REIC

Improving the environment, one client at a time...

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Wednesday, September 30, 2015

TOM BASS
WEST VIRGINIA DEP / OFFICE OF OIL & GAS
601 57TH STREET
CHARLESTON, WV 25304

TEL: (304) 926-0450
FAX:

RE: STEAMS & DRAINS
Work Order #: 1509E14
Dear TOM BASS:

Stacy Heasley
Project Manager

REI Consultants, Inc. - Case Narrative

WO#: 1509E14

Date Reported: 9/30/2015

Client: WEST VIRGINIA DEP / OFFICE OF OIL & GAS

Project: STEAMS & DRAINS

The analytical results presented in this report were produced using documented laboratory SOPs that incorporate appropriate quality control procedures as described in the applicable methods. Verification of required sample preservation (as required) is recorded on associated laboratory logs. Any deviation from compliance or method modification is identified within the body of this report by a qualifier footnote which is defined at the bottom of this page.

All sample results for solid samples are reported on an "as-received" wet weight basis unless otherwise noted.

Results reported for sums of individual parameters, such as TTHM and HAA5, may vary slightly from the sum of the individual parameter results, due to rounding of individual results, as required by EPA.

The test results in this report meet all NELAP and/or VELAP requirements for parameters clearly designated as PA, VA, PA/VA, or VELAP in the column labeled NELAP.

Please note if the sample collection time is not provided on the Chain of Custody, the default recording will be 0:00:00. This may cause some tests to be apparently analyzed out of hold.

All tests performed by REIC Service Centers are designated by an annotation on the test code. All other tests were performed by REIC's Main Laboratory in Beaver, WV.

DEFINITIONS:
MCL: Maximum Contaminant Level
MDL: Method Detection Limit; The lowest concentration of analyte that can be detected by the method in the applicable matrix.
Mg/Kg or mg/L: Units of part per million (PPM) - milligram per Kilogram (weight/weight) or milligram per Liter (weight/volume).
NA: Not Applicable
ND: Not Detected at the PQL or MDL
PQL: Practical Quantitation Limit; The lowest verified limit to which data is quantified without qualifications. Analyte concentrations below PQL are reported either as ND or as a number with a "J" qualifier.
Qual: Qualifier that applies to the analyte reported.
TIC: Tentatively Identified Compound, Estimated Concentration denoted by "J" qualifier.
Ug/Kg or ug/L: Units of part per billion (PPB) - microgram per kilogram (weight/weight) or microgram per liter (weight/volume).

QUALIFIERS:
X: Reported value exceeds required MCL
B: Analyte detected in the associated Method Blank at a concentration > 1/2 the PQL
E: The sample result is within the method accepted Linear Dynamic Range determined by the lab for this analysis. However, it may be considered estimated when applying the TNI (The NELAC Institute) standard.
H: Holding time for preparation or analysis has been exceeded.
J: Analyte concentration is reported, and is less than the PQL and greater than or equal to the MDL. The result reported is an estimate.
S: % REC (% recovery) exceeds control limits

CERTIFICATIONS:
Beaver, WV: WVDHHR 00412CM, WVDEP 060, VADCLS 00281, KYDEP 90039, TNDEQ TN02926, NCDWQ 466, PADEP 68-00839, VADCLS (VELAP) 460148
Bioassay (Beaver, WV): WVDEP 060, VADCLS(VELAP) 460148, PADEP 68-00839
Roanoke, VA: VADCLS(VELAP) 460150
Verona, VA: VADCLS(VELAP) 460151
Ashland, KY: KYDEP 00094, WVDEP 389
Morgantown, WV: WVDHHR 003112M, WVDEP 387

REI Consultants, Inc. - Analytical Report

WO#: 1509E14

Date Reported: 9/30/2015

Client:	WEST VIRGINIA DEP / OFFICE OF OIL & GAS	**Collection Date:**	9/10/2015 10:35:00 AM
Project:	STEAMS & DRAINS	**Date Received:**	9/11/2015
Lab ID:	1509E14-01A	**Matrix:**	Liquid
Client Sample ID:	DOWNSTREAM	**Site ID:**	HALL - UIC

Analysis	Result	MDL	PQL	MCL	Qual	Units	Date Analyzed	NELAP
METALS BY ICP			**Method: EPA 200.7 Rev. 4.4 (1994)**				**Analyst: CGW**	
Aluminum	2.90	0.006	0.100	NA		mg/L	9/18/2015 6:20 PM	PA/VA
Barium	0.132	0.002	0.100	NA		mg/L	9/18/2015 11:08 AM	PA/VA
Calcium	38.6	0.050	1.00	NA		mg/L	9/18/2015 11:08 AM	PA/VA
Iron	3.98	0.010	0.100	NA		mg/L	9/18/2015 11:08 AM	PA/VA
Magnesium	6.92	0.050	0.500	NA		mg/L	9/18/2015 11:08 AM	PA/VA
Manganese	0.151	0.002	0.100	NA		mg/L	9/18/2015 11:08 AM	PA/VA
Potassium	4.64	0.050	0.500	NA		mg/L	9/18/2015 11:08 AM	PA/VA
Sodium	13.8	0.100	1.00	NA		mg/L	9/18/2015 11:08 AM	PA/VA
Strontium	0.286	0.001	0.010	NA		mg/L	9/17/2015 10:48 AM	

Notes:

Matrix spike recovery for Al does not meet laboratory control limits due to matrix interference. Recovery in the associated post-digestion spike meets laboratory control limits.

METALS BY ICP-MS			**Method: EPA 200.8 Rev. 5.4 (1994)**				**Analyst: LF**	
Arsenic	0.0022	0.0010	0.0050	NA	J	mg/L	9/15/2015 1:17 PM	PA/VA
Lead	0.0030	0.0002	0.0010	NA		mg/L	9/15/2015 1:17 PM	PA/VA
HARDNESS			**Method: SM2340 B-1997**				**Analyst: CGW**	
Hardness, Total (As CaCO3)	125	NA	1.00	NA		mg/L	9/18/2015 11:08 AM	VA
ANIONS by ION CHROMATOGRAPHY			**Method: EPA 300.0, Rev.2.1 (1993)**				**Analyst: CF**	
Bromide	ND	0.05	0.10	NA		mg/L	9/11/2015 4:40 PM	PA/VA
Chloride	20.6	0.20	1.00	NA		mg/L	9/11/2015 4:40 PM	PA/VA
Sulfate	18.1	1.00	5.00	NA		mg/L	9/11/2015 4:40 PM	PA/VA
ANIONS by ION CHROMATOGRAPHY-48 HOUR			**Method: EPA 300.0, Rev.2.1 (1993)**				**Analyst: CF**	
Nitrogen, Nitrate	0.63	0.02	0.10	NA		mg/L	9/11/2015 4:40 PM	PA/VA
Nitrogen, Nitrite	1.08	0.05	0.50	NA		mg/L	9/11/2015 4:40 PM	PA/VA
CONDUCTIVITY			**Method: SM2510 B - 1997**				**Analyst: KY**	
Specific Conductivity	335	NA	NA	NA		µmhos/cm	9/14/2015 2:45 PM	PA/VA
TOTAL DISSOLVED SOLIDS			**Method: SM2540 C-1997**				**Analyst: KY**	
Total Dissolved Solids	168	5	10	NA		mg/L	9/11/2015 5:08 PM	PA/VA

REI Consultants, Inc. - Analytical Report

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Client:	WEST VIRGINIA DEP / OFFICE OF OIL & GAS	**Collection Date:**	9/10/2015 10:35:00 AM
Project:	STEAMS & DRAINS	**Date Received:**	9/11/2015
Lab ID:	1509E14-01A	**Matrix:**	Liquid
Client Sample ID:	DOWNSTREAM	**Site ID:**	HALL - UIC

Analysis	Result	MDL	PQL	MCL	Qual	Units	Date Analyzed	NELAP
TOTAL SUSPENDED SOLIDS			**Method: SM2540 D-1997**				**Analyst: KY**	
Total Suspended Solids	98.0	2.0	10	NA		mg/L	9/11/2015 4:48 PM	PA/VA
ACIDITY			**Method: SM2310 B-1997**				**Analyst: VS**	
Acidity, Total	17.6	1.0	10	NA		mg/L	9/14/2015 4:50 PM	PA/VA
ALKALINITY			**Method: SM2320 B-1997**				**Analyst: VS**	
Alkalinity, Total (As CaCO3)	96.5	1.0	20.0	NA		mg/L	9/14/2015 4:50 PM	PA/VA
pH - LAB TEST, HOLD TIME EXPIRED			**Method: SM4500-H+-B-2000**				**Analyst: VS**	
pH	7.48	NA	NA	NA		SU	9/14/2015 4:50 PM	

REI Consultants, Inc. - Analytical Report

WO#: 1509E14

Date Reported: 9/30/2015

Client:	WEST VIRGINIA DEP / OFFICE OF OIL & GAS	**Collection Date:**	9/10/2015 11:25:00 AM
Project:	STEAMS & DRAINS	**Date Received:**	9/11/2015
Lab ID:	1509E14-02A	**Matrix:**	Liquid
Client Sample ID:	SAMPLE 2	**Site ID:**	HALL - UIC

Analysis	Result	MDL	PQL	MCL	Qual	Units	Date Analyzed	NELAP
METALS BY ICP			**Method: EPA 200.7 Rev. 4.4 (1994)**				**Analyst: CGW**	
Aluminum	2.68	0.006	0.100	NA		mg/L	9/18/2015 11:32 AM	PA/VA
Barium	0.110	0.002	0.100	NA		mg/L	9/18/2015 11:32 AM	PA/VA
Calcium	33.7	0.050	1.00	NA		mg/L	9/18/2015 11:32 AM	PA/VA
Iron	3.60	0.010	0.100	NA		mg/L	9/18/2015 11:32 AM	PA/VA
Magnesium	6.25	0.050	0.500	NA		mg/L	9/18/2015 11:32 AM	PA/VA
Manganese	0.133	0.002	0.100	NA		mg/L	9/18/2015 11:32 AM	PA/VA
Potassium	4.65	0.050	0.500	NA		mg/L	9/18/2015 11:32 AM	PA/VA
Sodium	13.3	0.100	1.00	NA		mg/L	9/18/2015 11:32 AM	PA/VA
Strontium	0.213	0.001	0.010	NA		mg/L	9/17/2015 11:03 AM	
METALS BY ICP-MS			**Method: EPA 200.8 Rev. 5.4 (1994)**				**Analyst: LF**	
Arsenic	0.0019	0.0010	0.0050	NA	J	mg/L	9/15/2015 1:23 PM	PA/VA
Lead	0.0024	0.0002	0.0010	NA		mg/L	9/15/2015 1:23 PM	PA/VA
HARDNESS			**Method: SM2340 B-1997**				**Analyst: CGW**	
Hardness, Total (As CaCO3)	110	NA	1.00	NA		mg/L	9/18/2015 11:32 AM	VA
ANIONS by ION CHROMATOGRAPHY			**Method: EPA 300.0, Rev.2.1 (1993)**				**Analyst: CF**	
Bromide	ND	0.05	0.10	NA		mg/L	9/11/2015 4:59 PM	PA/VA
Chloride	17.6	0.20	1.00	NA		mg/L	9/11/2015 4:59 PM	PA/VA
Sulfate	14.9	1.00	5.00	NA		mg/L	9/11/2015 4:59 PM	PA/VA
ANIONS by ION CHROMATOGRAPHY-48 HOUR			**Method: EPA 300.0, Rev.2.1 (1993)**				**Analyst: CF**	
Nitrogen, Nitrate	0.56	0.02	0.10	NA		mg/L	9/11/2015 4:59 PM	PA/VA
Nitrogen, Nitrite	1.05	0.05	0.50	NA		mg/L	9/11/2015 4:59 PM	PA/VA
CONDUCTIVITY			**Method: SM2510 B - 1997**				**Analyst: KY**	
Specific Conductivity	312	NA	NA	NA		µmhos/cm	9/14/2015 2:45 PM	PA/VA
TOTAL DISSOLVED SOLIDS			**Method: SM2540 C-1997**				**Analyst: KY**	
Total Dissolved Solids	164	5	10	NA		mg/L	9/11/2015 5:08 PM	PA/VA
TOTAL SUSPENDED SOLIDS			**Method: SM2540 D-1997**				**Analyst: KY**	
Total Suspended Solids	55.0	2.0	10	NA		mg/L	9/11/2015 4:48 PM	PA/VA

REI Consultants, Inc. - Analytical Report

WO#: 1509E14

Date Reported: 9/30/2015

Client:	WEST VIRGINIA DEP / OFFICE OF OIL & GAS	**Collection Date:**	9/10/2015 11:25:00 AM
Project:	STEAMS & DRAINS	**Date Received:**	9/11/2015
Lab ID:	1509E14-02A	**Matrix:**	Liquid
Client Sample ID:	SAMPLE 2	**Site ID:**	HALL - UIC

Analysis	Result	MDL	PQL	MCL	Qual	Units	Date Analyzed	NELAP
ACIDITY			**Method: SM2310 B-1997**				**Analyst: VS**	
Acidity, Total	14.2	1.0	10	NA		mg/L	9/14/2015 4:50 PM	PA/VA
ALKALINITY			**Method: SM2320 B-1997**				**Analyst: VS**	
Alkalinity, Total (As CaCO3)	91.8	1.0	20.0	NA		mg/L	9/14/2015 4:50 PM	PA/VA
pH - LAB TEST, HOLD TIME EXPIRED			**Method: SM4500-H+-B-2000**				**Analyst: VS**	
pH	7.28	NA	NA	NA		SU	9/14/2015 4:50 PM	

REI Consultants, Inc. - Analytical Report

WO#: 1509E14

Date Reported: 9/30/2015

Client:	WEST VIRGINIA DEP / OFFICE OF OIL & GAS	**Collection Date:**	9/10/2015 11:45:00 AM
Project:	STEAMS & DRAINS	**Date Received:**	9/11/2015
Lab ID:	1509E14-03A	**Matrix:**	Liquid
Client Sample ID:	SAMPLE 3	**Site ID:**	HALL - UIC

Analysis	Result	MDL	PQL	MCL	Qual	Units	Date Analyzed	NELAP
METALS BY ICP			**Method: EPA 200.7 Rev. 4.4 (1994)**				**Analyst: CGW**	
Aluminum	0.731	0.006	0.100	NA		mg/L	9/18/2015 11:38 AM	PA/VA
Barium	0.153	0.002	0.100	NA		mg/L	9/18/2015 11:38 AM	PA/VA
Calcium	67.0	0.050	1.00	NA		mg/L	9/18/2015 11:38 AM	PA/VA
Iron	0.938	0.010	0.100	NA		mg/L	9/18/2015 11:38 AM	PA/VA
Magnesium	12.3	0.050	0.500	NA		mg/L	9/18/2015 11:38 AM	PA/VA
Manganese	0.147	0.002	0.100	NA		mg/L	9/18/2015 11:38 AM	PA/VA
Potassium	3.90	0.050	0.500	NA		mg/L	9/18/2015 11:38 AM	PA/VA
Sodium	19.3	0.100	1.00	NA		mg/L	9/18/2015 11:38 AM	PA/VA
Strontium	0.763	0.001	0.010	NA		mg/L	9/17/2015 11:06 AM	
METALS BY ICP-MS			**Method: EPA 200.8 Rev. 5.4 (1994)**				**Analyst: LF**	
Arsenic	ND	0.0010	0.0050	NA		mg/L	9/15/2015 1:28 PM	PA/VA
Lead	0.0009	0.0002	0.0010	NA	J	mg/L	9/15/2015 1:28 PM	PA/VA
HARDNESS			**Method: SM2340 B-1997**				**Analyst: CGW**	
Hardness, Total (As CaCO3)	218	NA	1.00	NA		mg/L	9/18/2015 11:38 AM	VA
ANIONS by ION CHROMATOGRAPHY			**Method: EPA 300.0, Rev.2.1 (1993)**				**Analyst: CF**	
Bromide	0.24	0.05	0.10	NA		mg/L	9/11/2015 5:18 PM	PA/VA
Chloride	47.3	0.20	1.00	NA		mg/L	9/11/2015 5:18 PM	PA/VA
Sulfate	43.3	1.00	5.00	NA		mg/L	9/11/2015 5:18 PM	PA/VA
ANIONS by ION CHROMATOGRAPHY-48 HOUR			**Method: EPA 300.0, Rev.2.1 (1993)**				**Analyst: CF**	
Nitrogen, Nitrate	1.09	0.02	0.10	NA		mg/L	9/11/2015 5:18 PM	PA/VA
Nitrogen, Nitrite	1.35	0.05	0.50	NA		mg/L	9/11/2015 5:18 PM	PA/VA
CONDUCTIVITY			**Method: SM2510 B - 1997**				**Analyst: KY**	
Specific Conductivity	572	NA	NA	NA		µmhos/cm	9/14/2015 2:45 PM	PA/VA
TOTAL DISSOLVED SOLIDS			**Method: SM2540 C-1997**				**Analyst: KY**	
Total Dissolved Solids	286	5	10	NA		mg/L	9/11/2015 5:08 PM	PA/VA
TOTAL SUSPENDED SOLIDS			**Method: SM2540 D-1997**				**Analyst: KY**	
Total Suspended Solids	29.0	2.0	10	NA		mg/L	9/11/2015 4:48 PM	PA/VA

REI Consultants, Inc. - Analytical Report

WO#: 1509E14

Date Reported: 9/30/2015

Client:	WEST VIRGINIA DEP / OFFICE OF OIL & GAS	**Collection Date:**	9/10/2015 11:45:00 AM
Project:	STEAMS & DRAINS	**Date Received:**	9/11/2015
Lab ID:	1509E14-03A	**Matrix:**	Liquid
Client Sample ID:	SAMPLE 3	**Site ID:**	HALL - UIC

Analysis	Result	MDL	PQL	MCL	Qual	Units	Date Analyzed	NELAP
ACIDITY			**Method: SM2310 B-1997**				**Analyst: VS**	
Acidity, Total	2.1	1.0	10	NA	J	mg/L	9/14/2015 4:50 PM	PA/VA
ALKALINITY			**Method: SM2320 B-1997**				**Analyst: VS**	
Alkalinity, Total (As CaCO3)	138	1.0	20.0	NA		mg/L	9/14/2015 4:50 PM	PA/VA
pH - LAB TEST, HOLD TIME EXPIRED			**Method: SM4500-H+-B-2000**				**Analyst: VS**	
pH	7.86	NA	NA	NA		SU	9/14/2015 4:50 PM	

REI Consultants, Inc. - Analytical Report

WO#: 1509E14

Date Reported: 9/30/2015

Client:	WEST VIRGINIA DEP / OFFICE OF OIL & GAS	**Collection Date:**	9/10/2015 12:00:00 PM
Project:	STEAMS & DRAINS	**Date Received:**	9/11/2015
Lab ID:	1509E14-04A	**Matrix:**	Liquid
Client Sample ID:	SAMPLE 4	**Site ID:**	HALL - UIC

Analysis	Result	MDL	PQL	MCL	Qual	Units	Date Analyzed	NELAP
METALS BY ICP			**Method: EPA 200.7 Rev. 4.4 (1994)**				**Analyst: CGW**	
Aluminum	1.40	0.006	0.100	NA		mg/L	9/18/2015 11:44 AM	PA/VA
Barium	1.34	0.002	0.100	NA		mg/L	9/18/2015 11:44 AM	PA/VA
Calcium	173	0.050	1.00	NA	E	mg/L	9/18/2015 11:44 AM	PA/VA
Iron	1.23	0.010	0.100	NA		mg/L	9/18/2015 11:44 AM	PA/VA
Magnesium	55.9	0.050	0.500	NA	E	mg/L	9/18/2015 11:44 AM	PA/VA
Manganese	13.8	0.002	0.100	NA	E	mg/L	9/18/2015 11:44 AM	PA/VA
Potassium	8.61	0.050	0.500	NA		mg/L	9/18/2015 11:44 AM	PA/VA
Sodium	350	10.0	100	NA		mg/L	9/18/2015 11:56 AM	PA/VA
Strontium	15.3	0.010	0.100	NA	E	mg/L	9/21/2015 10:18 AM	
METALS BY ICP-MS			**Method: EPA 200.8 Rev. 5.4 (1994)**				**Analyst: LF**	
Arsenic	ND	0.0010	0.0050	NA		mg/L	9/15/2015 1:34 PM	PA/VA
Lead	0.0023	0.0002	0.0010	NA		mg/L	9/15/2015 1:34 PM	PA/VA
HARDNESS			**Method: SM2340 B-1997**				**Analyst: CGW**	
Hardness, Total (As CaCO3)	661	NA	1.00	NA		mg/L	9/18/2015 11:44 AM	VA
ANIONS by ION CHROMATOGRAPHY			**Method: EPA 300.0, Rev.2.1 (1993)**				**Analyst: CF**	
Bromide	12.5	2.50	5.00	NA		mg/L	9/14/2015 9:26 AM	PA/VA
Chloride	938	10.0	50.0	NA		mg/L	9/14/2015 9:26 AM	PA/VA
Sulfate	5.24	1.00	5.00	NA		mg/L	9/11/2015 5:37 PM	PA/VA
ANIONS by ION CHROMATOGRAPHY-48 HOUR			**Method: EPA 300.0, Rev.2.1 (1993)**				**Analyst: CF**	
Nitrogen, Nitrate	2.76	0.10	0.50	NA	H	mg/L	9/14/2015 10:06 AM	PA/VA
Nitrogen, Nitrite	ND	0.05	0.50	NA		mg/L	9/11/2015 5:37 PM	PA/VA
CONDUCTIVITY			**Method: SM2510 B - 1997**				**Analyst: KY**	
Specific Conductivity	3,270	NA	NA	NA		µmhos/cm	9/14/2015 2:45 PM	PA/VA
TOTAL DISSOLVED SOLIDS			**Method: SM2540 C-1997**				**Analyst: KY**	
Total Dissolved Solids	2,390	5	10	NA		mg/L	9/11/2015 5:08 PM	PA/VA
TOTAL SUSPENDED SOLIDS			**Method: SM2540 D-1997**				**Analyst: KY**	
Total Suspended Solids	116	2.0	10	NA		mg/L	9/11/2015 4:48 PM	PA/VA

REI Consultants, Inc. - Analytical Report

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Date Reported: 9/30/2015

Client:	WEST VIRGINIA DEP / OFFICE OF OIL & GAS	**Collection Date:**	9/10/2015 12:00:00 PM
Project:	STEAMS & DRAINS	**Date Received:**	9/11/2015
Lab ID:	1509E14-04A	**Matrix:**	Liquid
Client Sample ID:	SAMPLE 4	**Site ID:**	HALL - UIC

Analysis	Result	MDL	PQL	MCL	Qual	Units	Date Analyzed	NELAP
ACIDITY			**Method: SM2310 B-1997**				**Analyst: VS**	
Acidity, Total	73.2	1.0	10	NA		mg/L	9/14/2015 4:50 PM	PA/VA
ALKALINITY			**Method: SM2320 B-1997**				**Analyst: VS**	
Alkalinity, Total (As CaCO3)	ND	1.0	20.0	NA		mg/L	9/14/2015 4:50 PM	PA/VA
pH - LAB TEST, HOLD TIME EXPIRED			**Method: SM4500-H+-B-2000**				**Analyst: VS**	
pH	4.02	NA	NA	NA		SU	9/14/2015 4:50 PM	

REI Consultants, Inc. - Analytical Report

WO#: 1509E14

Date Reported: 9/30/2015

Client:	WEST VIRGINIA DEP / OFFICE OF OIL & GAS	**Collection Date:**	9/10/2015 1:05:00 PM
Project:	STEAMS & DRAINS	**Date Received:**	9/11/2015
Lab ID:	1509E14-05A	**Matrix:**	Liquid
Client Sample ID:	SAMPLE 5	**Site ID:**	HALL - UIC

Analysis	Result	MDL	PQL	MCL	Qual	Units	Date Analyzed	NELAP
METALS BY ICP			**Method: EPA 200.7 Rev. 4.4 (1994)**				**Analyst: CGW**	
Aluminum	1.06	0.006	0.100	NA		mg/L	9/18/2015 11:50 AM	PA/VA
Barium	0.080	0.002	0.100	NA	J	mg/L	9/18/2015 11:50 AM	PA/VA
Calcium	42.6	0.050	1.00	NA		mg/L	9/18/2015 11:50 AM	PA/VA
Iron	1.46	0.010	0.100	NA		mg/L	9/18/2015 11:50 AM	PA/VA
Magnesium	7.46	0.050	0.500	NA		mg/L	9/18/2015 11:50 AM	PA/VA
Manganese	0.070	0.002	0.100	NA	J	mg/L	9/18/2015 11:50 AM	PA/VA
Potassium	4.99	0.050	0.500	NA		mg/L	9/18/2015 11:50 AM	PA/VA
Sodium	18.2	0.100	1.00	NA		mg/L	9/18/2015 11:50 AM	PA/VA
Strontium	0.200	0.001	0.010	NA		mg/L	9/17/2015 11:12 AM	
METALS BY ICP-MS			**Method: EPA 200.8 Rev. 5.4 (1994)**				**Analyst: LF**	
Arsenic	0.0025	0.0010	0.0050	NA	J	mg/L	9/15/2015 1:40 PM	PA/VA
Lead	0.0021	0.0002	0.0010	NA		mg/L	9/15/2015 1:40 PM	PA/VA
HARDNESS			**Method: SM2340 B-1997**				**Analyst: CGW**	
Hardness, Total (As CaCO3)	137	NA	1.00	NA		mg/L	9/18/2015 11:50 AM	VA
ANIONS by ION CHROMATOGRAPHY			**Method: EPA 300.0, Rev.2.1 (1993)**				**Analyst: CF**	
Bromide	ND	0.05	0.10	NA		mg/L	9/11/2015 5:56 PM	PA/VA
Chloride	25.2	0.20	1.00	NA		mg/L	9/11/2015 5:56 PM	PA/VA
Sulfate	16.0	1.00	5.00	NA		mg/L	9/11/2015 5:56 PM	PA/VA
ANIONS by ION CHROMATOGRAPHY-48 HOUR			**Method: EPA 300.0, Rev.2.1 (1993)**				**Analyst: CF**	
Nitrogen, Nitrate	0.58	0.02	0.10	NA		mg/L	9/11/2015 5:56 PM	PA/VA
Nitrogen, Nitrite	1.26	0.05	0.50	NA		mg/L	9/11/2015 5:56 PM	PA/VA
CONDUCTIVITY			**Method: SM2510 B - 1997**				**Analyst: KY**	
Specific Conductivity	399	NA	NA	NA		µmhos/cm	9/14/2015 2:45 PM	PA/VA
TOTAL DISSOLVED SOLIDS			**Method: SM2540 C-1997**				**Analyst: KY**	
Total Dissolved Solids	193	5	10	NA		mg/L	9/11/2015 5:08 PM	PA/VA
TOTAL SUSPENDED SOLIDS			**Method: SM2540 D-1997**				**Analyst: KY**	
Total Suspended Solids	18.0	2.0	10	NA		mg/L	9/11/2015 4:48 PM	PA/VA

REI Consultants, Inc. - Analytical Report

WO#: 1509E14

Date Reported: 9/30/2015

Client:	WEST VIRGINIA DEP / OFFICE OF OIL & GAS	**Collection Date:**	9/10/2015 1:05:00 PM
Project:	STEAMS & DRAINS	**Date Received:**	9/11/2015
Lab ID:	1509E14-05A	**Matrix:**	Liquid
Client Sample ID:	SAMPLE 5	**Site ID:**	HALL - UIC

Analysis	Result	MDL	PQL	MCL	Qual	Units	Date Analyzed	NELAP
ACIDITY			**Method: SM2310 B-1997**				**Analyst: VS**	
Acidity, Total	2.4	1.0	10	NA	J	mg/L	9/14/2015 4:50 PM	PA/VA
ALKALINITY			**Method: SM2320 B-1997**				**Analyst: VS**	
Alkalinity, Total (As CaCO3)	119	1.0	20.0	NA		mg/L	9/14/2015 4:50 PM	PA/VA
pH - LAB TEST, HOLD TIME EXPIRED			**Method: SM4500-H+-B-2000**				**Analyst: VS**	
pH	7.35	NA	NA	NA		SU	9/14/2015 4:50 PM	

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

September 30, 2015

Ms. Stacy Heasley
REI Consultants, Inc.
225 Industrial Park Drive
PO Box 286
Beaver, WV 25813

RE: Project: 1509E14
Pace Project No.: 30159379

Dear Ms. Heasley:
Enclosed are the analytical results for sample(s) received by the laboratory on September 16, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Carin A. Ferris

Carin Ferris
carin.ferris@pacelabs.com
Project Manager

Enclosures

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: 1509E14
Pace Project No.: 30159379

Pennsylvania Certification IDs
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: 1509E14
Pace Project No.: 30159379

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30159379001	1509E14-01A	Water	09/10/15 10:35	09/16/15 10:30
30159379002	1509E14-02A	Water	09/10/15 11:25	09/16/15 10:30
30159379003	1509E14-03A	Water	09/10/15 11:45	09/16/15 10:30
30159379004	1509E14-04A	Water	09/10/15 12:00	09/16/15 10:30
30159379005	1509E14-05A	Water	09/10/15 13:05	09/16/15 10:30

Pace Analytical Services, Inc.
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Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: 1509E14
Pace Project No.: 30159379

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30159379001	1509E14-01A	EPA 903.1	WRR	1
		EPA 904.0	JLW	1
30159379002	1509E14-02A	EPA 903.1	WRR	1
		EPA 904.0	JLW	1
30159379003	1509E14-03A	EPA 903.1	WRR	1
		EPA 904.0	JLW	1
30159379004	1509E14-04A	EPA 903.1	WRR	1
		EPA 904.0	JLW	1
30159379005	1509E14-05A	EPA 903.1	WRR	1
		EPA 904.0	JLW	1

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: 1509E14
Pace Project No.: 30159379

Method: EPA 903.1
Description: 903.1 Radium 226
Client: REI Consultants, Inc.
Date: September 30, 2015

General Information:
5 samples were analyzed for EPA 903.1. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: 1509E14
Pace Project No.: 30159379

Method: **EPA 904.0**
Description: 904.0 Radium 228
Client: REI Consultants, Inc.
Date: September 30, 2015

General Information:
5 samples were analyzed for EPA 904.0. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 1509E14
Pace Project No.: 30159379

Sample: 1509E14-01A **Lab ID: 30159379001** Collected: 09/10/15 10:35 Received: 09/16/15 10:30 Matrix: Water
PWS: Site ID: Sample Type:
Comments: • Sample Acceptance Policy Waiver on file from the client.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 903.1	**2.74 ± 4.31 (6.15) C:NA T:93%**	pCi/L	09/30/15 10:08	13982-63-3	
Radium-228	EPA 904.0	**7.28 ± 3.37 (5.79) C:94% T:75%**	pCi/L	09/29/15 16:04	15262-20-1	

Sample: 1509E14-02A **Lab ID: 30159379002** Collected: 09/10/15 11:25 Received: 09/16/15 10:30 Matrix: Water
PWS: Site ID: Sample Type:
Comments: • Sample Acceptance Policy Waiver on file from the client.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 903.1	**0.611 ± 3.39 (5.32) C:NA T:93%**	pCi/L	09/30/15 10:12	13982-63-3	
Radium-228	EPA 904.0	**5.17 ± 3.53 (6.86) C:93% T:79%**	pCi/L	09/29/15 16:04	15262-20-1	

Sample: 1509E14-03A **Lab ID: 30159379003** Collected: 09/10/15 11:45 Received: 09/16/15 10:30 Matrix: Water
PWS: Site ID: Sample Type:
Comments: • Sample Acceptance Policy Waiver on file from the client.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 903.1	**1.99 ± 3.91 (5.78) C:NA T:90%**	pCi/L	09/30/15 10:12	13982-63-3	
Radium-228	EPA 904.0	**5.59 ± 3.27 (6.14) C:94% T:79%**	pCi/L	09/29/15 16:04	15262-20-1	

Sample: 1509E14-04A **Lab ID: 30159379004** Collected: 09/10/15 12:00 Received: 09/16/15 10:30 Matrix: Water
PWS: Site ID: Sample Type:
Comments: • Sample Acceptance Policy Waiver on file from the client.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 903.1	**2.38 ± 3.31 (4.72) C:NA T:92%**	pCi/L	09/30/15 10:19	13982-63-3	
Radium-228	EPA 904.0	**7.89 ± 3.25 (5.35) C:91% T:87%**	pCi/L	09/29/15 16:04	15262-20-1	

Sample: 1509E14-05A **Lab ID: 30159379005** Collected: 09/10/15 13:05 Received: 09/16/15 10:30 Matrix: Water
PWS: Site ID: Sample Type:
Comments: • Sample Acceptance Policy Waiver on file from the client.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 903.1	**3.58 ± 4.07 (5.61) C:NA T:91%**	pCi/L	09/30/15 10:29	13982-63-3	
Radium-228	EPA 904.0	**9.53 ± 3.95 (6.68) C:99% T:71%**	pCi/L	09/29/15 15:54	15262-20-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: 1509E14
Pace Project No.: 30159379

QC Batch: RADC/26081 Analysis Method: EPA 904.0
QC Batch Method: EPA 904.0 Analysis Description: 904.0 Radium 228
Associated Lab Samples: 30159379001, 30159379002, 30159379003, 30159379004, 30159379005

METHOD BLANK: 953467 Matrix: Water
Associated Lab Samples: 30159379001, 30159379002, 30159379003, 30159379004, 30159379005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.202 ± 0.338 (0.737) C:92% T:81%	pCi/L	09/29/15 12:26	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: 1509E14
Pace Project No.: 30159379

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

REIC

Improving the environment, one client at a time...

CHAIN OF CUSTODY RECORD

COC ID: 6806 PAGE: 1 OF: 1

ADDRESS
REI Consultants, Inc.
PO Box 286
Beaver, WV 25813
TEL: (304) 255-2500
FAX: (304) 255-2572
Website: www reiclabs com

Please Include Email Address of Report Recipient Whenever Possible!!!

SUB CONTRATOR: PACE_PA
COMPANY: PACE ANALYTICAL SERVIC
ADDRESS: 1638 ROSEYTOWN ROAD
CITY STATE ZIP: GREENSBURG, PA 15601
PHONE: (724) 850-5600
FAX:
PO: 050719EVF1
EMAIL:

SPECIAL INSTRUCTIONS / COMMENTS
State Code: WV Please use SampleID as purchase order number
After analysis, the samples do not need to be returned and can be disposed per your standard laboratory practices. Results to sheasley@reiclabs com Thank you

ANALYTICAL PARAMETERS: RADIUM 228 SUB (EPA 904.0); RADIUM 226 SUB (EPA 903.1)

30159379

	SAMPLE ID	CLIENT SAMPLE ID	Matrix	DATE COLLECTED	NUMBER OF CONTAINERS	RADIUM 228 SUB (EPA 904.0)	RADIUM 226 SUB (EPA 903.1)	
1	1509E14-01A	DOWNSTREAM	Liquid	[illegible]	-	√	√	001
2	1509E14-02A	SAMPLE 2	Liquid	[illegible]				002
3	1509E14-03A	[illegible]	Liquid	[illegible]	2			003
4	1509E14-04A	SAMPLE 4	Liquid	9/10/2015 12:00:00 PM	2	√	√	004
5	1509E14-05A	[illegible]	Liquid	9/10/2015 1:05:00 PM	1	√	√	005

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*Results by 9/18/15 Thankyou

Relinquished By	Date	Time	Received By	Date	Time
Whitney Wallace	9/14/15	16:00	UPS	9/14/15	16:00
			[signature]	9-17-15	1030

TAT: Normal / Next BD / 2nd BD / 3rd BD
(Next BD SH are tests w/ 100% surcharges)

REPORT TRANSMITTAL DESIRED: HARDCOPY (extra cost) FAX EMAIL ONLINE

FOR LAB USE ONLY
Temp of samples °C Attempt to Cool?
Comments

BCM

Sample Condition Upon Receipt

Pace Analytical

Client Name: REIC

Project # 30159379

Courier: ☐ Fed Ex ☒ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 1Z26x7130376507450

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals Intact: ☐ yes ☐ no **Biological Tissue is Frozen:** Yes No

Packing Material: Bubble Wrap ___ Bubble Bags ___ None ___ Other _____

Thermometer Used NA Type of Ice: Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temp.: Observed Temp.: NA °C Correction Factor: ___ °C Final Temp: ___ °C

Temp should be above freezing to 6°C

Date and initials of person examining contents: AML 9/17/15

Comments:

Chain of Custody Present:	☒Yes	☐No	☐N/A	1.
Chain of Custody Filled Out:	☒Yes	☐No	☐N/A	2.
Chain of Custody Relinquished:	☒Yes	☐No	☐N/A	3.
Sampler Name & Signature on COC:	☐Yes	☒No	☐N/A	4.
Samples Arrived within Hold Time:	☒Yes	☐No	☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes	☒No	☐N/A	6.
Rush Turn Around Time Requested:	☒Yes	☐No	☐N/A	7.
Sufficient Volume:	☒Yes	☐No	☐N/A	8. low volume.
Correct Containers Used:	☒Yes	☐No	☐N/A	9.
-Pace Containers Used:	☐Yes	☒No	☐N/A	
Containers Intact:	☒Yes	☐No	☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes	☐No	☒N/A	11.
Sample Labels match COC:	☒Yes	☐No	☐N/A	12.
-Includes date/time/ID/Analysis Matrix: WT				
All containers needing preservation have been checked.	☒Yes	☐No	☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☒Yes	☐No	☐N/A	PH<2
exceptions: VOA, coliform, TOC, O&G, Phenols	☐Yes	☒No		Initial when completed: AML Lot # of added preservative:
Samples checked for dechlorination:	☐Yes	☐No	☒N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☒N/A	15.
Trip Blank Present:	☐Yes	☐No	☒N/A	16.
Trip Blank Custody Seals Present	☐Yes	☐No	☒N/A	
Pace Trip Blank Lot # (if purchased):				

Client Notification/ Resolution: **Field Data Required?** Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: Connie Ferris **Date:** 9/17/15

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

Pace Analytical

page 2

Project Number: 30159379

Client Name: RELC

Item No.	Matrix Code	Glass Jar (120 / 250 / 500 / 1L)	Soil Kit (2 SB, 1M, soil jar)	Chemistry (250 / 500 / 1L)	Organics (1L)	Nutrient (250 / 500)	Phenolics (250 ml)	TOC (40 ml / 250 ml)	TOX (250 ml)	Total Metals	Dissolved Metals preserved Y N	O & G (1L)	TPH (1L)	VOA (40 ml 30 ml)	Cyanide (250 ml)	Sulfide (500 ml)	Bacteria (120 ml)	Wipes / swipe/ smear/ filter	Radchem Nalgene (125 / 250 / 500 / 1L)	Radchem Nalgene (1/2 gal. / 1 gal.L)	Cubitainer (500 ml / 4L)	Ziploc	Other	Other	Other
001	WT																		1						
005	WT																								

SCURF Back (C016-4 15May2012).xls

456030

CHAIN OF CUSTODY RECORD

REIC
Research Environmental & Industrial Consultants, Inc.
MAIN LABORATORY & CORPORATE HEADQUARTERS:
P.O. Box 286 • 225 Industrial Park Rd, Beaver, WV 25813
800-999-0105 • 304-255-2500 • 304-255-2572/fax • www.reiclabs.com

Client: WVDEP | PO #:
Contact Person: Tom Bass | Phone: 304 926-0499
QUOTE #: | Fax: | Email: Thomas.L.Bass@wv.gov
Address: 601 57th ST. SE | City: CHARLESTON | State: WV | Zip: 25304
Billing Address (if different):
City: | State: | Zip:
Site ID & State: HALL-UIC | Project ID: STREAM & DRAINS | Sampler: T. Bass

MID-OHIO VALLEY Service Center
101 17th Street
Ashland, KY 41101
606-393-5027

SHENANDOAH Service Center
1557 Commerce Rd., Ste 201
Verona, VA 24482
540-248-0183

ROANOKE Service Center
3029-C Peters Creek Rd
Roanoke, VA 24019
540-777-1276

MORGANTOWN Service Center
16 Commerce Drive
Westover, WV 26501
304-241-5861

SAMPLE LOG & ANALYSIS REQUEST

TURNAROUND TIME
☐ NORMAL
RUSH TURNAROUND*
☑ 5 DAY ☐ 3 DAY ☐ 2 DAY ☐ 1 DAY
*Rush work needs prior laboratory approval and will incur additional charges

SAMPLE ID	No. & Type of Containers	Sampling Date/Time	Matrix	Sample Comp/Grab	ANALYSIS & METHOD REQUESTED: Alkalinity	Sulfate	Chloride	Hardness	pH	Conductivity	TDS	TSS	Nitrate	Aluminum	Iron	
~~1. HR~~ Downstream	4P	9/10/15 1105	Liq	X	2	2	2	2	2	2	2	2	2	2	2	
2. Sample 2		1125														
3. Sample 3		1145														
4. Sample 4		1200														
5. Sample 5		1305														

Preservative Codes:
0 None
1 Hydrochloric Acid
2 Nitric Acid
3 Sulfuric Acid
4 Sodium Thiosulfate
5 Sodium Hydroxide/ Sodium Arsenite
6 Sodium Hydroxide
7 Ascorbic Acid
8 Sodium Bisulfate/Methanol
9 Ammonium Chloride
10 _____ *
11 _____ *
*(Use blanks for preservatives not listed.)

ENTER PRESERVATIVE CODE

COMMENTS:
Mn Strontium
Mg T. Acidity
Calcium
Potassium Radium 226
Sodium
Barium Radium 228
Lead
Arsenic

All analytical requests are subject to REIC's Standard Terms and Conditions.

REIC USE ONLY: Temperature at arrival: 4 °C ICED? Y ✓ N ___ Containers provided by: ✓ REIC ☐ Client

1. Relinquished by (signature)	Date/Time	2. Relinquished by (signature)	Date/Time
Received by (signature)	Date/Time	Received by (signature)	Date/Time

FAX RESULTS ☐ EMAIL RESULTS ☐

REIC USE ONLY
SHIPMENT: ✓ Hand Delivered ___ Courier ___ UPS ___ FEDEX ___ USPS ___ OTHER

COC-NCR-101514