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NELAP Certifications: NJ PA010, NY 11759, PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11, MA PA0102, MD 128, VA 460157, WV 343

September 11, 2015

Mr. Paul Lasek
Bloomfield, Township of-NJ
1 Municipal Plaza
Bayonne, NJ 07002

Certificate of Analysis

Project Name: 2015-UCMR3	Workorder: 2088644
Purchase Order:	Workorder ID: UCMR3 (SE1)

Dear Mr. Lasek:

Enclosed are the analytical results for samples received by the laboratory on Tuesday, August 11, 2015.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Mrs. Kelli L Wolfgang (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Environmental.

ALS Spring City: 10 Riverside Drive, Spring City, PA 19475 610-948-4903

Mrs. Kelli L Wolfgang
Project Coordinator

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

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SAMPLE SUMMARY

Workorder: 2088644 UCMR3 (SE1)

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
2088644001	Max. Res. Time in Dist. System	Drinking Water	8/11/2015 11:58	8/11/2015 17:30	Mr. John P Grady
2088644002	Field Blank MR	Drinking Water	8/11/2015 11:58	8/11/2015 17:30	Mr. John P Grady
2088644003	NJEMS 07-227 - Bloomfield	Drinking Water	8/11/2015 12:30	8/11/2015 17:30	Mr. John P Grady
2088644004	Field Blank EP	Drinking Water	8/11/2015 12:30	8/11/2015 17:30	Mr. John P Grady
2088644005	Field Blank EP	Drinking Water	8/11/2015 12:25	8/11/2015 17:30	Mr. John P Grady

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SAMPLE SUMMARY

Workorder: 2088644 UCMR3 (SE1)

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are performed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits

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PROJECT SUMMARY

Workorder: 2088644 UCMR3 (SE1)

Workorder Comments

See attached subcontracted 537 results from ALS-Kelso. VLF 9/10/15

Sample Comments

Lab ID: 2088644005

Sample ID: Field Blank EP

Sample Type: FLDQC

This sample was cancelled per project specifications.

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ANALYTICAL RESULTS

Workorder: 2088644 UCMR3 (SE1)

Lab ID: **2088644001** Date Collected: 8/11/2015 11:58 Matrix: Drinking Water
 Sample ID: **Max. Res. Time in Dist. System** Date Received: 8/11/2015 17:30

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed	By	Cntr
WET CHEMISTRY									
Chlorate	63.8		ug/L	20.0	EPA 300.1		8/18/15 04:57	JP	C
Hexavalent Chromium	0.050		ug/L	0.030	EPA 218.7		8/18/15 09:50	MBW	B
METALS									
Chromium, Total	ND		ug/L	0.20	EPA 200.8	8/18/15 ZMC	8/18/15 12:24	MO	A1
Cobalt, Total	ND		ug/L	1.0	EPA 200.8	8/18/15 ZMC	8/18/15 12:24	MO	A1
Molybdenum, Total	ND		ug/L	1.0	EPA 200.8	8/18/15 ZMC	8/18/15 12:24	MO	A1
Strontium, Total	49.8		ug/L	30.0	EPA 200.8	8/18/15 ZMC	8/18/15 12:27	MO	A1
Vanadium, Total	ND		ug/L	0.20	EPA 200.8	8/18/15 ZMC	8/18/15 12:24	MO	A1

Kelli Wolfgang

Mrs. Kelli L Wolfgang
 Project Coordinator

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ANALYTICAL RESULTS

Workorder: 2088644 UCMR3 (SE1)

Lab ID: 2088644002 Date Collected: 8/11/2015 11:58 Matrix: Drinking Water
 Sample ID: Field Blank MR Date Received: 8/11/2015 17:30

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed	By	Cntr
METALS									
Chromium, Total	ND		ug/L	0.20	EPA 200.8	8/18/15 ZMC	8/18/15 12:29	MO	A1
Cobalt, Total	ND		ug/L	1.0	EPA 200.8	8/18/15 ZMC	8/18/15 12:29	MO	A1
Molybdenum, Total	ND		ug/L	1.0	EPA 200.8	8/18/15 ZMC	8/18/15 12:29	MO	A1
Strontium, Total	ND		ug/L	0.30	EPA 200.8	8/18/15 ZMC	8/18/15 12:29	MO	A1
Vanadium, Total	ND		ug/L	0.20	EPA 200.8	8/18/15 ZMC	8/18/15 12:29	MO	A1

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ANALYTICAL RESULTS

Workorder: 2088644 UCMR3 (SE1)

 Lab ID: 2088644003 Date Collected: 8/11/2015 12:30 Matrix: Drinking Water
 Sample ID: NJEMS 07-227 - Bloomfield Date Received: 8/11/2015 17:30

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed	By	Cntr
VOLATILE ORGANICS									
Bromochloromethane	ND		ug/L	0.060	EPA 524.3		8/19/15 20:56	CPK	D
Bromomethane	ND		ug/L	0.20	EPA 524.3		8/19/15 20:56	CPK	D
1,3-Butadiene	ND		ug/L	0.10	EPA 524.3		8/19/15 20:56	CPK	D
Chlorodifluoromethane	ND		ug/L	0.080	EPA 524.3		8/19/15 20:56	CPK	D
Chloromethane	ND		ug/L	0.20	EPA 524.3		8/19/15 20:56	CPK	D
1,1-Dichloroethane	ND		ug/L	0.030	EPA 524.3		8/19/15 20:56	CPK	D
1,2,3-Trichloropropane	ND		ug/L	0.030	EPA 524.3		8/19/15 20:56	CPK	D
<i>Surrogate Recoveries</i>	<i>Results</i>	<i>Flag</i>	<i>Units</i>	<i>Limits</i>	<i>Method</i>	<i>Prepared By</i>	<i>Analyzed</i>	<i>By</i>	<i>Cntr</i>
1,2-Dichlorobenzene-d4 (S)	108		%	70 - 130	EPA 524.3		8/19/15 20:56	CPK	D
4-Bromofluorobenzene (S)	106		%	70 - 130	EPA 524.3		8/19/15 20:56	CPK	D
Methyl-t-Butyl ether-d3 (S)	120		%	70 - 130	EPA 524.3		8/19/15 20:56	CPK	D
SEMIVOLATILES									
1,4-Dioxane	ND		ug/L	0.070	EPA 522	8/21/15 JEK	8/21/15 20:33	DHF	B
<i>Surrogate Recoveries</i>	<i>Results</i>	<i>Flag</i>	<i>Units</i>	<i>Limits</i>	<i>Method</i>	<i>Prepared By</i>	<i>Analyzed</i>	<i>By</i>	<i>Cntr</i>
1,4-Dioxane-d8 (S)	91.4		%	70 - 130	EPA 522	8/21/15 JEK	8/21/15 20:33	DHF	B
WET CHEMISTRY									
Chlorate	60.3		ug/L	20.0	EPA 300.1		8/18/15 06:12	JP	A
Hexavalent Chromium	0.046		ug/L	0.030	EPA 218.7		8/18/15 09:58	MBW	C
METALS									
Chromium, Total	ND		ug/L	0.20	EPA 200.8	8/18/15 ZMC	8/18/15 12:32	MO	F1
Cobalt, Total	ND		ug/L	1.0	EPA 200.8	8/18/15 ZMC	8/18/15 12:32	MO	F1
Molybdenum, Total	ND		ug/L	1.0	EPA 200.8	8/18/15 ZMC	8/18/15 12:32	MO	F1
Strontium, Total	48.7		ug/L	30.0	EPA 200.8	8/18/15 ZMC	8/18/15 12:35	MO	F1
Vanadium, Total	ND		ug/L	0.20	EPA 200.8	8/18/15 ZMC	8/18/15 12:32	MO	F1
PERFLUORINATED COMPOUNDS									
Perfluorobutanesulfonic acid	ND		ug/L	0.0900	EPA 537		8/28/15 18:27	SUB	G
Perfluoroheptanoic acid	ND		ug/L	0.0100	EPA 537		8/28/15 18:27	SUB	G
Perfluorohexanesulfonic acid	ND		ug/L	0.0300	EPA 537		8/28/15 18:27	SUB	G
Perfluorononanoic acid	ND		ug/L	0.0200	EPA 537		8/28/15 18:27	SUB	G
Perfluorooctanesulfonic acid	ND		ug/L	0.0400	EPA 537		8/28/15 18:27	SUB	G
Perfluorooctanoic acid	ND		ug/L	0.0200	EPA 537		8/28/15 18:27	SUB	G

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ANALYTICAL RESULTS

Workorder: 2088644 UCMR3 (SE1)

Lab ID: 2088644003 Date Collected: 8/11/2015 12:30 Matrix: Drinking Water
Sample ID: NJEMS 07-227 - Bloomfield Date Received: 8/11/2015 17:30

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed	By	Cntr
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ANALYTICAL RESULTS

Workorder: 2088644 UCMR3 (SE1)

Lab ID: 2088644004
Sample ID: Field Blank EP

Date Collected: 8/11/2015 12:30 Matrix: Drinking Water
Date Received: 8/11/2015 17:30

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed	By	Cntr
METALS									
Chromium, Total	ND		ug/L	0.20	EPA 200.8	8/18/15 ZMC	8/18/15 12:50	MO	A1
Cobalt, Total	ND		ug/L	1.0	EPA 200.8	8/18/15 ZMC	8/18/15 12:50	MO	A1
Molybdenum, Total	ND		ug/L	1.0	EPA 200.8	8/18/15 ZMC	8/18/15 12:50	MO	A1
Strontium, Total	ND		ug/L	0.30	EPA 200.8	8/18/15 ZMC	8/18/15 12:50	MO	A1
Vanadium, Total	ND		ug/L	0.20	EPA 200.8	8/18/15 ZMC	8/18/15 12:50	MO	A1

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ANALYTICAL RESULTS

Workorder: 2088644 UCMR3 (SE1)

Lab ID: 2088644005 Date Collected: 8/11/2015 12:25 Matrix: Drinking Water
Sample ID: Field Blank EP Date Received: 8/11/2015 17:30

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed	By	Cntr
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ADMINISTRATIVE

Sample Cancelled

CANCEL

8/20/15 10:16 CPK

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SAMPLE SUMMARY

Workorder: 2101479 UCMR3 (SE2)

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits

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PROJECT SUMMARY

Workorder: 2101479 UCMR3 (SE2)

Workorder Comments

See attached subcontracted 537 results from ALS-Kelso. VLF 11/5/15

Sample Comments

Lab ID: 2101479005

Sample ID: Field Blank EP

Sample Type: FLDQC

This sample was cancelled per project specifications.

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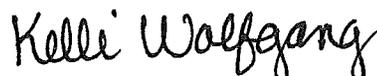
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ANALYTICAL RESULTS

Workorder: 2101479 UCMR3 (SE2)

Lab ID: 2101479001 Date Collected: 10/13/2015 12:35 Matrix: Drinking Water
Sample ID: Max. Res. Time in Dist. System Date Received: 10/13/2015 20:27

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed	By	Cntr
WET CHEMISTRY									
Hexavalent Chromium	0.061		ug/L	0.030	EPA 218.7		10/22/15 07:27	MBW	B
METALS									
Chromium, Total	ND		ug/L	0.20	EPA 200.8	10/20/15 JPS	10/21/15 10:45	MO	A1
Cobalt, Total	ND		ug/L	1.0	EPA 200.8	10/20/15 JPS	10/21/15 10:45	MO	A1
Molybdenum, Total	ND		ug/L	1.0	EPA 200.8	10/20/15 JPS	10/21/15 10:45	MO	A1
Strontium, Total	45.9		ug/L	30.0	EPA 200.8	10/20/15 JPS	10/21/15 10:48	MO	A1
Vanadium, Total	ND		ug/L	0.20	EPA 200.8	10/20/15 JPS	10/21/15 10:45	MO	A1



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ANALYTICAL RESULTS

Workorder: 2101479 UCMR3 (SE2)

Lab ID: 2101479002
Sample ID: Field Blank MR

Date Collected: 10/13/2015 12:35 Matrix: Drinking Water
Date Received: 10/13/2015 20:27

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed	By	Cntr
METALS									
Chromium, Total	ND		ug/L	0.20	EPA 200.8	10/20/15 JPS	10/21/15 10:51	MO	A1
Cobalt, Total	ND		ug/L	1.0	EPA 200.8	10/20/15 JPS	10/21/15 10:51	MO	A1
Molybdenum, Total	ND		ug/L	1.0	EPA 200.8	10/20/15 JPS	10/21/15 10:51	MO	A1
Strontium, Total	ND		ug/L	0.30	EPA 200.8	10/20/15 JPS	10/21/15 10:51	MO	A1
Vanadium, Total	ND		ug/L	0.20	EPA 200.8	10/20/15 JPS	10/21/15 10:51	MO	A1

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ANALYTICAL RESULTS

Workorder: 2101479 UCMR3 (SE2)

Lab ID: 2101479003 Date Collected: 10/13/2015 13:00 Matrix: Drinking Water
 Sample ID: NJEMS 07-227 - Bloomfield Date Received: 10/13/2015 20:27

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed	By	Cntr
VOLATILE ORGANICS									
Bromochloromethane	ND		ug/L	0.060	EPA 524.3		10/27/15 01:06	CJG	D
Bromomethane	ND		ug/L	0.20	EPA 524.3		10/27/15 01:06	CJG	D
1,3-Butadiene	ND		ug/L	0.10	EPA 524.3		10/27/15 01:06	CJG	D
Chlorodifluoromethane	ND		ug/L	0.080	EPA 524.3		10/27/15 01:06	CJG	D
Chloromethane	ND		ug/L	0.20	EPA 524.3		10/27/15 01:06	CJG	D
1,1-Dichloroethane	ND		ug/L	0.030	EPA 524.3		10/27/15 01:06	CJG	D
1,2,3-Trichloropropane	ND		ug/L	0.030	EPA 524.3		10/27/15 01:06	CJG	D
<i>Surrogate Recoveries</i>	<i>Results</i>	<i>Flag</i>	<i>Units</i>	<i>Limits</i>	<i>Method</i>	<i>Prepared By</i>	<i>Analyzed</i>	<i>By</i>	<i>Cntr</i>
1,2-Dichlorobenzene-d4 (S)	104		%	70 - 130	EPA 524.3		10/27/15 01:06	CJG	D
4-Bromofluorobenzene (S)	94.6		%	70 - 130	EPA 524.3		10/27/15 01:06	CJG	D
Methyl-t-Butyl ether-d3 (S)	110		%	70 - 130	EPA 524.3		10/27/15 01:06	CJG	D
SEMIVOLATILES									
1,4-Dioxane	0.076		ug/L	0.070	EPA 522	10/19/15 JEK	10/19/15 20:26	DHF	B
<i>Surrogate Recoveries</i>	<i>Results</i>	<i>Flag</i>	<i>Units</i>	<i>Limits</i>	<i>Method</i>	<i>Prepared By</i>	<i>Analyzed</i>	<i>By</i>	<i>Cntr</i>
1,4-Dioxane-d8 (S)	94.5		%	70 - 130	EPA 522	10/19/15 JEK	10/19/15 20:26	DHF	B
WET CHEMISTRY									
Hexavalent Chromium	ND		ug/L	0.030	EPA 218.7		10/22/15 07:52	MBW	C
METALS									
Chromium, Total	ND		ug/L	0.20	EPA 200.8	10/20/15 JPS	10/21/15 10:53	MO	F1
Cobalt, Total	ND		ug/L	1.0	EPA 200.8	10/20/15 JPS	10/21/15 10:53	MO	F1
Molybdenum, Total	ND		ug/L	1.0	EPA 200.8	10/20/15 JPS	10/21/15 10:53	MO	F1
Strontium, Total	47.7		ug/L	30.0	EPA 200.8	10/20/15 JPS	10/21/15 11:02	MO	F1
Vanadium, Total	ND		ug/L	0.20	EPA 200.8	10/20/15 JPS	10/21/15 10:53	MO	F1
PERFLUORINATED COMPOUNDS									
Perfluorobutanesulfonic acid	ND		ug/L	0.0900	EPA 537		10/27/15 22:52	SUB	G
Perfluoroheptanoic acid	ND		ug/L	0.0100	EPA 537		10/27/15 22:52	SUB	G
Perfluorohexanesulfonic acid	ND		ug/L	0.0300	EPA 537		10/27/15 22:52	SUB	G
Perfluorononanoic acid	ND		ug/L	0.0200	EPA 537		10/27/15 22:52	SUB	G
Perfluorooctanesulfonic acid	ND		ug/L	0.0400	EPA 537		10/27/15 22:52	SUB	G
Perfluorooctanoic acid	ND		ug/L	0.0200	EPA 537		10/27/15 22:52	SUB	G

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ANALYTICAL RESULTS

Workorder: 2101479 UCMR3 (SE2)

Lab ID: 2101479003 Date Collected: 10/13/2015 13:00 Matrix: Drinking Water
Sample ID: NJEMS 07-227 - Bloomfield Date Received: 10/13/2015 20:27

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed	By	Cntr
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Kelli Wolfgang

Mrs. Kelli L Wolfgang
Project Coordinator

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ANALYTICAL RESULTS

Workorder: 2101479 UCMR3 (SE2)

Lab ID: 2101479004 Date Collected: 10/13/2015 13:00 Matrix: Drinking Water
 Sample ID: Field Blank EP Date Received: 10/13/2015 20:27

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed	By	Cntr
METALS									
Chromium, Total	ND		ug/L	0.20	EPA 200.8	10/20/15 JPS	10/21/15 11:10	MO	A1
Cobalt, Total	ND		ug/L	1.0	EPA 200.8	10/20/15 JPS	10/21/15 11:10	MO	A1
Molybdenum, Total	ND		ug/L	1.0	EPA 200.8	10/20/15 JPS	10/21/15 11:10	MO	A1
Strontium, Total	ND		ug/L	0.30	EPA 200.8	10/20/15 JPS	10/21/15 11:10	MO	A1
Vanadium, Total	ND		ug/L	0.20	EPA 200.8	10/20/15 JPS	10/21/15 11:10	MO	A1

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ANALYTICAL RESULTS

Workorder: 2101479 UCMR3 (SE2)

Lab ID: 2101479005 Date Collected: 10/13/2015 13:00 Matrix: Drinking Water
Sample ID: Field Blank EP Date Received: 10/13/2015 20:27

Parameters	Results	Flag	Units	RDL	Method	Prepared By	Analyzed	By	Cntr
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ADMINISTRATIVE

Sample Cancelled

CANCEL

10/27/15 14:05 CPK

Kelli Wolfgang

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SAMPLE SUMMARY

Workorder: 2120916 UCMR3 (SE3)

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
2120916001	Max. Res. Time in Dist. System	Drinking Water	1/28/2016 12:10	1/28/2016 19:20	Mr. Chris M Frederick
2120916002	Field Blank MR	Drinking Water	1/28/2016 12:12	1/28/2016 19:20	Mr. Chris M Frederick
2120916003	NJEMS 07-227 - Bloomfield	Drinking Water	1/28/2016 11:45	1/28/2016 19:20	Mr. Chris M Frederick
2120916004	Field Blank EP	Drinking Water	1/28/2016 11:48	1/28/2016 19:20	Mr. Chris M Frederick
2120916005	Field Blank EP	Drinking Water	1/28/2016 11:48	1/28/2016 19:20	Mr. Chris M Frederick

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are performed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit

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PROJECT SUMMARY

Workorder: 2120916 UCMR3 (SE3)

Workorder Comments

See attached subcontracted EPA 537 results from ALS Kelso SSL 02/25/16

Sample Comments

Lab ID: 2120916005

Sample ID: Field Blank EP

Sample Type: FLDQC

This sample was cancelled per project specifications.

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ANALYTICAL RESULTS

Workorder: 2120916 UCMR3 (SE3)

Lab ID: 2120916001 Date Collected: 1/28/2016 12:10 Matrix: Drinking Water
Sample ID: Max. Res. Time in Dist. System Date Received: 1/28/2016 19:20

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
WET CHEMISTRY										
Chlorate	ND		ug/L	20.0	EPA 300.1			2/1/16 19:35	JP	C
Hexavalent Chromium	ND		ug/L	0.030	EPA 218.7			2/9/16 06:06	MBW	B
METALS										
Chromium, Total	ND		ug/L	0.20	EPA 200.8	2/7/16 08:30	JPS	2/8/16 10:02	MO	A1
Cobalt, Total	ND		ug/L	1.0	EPA 200.8	2/7/16 08:30	JPS	2/8/16 10:02	MO	A1
Molybdenum, Total	ND		ug/L	1.0	EPA 200.8	2/7/16 08:30	JPS	2/8/16 10:02	MO	A1
Strontium, Total	43.7		ug/L	30.0	EPA 200.8	2/7/16 08:30	JPS	2/8/16 10:10	MO	A1
Vanadium, Total	ND		ug/L	0.20	EPA 200.8	2/7/16 08:30	JPS	2/8/16 10:02	MO	A1

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ANALYTICAL RESULTS

Workorder: 2120916 UCMR3 (SE3)

Lab ID: 2120916002 Date Collected: 1/28/2016 12:12 Matrix: Drinking Water
 Sample ID: Field Blank MR Date Received: 1/28/2016 19:20

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
METALS										
Chromium, Total	ND		ug/L	0.20	EPA 200.8	2/7/16 08:30	JPS	2/8/16 10:13	MO	A1
Cobalt, Total	ND		ug/L	1.0	EPA 200.8	2/7/16 08:30	JPS	2/8/16 10:13	MO	A1
Molybdenum, Total	ND		ug/L	1.0	EPA 200.8	2/7/16 08:30	JPS	2/8/16 10:13	MO	A1
Strontium, Total	ND		ug/L	0.30	EPA 200.8	2/7/16 08:30	JPS	2/8/16 10:13	MO	A1
Vanadium, Total	ND		ug/L	0.20	EPA 200.8	2/7/16 08:30	JPS	2/8/16 10:13	MO	A1

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ANALYTICAL RESULTS

Workorder: 2120916 UCMR3 (SE3)

Lab ID: 2120916003 Date Collected: 1/28/2016 11:45 Matrix: Drinking Water
 Sample ID: NJEMS 07-227 - Bloomfield Date Received: 1/28/2016 19:20

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Bromochloromethane	ND		ug/L	0.060	EPA 524.3			2/3/16 05:23	CJG	D
Bromomethane	ND		ug/L	0.20	EPA 524.3			2/3/16 05:23	CJG	D
1,3-Butadiene	ND		ug/L	0.10	EPA 524.3			2/3/16 05:23	CJG	D
Chlorodifluoromethane	ND		ug/L	0.080	EPA 524.3			2/3/16 05:23	CJG	D
Chloromethane	ND		ug/L	0.20	EPA 524.3			2/3/16 05:23	CJG	D
1,1-Dichloroethane	ND		ug/L	0.030	EPA 524.3			2/3/16 05:23	CJG	D
1,2,3-Trichloropropane	ND		ug/L	0.030	EPA 524.3			2/3/16 05:23	CJG	D
<i>Surrogate Recoveries</i>	<i>Results</i>	<i>Flag</i>	<i>Units</i>	<i>Limits</i>	<i>Method</i>	<i>Prepared</i>	<i>By</i>	<i>Analyzed</i>	<i>By</i>	<i>Cntr</i>
1,2-Dichlorobenzene-d4 (S)	89.8		%	70 - 130	EPA 524.3			2/3/16 05:23	CJG	D
4-Bromofluorobenzene (S)	96.6		%	70 - 130	EPA 524.3			2/3/16 05:23	CJG	D
Methyl-t-Butyl ether-d3 (S)	104		%	70 - 130	EPA 524.3			2/3/16 05:23	CJG	D
SEMIVOLATILES										
1,4-Dioxane	ND		ug/L	0.070	EPA 522	2/2/16 20:55	JEK	2/3/16 12:33	CGS	B
<i>Surrogate Recoveries</i>	<i>Results</i>	<i>Flag</i>	<i>Units</i>	<i>Limits</i>	<i>Method</i>	<i>Prepared</i>	<i>By</i>	<i>Analyzed</i>	<i>By</i>	<i>Cntr</i>
1,4-Dioxane-d8 (S)	84.8		%	70 - 130	EPA 522	2/2/16 20:55	JEK	2/3/16 12:33	CGS	B
WET CHEMISTRY										
Chlorate	ND		ug/L	20.0	EPA 300.1			2/1/16 19:48	JP	A
Hexavalent Chromium	ND		ug/L	0.030	EPA 218.7			2/9/16 06:14	MBW	C
METALS										
Chromium, Total	ND		ug/L	0.20	EPA 200.8	2/7/16 08:30	JPS	2/8/16 10:16	MO	F1
Cobalt, Total	ND		ug/L	1.0	EPA 200.8	2/7/16 08:30	JPS	2/8/16 10:16	MO	F1
Molybdenum, Total	ND		ug/L	1.0	EPA 200.8	2/7/16 08:30	JPS	2/8/16 10:16	MO	F1
Strontium, Total	42.5		ug/L	30.0	EPA 200.8	2/7/16 08:30	JPS	2/8/16 10:18	MO	F1
Vanadium, Total	ND		ug/L	0.20	EPA 200.8	2/7/16 08:30	JPS	2/8/16 10:16	MO	F1
PERFLUORINATED COMPOUNDS										
Perfluorobutanesulfonic acid	ND		ug/L	0.0776	EPA 537			2/10/16 05:12	SUB	G
Perfluoroheptanoic acid	ND		ug/L	0.00862	EPA 537			2/10/16 05:12	SUB	G
Perfluorohexanesulfonic acid	ND		ug/L	0.0259	EPA 537			2/10/16 05:12	SUB	G
Perfluorononanoic acid	ND		ug/L	0.0172	EPA 537			2/10/16 05:12	SUB	G
Perfluorooctanesulfonic acid	ND		ug/L	0.0345	EPA 537			2/10/16 05:12	SUB	G
Perfluorooctanoic acid	ND		ug/L	0.0172	EPA 537			2/10/16 05:12	SUB	G

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ANALYTICAL RESULTS

Workorder: 2120916 UCMR3 (SE3)

Lab ID: 2120916003

Date Collected: 1/28/2016 11:45

Matrix: Drinking Water

Sample ID: NJEMS 07-227 - Bloomfield

Date Received: 1/28/2016 19:20

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
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Project Coordinator

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ANALYTICAL RESULTS

Workorder: 2120916 UCMR3 (SE3)

Lab ID: 2120916004
 Sample ID: Field Blank EP

Date Collected: 1/28/2016 11:48 Matrix: Drinking Water
 Date Received: 1/28/2016 19:20

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
METALS										
Chromium, Total	ND		ug/L	0.20	EPA 200.8	2/7/16 08:30	JPS	2/8/16 10:21	MO	A1
Cobalt, Total	ND		ug/L	1.0	EPA 200.8	2/7/16 08:30	JPS	2/8/16 10:21	MO	A1
Molybdenum, Total	ND		ug/L	1.0	EPA 200.8	2/7/16 08:30	JPS	2/8/16 10:21	MO	A1
Strontium, Total	ND		ug/L	0.30	EPA 200.8	2/7/16 08:30	JPS	2/8/16 10:21	MO	A1
Vanadium, Total	ND		ug/L	0.20	EPA 200.8	2/7/16 08:30	JPS	2/8/16 10:21	MO	A1

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State Certifications: DE ID 11, MA PA0102, MD 128, VA 460157, WV 343

ANALYTICAL RESULTS

Workorder: 2120916 UCMR3 (SE3)

Lab ID: 2120916005 Date Collected: 1/28/2016 11:48 Matrix: Drinking Water
Sample ID: Field Blank EP Date Received: 1/28/2016 19:20

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
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ADMINISTRATIVE

Sample Cancelled CANCEL 2/3/16 15:39 CPK

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SAMPLE SUMMARY

Workorder: 2139267 UCMR3 (SE4)

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are performed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits

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State Certifications: DE ID 11, MA PA0102, MD 128, VA 460157, WV 343

PROJECT SUMMARY

Workorder: 2139267 UCMR3 (SE4)

Workorder Comments

See attached subcontracted EPA 200.8 results from Eurofins IN. SSL 06/02/16

Sample Comments

Lab ID: 2139267005

Sample ID: Field Blank EP

Sample Type: SAMPLE

This sample was cancelled per project specifications.

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ANALYTICAL RESULTS

Workorder: 2139267 UCMR3 (SE4)

Lab ID: 2139267001

Date Collected: 4/21/2016 11:45

Matrix: Drinking Water

Sample ID: Max. Res. Time in Dist. System

Date Received: 4/26/2016 19:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
WET CHEMISTRY										
Chlorate	33.7		ug/L	20.0	EPA 300.1			5/2/16 07:51	JP	C
Hexavalent Chromium	ND		ug/L	0.030	EPA 218.7			4/27/16 10:26	MBW	B

Kelli Wolfgang

Mrs. Keili L Wolfgang

Project Coordinator

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ANALYTICAL RESULTS

Workorder: 2139267 UCMR3 (SE4)

Lab ID: 2139267002 Date Collected: 4/21/2016 11:45 Matrix: Drinking Water
Sample ID: Field Blank MR Date Received: 4/26/2016 19:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
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ADMINISTRATIVE

Sample Cancelled

CANCEL
LED

6/16/16 14:45 SSL A

Kelli Wolfgang

Mrs. Kelli L Wolfgang
Project Coordinator

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ANALYTICAL RESULTS

Workorder: 2139267 UCMR3 (SE4)

Lab ID: 2139267003 Date Collected: 4/21/2016 12:11 Matrix: Drinking Water
 Sample ID: NJEMS 07-227 - Bloomfield Date Received: 4/26/2016 19:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Bromochloromethane	ND		ug/L	0.060	EPA 524.3			4/30/16 12:51	CJG	D
Bromomethane	ND		ug/L	0.20	EPA 524.3			4/30/16 12:51	CJG	D
1,3-Butadiene	ND		ug/L	0.10	EPA 524.3			4/30/16 12:51	CJG	D
Chlorodifluoromethane	ND		ug/L	0.080	EPA 524.3			4/30/16 12:51	CJG	D
Chloromethane	ND		ug/L	0.20	EPA 524.3			4/30/16 12:51	CJG	D
1,1-Dichloroethane	ND		ug/L	0.030	EPA 524.3			4/30/16 12:51	CJG	D
1,2,3-Trichloropropane	ND		ug/L	0.030	EPA 524.3			4/30/16 12:51	CJG	D
<i>Surrogate Recoveries</i>	<i>Results</i>	<i>Flag</i>	<i>Units</i>	<i>Limits</i>	<i>Method</i>	<i>Prepared</i>	<i>By</i>	<i>Analyzed</i>	<i>By</i>	<i>Cntr</i>
1,2-Dichlorobenzene-d4 (S)	101		%	70 - 130	EPA 524.3			4/30/16 12:51	CJG	D
4-Bromofluorobenzene (S)	107		%	70 - 130	EPA 524.3			4/30/16 12:51	CJG	D
Methyl-t-Butyl ether-d3 (S)	87.7		%	70 - 130	EPA 524.3			4/30/16 12:51	CJG	D
SEMIVOLATILES										
1,4-Dioxane	ND		ug/L	0.070	EPA 522	4/27/16 22:00	JEK	4/28/16 15:40	CGS	B
<i>Surrogate Recoveries</i>	<i>Results</i>	<i>Flag</i>	<i>Units</i>	<i>Limits</i>	<i>Method</i>	<i>Prepared</i>	<i>By</i>	<i>Analyzed</i>	<i>By</i>	<i>Cntr</i>
1,4-Dioxane-d8 (S)	94.1		%	70 - 130	EPA 522	4/27/16 22:00	JEK	4/28/16 15:40	CGS	B
WET CHEMISTRY										
Chlorate	34.7		ug/L	20.0	EPA 300.1			5/2/16 08:05	JP	A
Hexavalent Chromium	ND		ug/L	0.030	EPA 218.7			4/27/16 10:34	MBW	C
SUBCONTRACTED ANALYSIS										
Subcontracted Analysis	See Attached				Subcontract			5/18/16 14:06	SUB	

Kelli Wolfgang

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ANALYTICAL RESULTS

Workorder: 2139267 UCMR3 (SE4)

Lab ID: 2139267004 Date Collected: 4/21/2016 12:11 Matrix: Drinking Water
Sample ID: Field Blank EP Date Received: 4/26/2016 19:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
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SUBCONTRACTED ANALYSIS

Subcontracted Analysis	See Attached				Subcontract			5/18/16 14:51		SUB
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ANALYTICAL RESULTS

Workorder: 2139267 UCMR3 (SE4)

Lab ID: 2139267005
Sample ID: Field Blank EP

Date Collected: 4/21/2016 12:11 Matrix: Drinking Water
Date Received: 4/26/2016 19:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
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ADMINISTRATIVE

Sample Cancelled

CANCEL

5/2/16 12:53 CPK

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SAMPLE SUMMARY

Workorder: 2142812 UCMR3 (SE4)

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are performed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits

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PROJECT SUMMARY

Workorder: 2142812 UCMR3 (SE4)

Workorder Comments

See attached subcontracted EPA 537 results from ALS Kelso. SSL 06/20/16

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ANALYTICAL RESULTS

Workorder: 2142812 UCMR3 (SE4)

Lab ID: 2142812001 Date Collected: 5/10/2016 12:30 Matrix: Drinking Water
 Sample ID: NJEMS 07-227 - Bloomfield Date Received: 5/10/2016 19:30

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
PERFLUORINATED COMPOUNDS										
Perfluorobutanesulfonic acid	ND		ug/L	0.0900	EPA 537			5/25/16 01:03	SUB	A
Perfluoroheptanoic acid	ND		ug/L	0.0100	EPA 537			5/25/16 01:03	SUB	A
Perfluorohexanesulfonic acid	ND		ug/L	0.0300	EPA 537			5/25/16 01:03	SUB	A
Perfluorononanoic acid	ND		ug/L	0.0200	EPA 537			5/25/16 01:03	SUB	A
Perfluorooctanesulfonic acid	ND		ug/L	0.0400	EPA 537			5/25/16 01:03	SUB	A
Perfluorooctanoic acid	ND		ug/L	0.0200	EPA 537			5/25/16 01:03	SUB	A

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SAMPLE SUMMARY

Workorder: 2152757 UCMR3 (SE4)

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are performed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits

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PROJECT SUMMARY

Workorder: 2152757 UCMR3 (SE4)

Workorder Comments

See attached subcontracted EPA 200.8 (Cr, Co, V, Mo, Sr) results from Eurofins Eaton Analytical. SSL 07/13/16

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ANALYTICAL RESULTS

Workorder: 2152757 UCMR3 (SE4)

Lab ID: 2152757001 Date Collected: 6/20/2016 12:12 Matrix: Drinking Water
Sample ID: Max. Res. Time in Dist. System Date Received: 6/20/2016 19:50

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
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SUBCONTRACTED ANALYSIS

Subcontracted Analysis	See Attached				Subcontract			7/6/16 15:49	SUB	A
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ANALYTICAL RESULTS

Workorder: 2152757 UCMR3 (SE4)

Lab ID: 2152757002
Sample ID: Field Blank MR

Date Collected: 6/20/2016 08:00 Matrix: Drinking Water
Date Received: 6/20/2016 19:50

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
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SUBCONTRACTED ANALYSIS

Subcontracted Analysis	See Attached	Subcontract	7/6/16 18:19	SUB	A
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Project Coordinator

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eurofins

Eaton Analytical

LABORATORY REPORT

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Page 1 of 7

ALS



CHAIN OF CUSTODY / UCMR-3

ALS Environmental

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All fields must be filled out. The information in the **Shaded Fields** is required for reporting your UCMR-3 results.

Public Water System Name: Bloomfield Water Department		Schedule Event: SE4	
Public Water System ID: NJ0702001		Project Manager:	
Address: (Street) ANIMAL SHELTER / 61 BUKOSKI PL		Address: (City/State/Zip) BLOOMFIELD, NJ	
Phone Number:		Fax Number:	
Sampled By: (Please print clearly)		Sampler's Signature:	
Sample Point ID	Date Collected	Time Collected	Facility ID
DEPMAX	6/20/16	12:12	15103
Field Blank MR	6/20/16	8:00	N/A
Water Source Type		Sample Point Type	
SW = Surface Water GW = Ground Water GL = Ground water under influence of SW MX = any combination of types		EP = Entry Point Sample MR = Distribution Sample at maximum residence time	
NUMBER OF CONTAINERS		List 1 - Assessment 524.30 5220 5370 Metals <input type="checkbox"/> Chloride <input type="checkbox"/> Cr+6 <input type="checkbox"/>	
List 2 - Screening Survey 539 <input type="checkbox"/>		MR Sampling Metals <input type="checkbox"/> Chloride <input type="checkbox"/> Cr+6 <input type="checkbox"/>	
Field Blank Metals <input type="checkbox"/> 524.30 <input type="checkbox"/> 5370		Additional Information	
		1 FB for Metals	

INVOICE INFORMATION

SPECIAL INSTRUCTIONS/COMMENTS

Follow field trip instructions as listed on enclosed sampling sheets.

Metals Resample

UMCA 0012/16 0330

RELINQUISHED BY:
 Printed Name: John Condy
 Signature: *[Signature]*
 Date/Time: 6/20/16 9:45
 Company: NYS

RECEIVED BY:
 Printed Name: Dan Blacker
 Signature: *[Signature]*
 Date/Time: 6-20-16 17:15
 Company: A15

RELINQUISHED BY:
 Printed Name: Dan Blacker
 Signature: *[Signature]*
 Date/Time: 6-20-16 17:15
 Company: A15

RECEIVED BY:
 Printed Name: *[Signature]*
 Signature: *[Signature]*
 Date/Time: 6-20-16 19:50
 Company: A15

**CHAIN OF CUSTODY/
 REQUEST FOR ANALYSIS**

COC #: **1**
 ALS Quote #: **1**

**ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT /
 SAMPLER. INSTRUCTIONS ON THE BACK.**

Client Name: ALS-Middletown
Address: 34 Dogwood Lane
 Middletown PA 17057
Contact: Kelli Wolfgang
Phone: 717-702-2248
Project Name: Bloomfield Water Department
Bill To:

TAT: Normal-Standard. TAT is 10-12 business days.
 Rush-Subject to ALS approval and surcharges.
Date Required: _____ **Approved By:** _____
Email: Y N kelli.wolfgang@alsglobal.com
Fax: Y N _____

Sample Date	Time	Sample Description/Location (as it will appear on the lab report)	Matrix	Container Type	Container Size	Preservative	ANALYSES/METHOD REQUESTED	Enter Number of Containers Per Sample or Field Results Below.
1 2152757001	6/20/2016 1212P		DW	G	1		Subcontract to Eurofins - TN	1
2 2152757002	6/20/2016 0800A		DW	G	1			1
3								
4								
5								
6								
7								
8								
9								
10								

Project Comments: Sample results MUST be uploaded to CDX website 120 days from sample collection.
LOGGED BY (signature): _____
REVIEWED BY (signature): _____

Refiniquished By / Company Name: *Wolfgang*
Date: 6/22/16 1740Z
Time: 4
Received By / Company Name: _____
Date: _____
Time: _____

Receipt Information (completed by Receiving Lab)
 Cooler Temp: _____ Therm ID: _____ Y N Initial _____
 No. of Coolers: _____
 Custody Seals Present? _____
 (if present) Seals Intact? _____
 Received on Ice? _____
 COC Labels Complete/Accurate? _____
 Cont. In Good Cond.? _____
 Correct Container? _____
 Correct Sample Volumes? _____
 Correct Preservation? _____
 Headspace/Volatiles? _____
 Courier/Tracking #: _____
 Samples/COC Comments: _____
 Sample Point: DBP/MAX, Facility ID: 15103
 Field Blank

Schedule Event: SE4
 ALS Field Services: Pickup _____ Labor _____
 Composite Sampling _____ Rental Equipment _____
 Other: _____

Special Processing: USACE _____
 Navy _____
 State Samples Collected In: NY _____ NJ _____ PA _____ NC _____
 Reportable to PADEP? Yes _____ No _____
 PWSID #: NJ0702001
 EDDS: Format Type: _____

* G-Grab; C-Composite **Matrix: A=Air; D=Drinking Water; GW=Groundwater; O=Oil; OL=Other Liquid; SL=Sludge; SQ=Soil; WP=Wipe; WW=Wastewater
 ALS ENVIRONMENTAL SHIPPING ADDRESS: 34 DOGWOOD LANE, MIDDLETOWN, PA 17057

STATE CERTIFICATION LIST

State	Certification	State	Certification
Alabama	40700	Montana	CERT0026
Alaska	IN00035	Nebraska	E87775
Arizona	AZ0432	Nevada	IN00035
Arkansas	IN00035	New Hampshire*	2124
California	2920	New Mexico	IN00035
Colorado	IN035	New Jersey*	IN598
Colorado Radiochemistry	IN035	New York*	11398
Connecticut	PH-0132	North Carolina	18700
Delaware	IN035	North Dakota	R-035
Florida*	E87775	Ohio	87775
Georgia	929	Oklahoma	D9508
Hawaii	IN035	Oregon (Primary AB)*	4074-001
Idaho	IN00035/E87775	Pennsylvania*	68-00466
Illinois*	200001	Puerto Rico	IN00035
Illinois Microbiology	200001	Rhode Island	LA000343
Indiana Chemistry	C-71-01	South Carolina	95005
Indiana Microbiology	M-76-07	South Dakota	IN00035
Iowa	098	Tennessee	TN02973
Kansas*	E-10233	Texas*	T104704187-15-8
Kentucky	90056	Texas/TCEQ	TX207
Louisiana*	LA160002	Utah*	IN00035
Maine	IN00035	Vermont	VT-8775
Maryland	209	Virginia*	460275
Massachusetts	M-IN035	Washington	C837
Michigan	9926	West Virginia	9927 C
Minnesota*	018-999-338	Wisconsin	999766900
Mississippi	IN035	Wyoming	IN035
Missouri	880		

*NELAP/TNI Recognized Accreditation Bodies

Revision date: 04/14/2016

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Eaton Analytical

110 South Hill Street
South Bend, IN 46617
Tel: (574) 233-4777
Fax: (574) 233-8207
1 800 332 4345

Laboratory Report

Client: ALS Report: 366135
 Attn: Kelli Wolfgang Priority: Standard Written
 34 Dogwood Lane
 Middletown, PA 17057
 Status: Final
 Lab ID Code: IN00035
 PWS ID: NJ0702001
 PWS Facility Name: Distribution System PWS Facility ID: 15103
 Sampling Point Name: Max. Res. Time in Dist. System Sampling Point ID: DBPMAX
 Sampling Point Type: MR Sample Event Code: SE4

Sample Information

EEA ID #	Client ID	Method	Collected Date / Time	Collected By:	Received Date / Time
3478366	2152757001	200.8	06/20/16 12:12	Client	06/24/16 09:30
3478367	2152757002	200.8	06/20/16 09:00	Client	06/24/16 09:30

Report Summary

Note: Sample containers were provided by the client.

Note: Per the US EPA, Field Blank data are not uploaded to SDWARs. The data is however to be maintained on site at the laboratory performing the analysis.

Detailed quantitative results are presented on the following pages. The results presented relate only to the samples provided for analysis.

We appreciate the opportunity to provide you with this analysis. If you have any questions concerning this report, please do not hesitate to call Traci Chlebowski at (574) 233-4777.

Note: This report may not be reproduced, except in full, without written approval from EEA.

Traci Chlebowski ASM

07/13/2016

Authorized Signature

Title

Date

Client Name: ALS
Report #: 366135

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Client Name: ALS

Report #: 366135

Sampling Point Name: Max. Res. Time in Dist. System

PWS ID: NJ0702001

UCMR Assessment Monitoring								
Analyte ID #	Analyte	Method	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID #
1020	Chromium	200.8	0.2	0.4	ug/L	07/05/16 11:30	07/06/16 15:49	3478366
108	Cobalt	200.8	1.0	< 1.0	ug/L	07/05/16 11:30	07/06/16 15:49	3478366
1084	Molybdenum	200.8	1.0	< 1.0	ug/L	07/05/16 11:30	07/06/16 15:49	3478366
1051	Strontium	200.8	0.3	45	ug/L	07/05/16 11:30	07/06/16 15:49	3478366
1083	Vanadium	200.8	0.2	< 0.2	ug/L	07/05/16 11:30	07/06/16 15:49	3478366

EEA has demonstrated it can achieve these report limits in reagent water, but can not document them in all sample matrices.

Sampling Point Name: FTB

PWS ID: NJ0702001

UCMR Assessment Monitoring								
Analyte ID #	Analyte	Method	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID #
1020	Chromium	200.8	0.2	< 0.2	ug/L	07/05/16 11:30	07/06/16 16:46	3478367
1081	Cobalt	200.8	1.0	< 1.0	ug/L	07/05/16 11:30	07/06/16 16:46	3478367
1084	Molybdenum	200.8	1.0	< 1.0	ug/L	07/05/16 11:30	07/06/16 16:46	3478367
1051	Strontium	200.8	0.3	< 0.3	ug/L	07/05/16 11:30	07/06/16 16:46	3478367
1083	Vanadium	200.8	0.2	< 0.2	ug/L	07/05/16 11:30	07/06/16 16:46	3478367

EEA has demonstrated it can achieve these report limits in reagent water, but can not document them in all sample matrices.

Lab Definitions

Continuing Calibration Check Standard (CCC) / Continuing Calibration Verification (CCV) / Initial Calibration Verification Standard (ICV) / Initial Performance Check (IPC) - is a standard containing one or more of the target analytes that is prepared from the same standards used to calibrate the instrument. This standard is used to verify the calibration curve at the beginning of each analytical sequence, and may also be analyzed throughout and at the end of the sequence. The concentration of continuing standards may be varied, when prescribed by the reference method, so that the range of the calibration curve is verified on a regular basis. CCL, CCM, and CCH are the CCC standards at low, mid, and high concentration levels, respectively.

Internal Standards (IS) - are pure compounds with properties similar to the analytes of interest, which are added to field samples or extracts, calibration standards, and quality control standards at a known concentration. They are used to measure the relative responses of the analytes of interest and surrogates in the sample, calibration standard or quality control standard.

Laboratory Duplicate (LD) - is a field sample aliquot taken from the same sample container in the laboratory and analyzed separately using identical procedures. Analysis of laboratory duplicates provides a measure of the precision of the laboratory procedures.

Laboratory Fortified Blank (LFB) / Laboratory Control Sample (LCS) - is an aliquot of reagent water to which known concentrations of the analytes of interest are added. The LFB is analyzed exactly the same as the field samples. LFBs are used to determine whether the method is in control. FBL, FBM, and FBH are the LFB samples at low, mid, and high concentration levels, respectively.

Laboratory Method Blank (LMB) / Laboratory Reagent Blank (LRB) - is a sample of reagent water included in the sample batch analyzed in the same way as the associated field samples. The LMB is used to determine if method analytes or other background contamination have been introduced during the preparation or analytical procedure. The LMB is analyzed exactly the same as the field samples.

Laboratory Trip Blank (LTB) / Field Reagent Blank (FRB) - is a sample of laboratory reagent water placed in a sample container in the laboratory and treated as a field sample, including storage, preservation, and all analytical procedures. The FRB/LTB container follows the collection bottles to and from the collection site, but the FRB/LTB is not opened at any time during the trip. The FRB/LTB is primarily a travel blank used to verify that the samples were not contaminated during shipment.

Matrix Spike Duplicate Sample (MSD) / Laboratory Fortified Sample Matrix Duplicate (LFSMD) - is a sample aliquot taken from the same field sample source as the Matrix Spike Sample to which known quantities of the analytes of interest are added in the laboratory. The MSD is analyzed exactly the same as the field samples. Analysis of the MSD provides a measure of the precision of the laboratory procedures in a specific matrix. SDL, SDM, and SDH / LFSMDL, LFSMDM, and LFSMDH are the MSD or LFSMD at low, mid, and high concentration levels, respectively.

Matrix Spike Sample (MS) / Laboratory Fortified Sample Matrix (LFSM) - is a sample aliquot taken from field sample source to which known quantities of the analytes of interest are added in the laboratory. The MS is analyzed exactly the same as the field samples. The purpose is to demonstrate recovery of the analytes from a sample matrix to determine if the specific matrix contributes bias to the analytical results. MSL, MSM, and MSH / LFSML, LFSMM, and LFSMH are the MS or LFSM at low, mid, and high concentration levels, respectively.

Quality Control Standard (QCS) / Second Source Calibration Verification (SSCV) - is a solution containing known concentrations of the analytes of interest prepared from a source different from the source of the calibration standards. The solution is obtained from a second manufacturer or lot if the lot can be demonstrated by the manufacturer as prepared independently from other lots. The QCS sample is analyzed using the same procedures as field samples. The QCS is used as a check on the calibration standards used in the method on a routine basis.

Reporting Limit Check (RLC) / Initial Calibration Check Standard (ICCS) - is a procedural standard that is analyzed each day to evaluate instrument performance at or below the minimum reporting limit (MRL).

Surrogate Standard (SS) / Surrogate Analyte (SUR) - is a pure compound with properties similar to the analytes of interest, which is highly unlikely to be found in any field sample, that is added to the field samples, calibration standards, blanks and quality control standards before sample preparation. The SS is used to evaluate the efficiency of the sample preparation process.



34 Dogwood Lane
Middletown, PA 17057
P. 717-944-5541
F. 717-944-1430

CHAIN OF CUSTODY
REQUEST FOR ANALYSIS
ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC # 30008 of 1
ALS QUOTE #:

Client Name: ALS Middletown
Address: 34 Dogwood Lane
Middletown PA 17057
Contact: Kelli Wolfgang
Phone#: 717-702-2248
Project Name/Ref: Bloomfield Water Department
Bill To:

TAT: Normal-Standard TAT is 10-12 business days.
 Rush-Subject to ALS approval and surcharges.
Date Required: _____ Approved By: _____
Email? Y N kelli.wolfgang@alsglobal.com
Fax? Y N

Receipt Information (completed by Receiving Lab)
Cooler Temp: _____ Therm ID: _____
No. of Coolers: _____ Y N Initial _____
Caddy Seals Present? _____
(if present) Seals Intact? _____
Received on Ice? _____
COC Labels Complete/Accurate? _____
Can't In Good Contd.? _____
Correct Containers? _____
Correct Sample Volumes? _____
Correct Preservation? _____
Headspace/Seals? _____
Courier/Tracking #: _____
Sample/COC Comments: _____

Sample No.	Sample Description/Location (attach label upon the lab report)	Matrix	G or C	Volume	Enter Number of Containers Per Sample or Field Results Below.		Sample Point: DBP/MAX, Facility ID: 15103
					3478366	3478367	
1	EPA 200.8 (Cr, Co, V, Mo, S)	DW	G	1	1	1	Field Blank
2		DW	G	1	1	1	
3							
4							
5							
6							
7							
8							
9							
10							

Project Comments: Sample results MUST be uploaded to CDX website 120 days from sample collection.

Relinquished By / Company Name: ALS Date: 6/22/16 Time: 1740
Received By / Company Name: K. Dennis Date: 6-24-16 Time: 09:30

LOGGED BY (signature): _____
REVIEWED BY (signature): _____

ALS Field Services: Pickup Labor
 Composite Sampling Rental Equipment
 Other: _____

Schedule Event: SE4

Special Processing: Standard CLP-like USACE
 USACE Navy NY NJ PA NC

State Samples Collected In: _____

Reportable to PADEP? Yes No
PWSID # NU0702001
EDDS: Formid Type: _____

Matrix: A=Air; D=W=Drinking Water; G=Groundwater; O=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater
ALS ENVIRONMENTAL SHIPPING ADDRESS: 34 DOGWOOD LANE, MIDDLETOWN, PA 17057
Rev 10/11



