGC10052819b0528_17b465874	0528_17b	05/29/19 02:44	1	

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415674-1

Lab Sample ID:	R3415674-1	**SDG:**	L1102841
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	0528_06b	**Received Date/Time:**	_____
Instrument ID:	SVGC10	**Preparation Date/Time:**	05/28/19 18:07
Analytical Batch:	WG1287559	**Analysis Date/Time:**	05/28/19 23:28
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.:
R3415674-2

Lab Sample ID:	R3415674-2	**SDG:**	L1102841
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	0528_07b	**Received Date/Time:**	_____
Instrument ID:	SVGC10	**Preparation Date/Time:**	05/28/19 18:07
Analytical Batch:	WG1287559	**Analysis Date/Time:**	05/28/19 23:46
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	93.6		0.492	5	5.00

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415674-3

Lab Sample ID:	R3415674-3	**SDG:**	L1102841
Client Sample ID:	LCSD	**Collected Date/Time:**	_____
Lab File ID:	0528_08b	**Received Date/Time:**	_____
Instrument ID:	SVGC10	**Preparation Date/Time:**	05/28/19 18:07
Analytical Batch:	WG1287559	**Analysis Date/Time:**	05/29/19 00:04
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	96.3		0.492	5	5.00

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415674-4

Lab Sample ID:	R3415674-4	**SDG:**	L1102841
Client Sample ID:	MS	**Collected Date/Time:**	05/25/19 14:00
Lab File ID:	0528_14b	**Received Date/Time:**	05/27/19 08:45
Instrument ID:	SVGC10	**Preparation Date/Time:**	05/28/19 18:08
Analytical Batch:	WG1287559	**Analysis Date/Time:**	05/29/19 01:51
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	96.1		0.492	5	5.00

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3415674-5

Lab Sample ID:	R3415674-5	**SDG:**	L1102841
Client Sample ID:	MSD	**Collected Date/Time:**	05/25/19 14:00
Lab File ID:	0528_15b	**Received Date/Time:**	05/27/19 08:45
Instrument ID:	SVGC10	**Preparation Date/Time:**	05/28/19 18:08
Analytical Batch:	WG1287559	**Analysis Date/Time:**	05/29/19 02:09
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	5.69	94.9		0.492	5	5.00

8151 Chlorinated Acid Herbicides (GC)

2A-OR

SURROGATE RECOVERY

Analytical Method: 8151 **SDG:** L1102841
Matrix: WW

Sample ID	Lab Sample ID	Instrument	File ID	DMC-1 % Rec.	TOT Out
WW-20190524-002-DAY 22	L1102841-01	SVGC11	0529A_39	72.6	0
BLANK	R3416052-1	SVGC11	0529A_36	79.8	0
LCS	R3416052-2	SVGC11	0529A_37	76.8	0
LCSD	R3416052-3	SVGC11	0529A_38	82.6	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

L1102841-01

SAMPLE NO.:
R3416052-2
R3416052-3

LCS Sample / File ID:	R3416052-2 / 0529A_37	**SDG:**	L1102841
LCSD Sample / File ID:	R3416052-3 / 0529A_38	**Analytical Batch:**	WG1287805
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	0.00337	0.00374	67.4	74.8	50.0 - 125	10.4	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.:
R3416052-1

Lab Sample ID:	R3416052-1	**SDG:**	L1102841
Lab File ID:	0529A_36	**Preparation Date/Time:**	05/29/19 11:04
Instrument ID:	SVGC11	**Analysis Date/Time:**	05/29/19 17:34
Analytical Batch:	WG1287805	**Dilution Factor:**	1
Analytical Method:	8151	**Matrix:**	WW

Sample ID	**Lab Sample ID**	**Instrument**	**File ID**	**Analysis** *date/time*
LCS	R3416052-2	SVGC11	0529A_37	05/29/19 17:47
LCSD	R3416052-3	SVGC11	0529A_38	05/29/19 18:01
WW-20190524-002-DAY 22	L1102841-01	SVGC11	0529A_39	05/29/19 18:14

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
WW-20190524-002-DAY 22

Lab Sample ID:	L1102841-01	**SDG:**	L1102841
Client Sample ID:	WW-20190524-002-DAY 22	**Collected Date/Time:**	05/24/19 14:00
Lab File ID:	0529A_39	**Received Date/Time:**	05/27/19 08:45
Instrument ID:	SVGC11	**Preparation Date/Time:**	05/29/19 11:04
Analytical Batch:	WG1287805	**Analysis Date/Time:**	05/29/19 18:14
Dilution Factor:	1.08	**Prep Method:**	8151A
Analytical Method:	8151	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	930 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		0.000913	0.00200	0.00216

6B-OR

RETENTION TIME
INITIAL CALIBRATION OF
SINGLE COMPONENT ANALYTES

SDG:	L1102841	**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:	L1102841	**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:	L1102841	**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:	L1102841	**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:	L1102841	**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:	L1102841	**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:	L1102841	**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:	L1102841	**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:	L1102841	**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:	0529A_35	**Analysis date/time:**	05/29/19 17:20
Analytical Method:	8151	**Sample ID:**	CCV

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
2,4,5-TP (SILVEX)	0.20	0.1875	106	85 - 115
2,4-DICHLOROPHENYL ACETIC ACID	0.20	0.1949	97.50	70 - 130

7D-OR

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1102841	**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:	0529A_35	**Analysis date/time:**	05/29/19 17:20
Analytical Method:	8151	**Sample ID:**	CCV

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
2,4,5-TP (SILVEX)	0.20	0.1875	93.80	85 - 115
2,4-DICHLOROPHENYL ACETIC ACID	0.20	0.1959	97.90	70 - 130

7D-OR

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1102841	**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:	0529A_48	**Analysis date/time:**	05/29/19 20:16
Analytical Method:	8151	**Sample ID:**	CCV

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
2,4,5-TP (SILVEX)	0.20	0.1954	104	85 - 115
2,4-DICHLOROPHENYL ACETIC ACID	0.20	0.1921	96.10	70 - 130

7D-OR

CONTINUING CALIBRATION VERIFICATION
DUAL COLUMN ANALYTES

SDG:	L1102841	**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:	0529A_48	**Analysis date/time:**	05/29/19 20:16
Analytical Method:	8151	**Sample ID:**	CCV

Analyte	**True Value**	**Result**	**Result**	**Limits**
	mg/l	*mg/l*	*% Rec.*	*%*
2,4,5-TP (SILVEX)	0.20	0.1954	97.70	85 - 115
2,4-DICHLOROPHENYL ACETIC ACID	0.20	0.2009	100	70 - 130

8B-OR

ANALYTICAL SEQUENCE

SDG:	L1102841	**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	SVGC11052919A0529A_35472385	0529A_35	05/29/19 17:20	1	
BLANK	R3416052-1	0529A_36	05/29/19 17:34	1	WG1287805
LCS	R3416052-2	0529A_37	05/29/19 17:47	1	WG1287805
LCSD	R3416052-3	0529A_38	05/29/19 18:01	1	WG1287805
WW-20190524-002-DAY 22	L1102841-01	0529A_39	05/29/19 18:14	1.08	WG1287805
CCV	SVGC11052919A0529A_48472385	0529A_48	05/29/19 20:16	1	

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416052-1

Lab Sample ID:	R3416052-1	**SDG:**	L1102841
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	0529A_36	**Received Date/Time:**	_____
Instrument ID:	SVGC11	**Preparation Date/Time:**	05/29/19 11:04
Analytical Batch:	WG1287805	**Analysis Date/Time:**	05/29/19 17:34
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.:
R3416052-2

Lab Sample ID:	R3416052-2	**SDG:**	L1102841
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	0529A_37	**Received Date/Time:**	_____
Instrument ID:	SVGC11	**Preparation Date/Time:**	05/29/19 11:04
Analytical Batch:	WG1287805	**Analysis Date/Time:**	05/29/19 17:47
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	6.34	0.00337		0.000845	0.0020	0.00200

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3416052-3

Lab Sample ID:	R3416052-3	**SDG:**	L1102841
Client Sample ID:	LCSD	**Collected Date/Time:**	_____
Lab File ID:	0529A_38	**Received Date/Time:**	_____
Instrument ID:	SVGC11	**Preparation Date/Time:**	05/29/19 11:04
Analytical Batch:	WG1287805	**Analysis Date/Time:**	05/29/19 18:01
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	6.34	0.00374		0.000845	0.0020	0.00200

Calc. Calculated Results

1-IN

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
WW-20190524-002-DAY 22

Lab Sample ID:	L1102841-01	**SDG:**	L1102841
Client Sample ID:	WW-20190524-002-DAY 22	**Collected Date/Time:**	05/24/19 14:00
Lab File ID:	NONE	**Received Date/Time:**	05/27/19 08:45
Instrument ID:	NONE	**Preparation Date/Time:**	05/30/19 11:56
Analytical Batch:	WG1287198	**Analysis Date/Time:**	05/30/19 11:56
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	0.707		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.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
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.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

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

State Accreditations

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

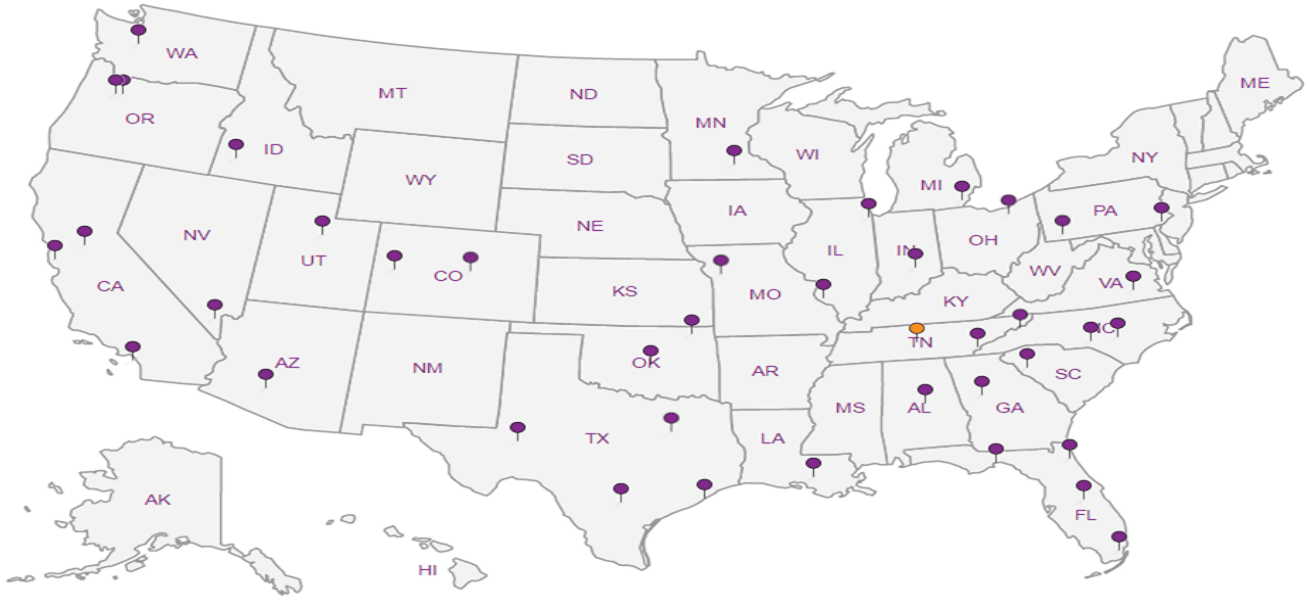
Third Party Federal Accreditations

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

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

Our Locations

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



Cardno - Newark, DE

121 Continental Drive Suite 308
Newark, DE 19713

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

Report to: Art Saunders

Email To: Art.Saunders@cardno.com

Project Description:

City/State Collected:

Phone: 610-220-3957
Fax:

Client Project #

Lab Project # CARDNONDE-ITC

Collected by (print):

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ____ Y ____

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

Quote #

Date Results Needed

Chain of Custody Page 1 of 2

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# 1102841
F199

Acctnum: CARDNONDE
Template: T150425
Prelogin: P710348
TSR: 034 - Craig Cothron
PB:
Shipped Via: FedEx Ground

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	1613/DIOXIN/FURANS 1L-Amb-NoPres	CHLORIDE 250mlHDPE-NoPres	COD,NH3,PT,TKN,NORG 250mlHDPE-H2SO4	ETHGLY 40mlAmb-NoPres-WT	HG 245.7 Other	Metals 250mlHDPE-HNO3	OGHEX 1L-Clr-Add HCl	PFOS 250mlHDPE-NoPres	SULFIDE 125mlAmb-S-NaOH+ZnAc	SV1657 1L-Amb-No Pres	Remarks	Sample # (lab only)
Pres Chk									C2			C2			7/2			
		DW				23		X	X	X		X			X	X		
		WW				1							X					
		GW				4	X							X				
		GW				1					X							
WW-20190524-002-Day22	Comp	WW		5/24/19	1400	16	X	X	X	X	X	X		X	X	X		01
WW-20190524-002-Day22	Grab	WW		5/24/19	1400	1							X					02

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

Remarks: *NOTE - composite 4 vials for V624.1AP9, SV504EDB/DBCP, ~~and ETHGLY~~ before running* *other* container for HG 245.7 is 500ml glass w/HCL

pH _____ Temp _____
Flow _____ Other _____

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

Tracking #

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

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	
	5/25/19	17:00			
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 4.5 °C 3.4+.1=3.5 Bottles Received: 30	If preservation required by Login: Date/Time
	5/26/19	19:20			
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 5/27/19 Time: 0845	Hold: / Condition: NCF / OK

Cardno - Newark, DE

121 Continental Drive Suite 308
Newark, DE 19713

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

Report to: Art Saunders
Email To: Art.Saunders@cardno.com

Project Description:
City/State Collected:

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

Collected by (print): C. Pilla
Site/Facility ID #
P.O. #

Collected by (signature):
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

Chain of Custody Page 2 of 2

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 # 1102841
Table #
Acctnum: CARDNONDE
Template: T150425
Prelogin: P710348
TSR: 034 - Craig Cothron
PB:
Shipped Via: FedEx Ground

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	SV504 40mlAmb-NoPres-WT	SV8151 1L-Amb-No Pres	TDS 250mlHDPE-NoPres	TOC 250mlAmb-HCl	TSS 1L-HDPE-NoPres	V624.1AP9 40mlAmb-HCl	Remarks	Sample # (lab only)
		DW				23	X	X	X	X	X	X		
		WW				1								
		GW				4								
		GW				1								
WW-20190524-002-Day22		WW		5/24/19	1400	7	X	X	X	X	X	X		01
WW-20190524-002-Day22		WW		5/24/19	2200	2	X					X		01
WW-20190524-002-Day22		WW		5/24/19	0600	2	X					X		01
WW-20190524-002-Day22		WW		5/24/19	1355	2	X					X		01

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

Remarks: *NOTE - composite 4 vials for V624.1AP9, SV504EDB/DBCP, ~~and ETHGLY~~ before running* *other* container for HG 245.7 is 500ml glass w/HCL

pH _____ Temp _____
Flow _____ Other _____

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

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

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
	5/25/19	17:00		
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.5 °C Bottles Received: 30
	5/26/19	19:00		
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 5/27/19 Time: 0945

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK