water is life

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY | 5000 OVERLOOK AVENUE, SW | WASHINGTON, DC 20032

March 27, 2017

Mr. John Lovell (3WP41)
Pretreatment Coordinator
U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

RE: Pretreatment Program 2016 Annual Report
NPDES No. DC0021199

Dear Mr. Lovell:

Enclosed is the DC Water and Sewer Authority's (DC Water) 2016 Annual Pretreatment Program report. The report is arranged as follows:

2016 Annual Report Parts A and B for Blue Plains Advanced Wastewater Treatment Plant (AWTP) Users with the following attachments:

Attachment 1 – Part A with attachments for Significant Industrial Users (SIUs) in the District of Columbia;

Attachment 2 – Parts A and B with attachments for Washington Suburban Sanitary Commission (WSSC) SIUs discharging to Blue Plains;

Attachment 3 – Parts A and B with attachments for Fairfax County Department of Public Works SIUs discharging to Blue Plains;

Attachment 4 - Parts A and B with attachments for Loudoun Water SIUs discharging to Blue Plains;

Attachment 5 – Part A for the Town of Vienna; and

Attachment 6 – Quarterly influent, effluent, and biosolids data (local limits) and annual influent and biosolids priority pollutant data.

If you have any questions or need additional information, please contact Elaine Wilson at 202-787-4177 or elaine.wilson@dcwater.com.

Sincerely,

Aklile Tesfaye
AGM, Blue Plains

Enclosure

cc: Nicoline Shulterbrandt, DOEE
Elaine Wilson, DC Water
I-Hsin McConnell, WSSC (electronic copy)
John Botts, Fairfax County (electronic copy)
Frank Stokes, Loudoun Water (electronic copy)
John Cassidy, Greeley and Hansen (electronic copy)

PART A
PRETREATMENT PERFORMANCE SUMMARY*

I. General Information

Control Authority Name	*DC Water and Sewer Authority*				
Address	*5000 Overlook Ave., SW*				
City	*Washington*	State	*DC*	Zip+4	*20032*
Contact Person	*Aklile Tesfaye*		Telephone No.	*202-787-4008*	
Contact Title	*AGM Blue Plains*		E-mail Address	*atesfaye@dcwater.com*	
NPDES No.	*DC 0021199*		Reporting Period	*01-01-16 to 12-31-16*	
Issuance Date	*08/31/10*		Expiration Date*	*09/30/15*	
Total CIUs	*16*		Total MTCIUs	*0*	
Total SNIUs	*35*		Total NSCIUs	*0*	

CIUs - Categorical Industrial Users *MTCIUs – Middle Tier Categorical Industrial Users*

SNIUs - Significant Noncategorical Industrial Users *NSCIUs – Nonsignificant Categorical Industrial Users*

II. Compliance Monitoring Program

1.	No. of SIUs with current Control Documents	51
2.	No. of SIU Facilities Inspected	52
3.	No. of SIU Facilities Sampled	51
4.	No. of SIUs Submitting Self-Monitoring Reports	50

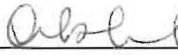
III. Significant Industrial User Compliance

1.	No. of SIUs Violating a Compliance Schedule / No. on a Schedule	0/1
2.	No. of SIUs in SNC for the July to December Period	0
3.	No. of SIUs in SNC At Any Time During the Calendar Year	3
4.	No. of SIUs in SNC That Were Also in SNC During the Previous Calendar Year	0
5.	No. of NSCIUs that violated any standards or requirements	NA

IV. Enforcement Actions

1.	Notices/Letters of Violation Issued to SIUs	30
2.	Enforceable Compliance Schedules Issued to SIUs	15
3.	Civil/Criminal Suits Filed	0
4.	No. of SIUs from which Penalties have been Collected	1
5.	Other Actions (sewer bans, etc.)	1**

I certify that the information contained in this report and attachments is complete and accurate to the best of my knowledge (see Part B.V of the instructions).

Aklile Tesfaye	Assistant General Manager, Blue Plains
Name of Authorized Representative (Print)	**Title (Print)**
	3/27/17
Signature of Authorized Representative	**Date**

*New NPDES permit has not been issued as of 12/31/16.

**Remaining Fairfax County 'Other Actions' pertain to waste haulers, not CIUs or SNIUs.

Section I Attachment
Summary of Blue Plains AWTP Significant Industrial Users

Table 1. List of Categorical Industrial Users and Category as of December 31, 2016

#	Categorical Industrial User	Address	Category	Jurisdiction
1	Adelphi Laboratory Center (formerly Adelphi Labs)*	2800 Powder Mill Road Adelphi, MD 20783	PSNS 433.17 Metal Finishing; PSNS 469.18 Semiconductor; PSNS 461 – no discharge	WSSC
2	ATK Space Systems	11313 Frederick Avenue Beltsville, MD 20705	PSNS 433.17 Metal Finishing	WSSC
3	Bethesda Art Metal Works	4955 Bethesda Avenue Bethesda, MD 20814	PSES 413 Electroplating	WSSC
4	Bureau of Engraving and Printing	14th and C Streets, SW Washington, DC 20228	PSNS 433.17 Metal Finishing	DC Water
5	Eaton Corporation	11642 Old Baltimore Pike Beltsville, MD 20705-1294	PSNS 433.17 Metal Finishing	WSSC
6	FlexEl, LLC	4505 Campus Drive College Park, MD 20740	PSNS 461.45 Battery manufacturing (Zero Discharger**)	WSSC
7	Human Genome Sciences (Large Scale Mfg)	9911 Belward Campus Drive Rockville, MD 20850	PSNS 439.17 Pharmaceutical Mfg	WSSC
8	Human Genome Sciences (Small Scale Mfg)	9910 Belward Campus Drive Rockville, MD 20850	PSNS 439.17 Pharmaceutical Mfg	WSSC
9	InnoScience, Inc.	15892 Gaither Drive, Suite A Gaithersburg, MD 20877	PSNS 469.18 Electrical & Electronic Components – Semiconductor Mfg	WSSC
10	Maryland Metal Plating & Polishing	4110 Howard Avenue Kensington, MD 20895	PSNS 433.17 Metal Finishing	WSSC
11	Mid-Atlantic Finishing, Inc.	4656 Addison Road Capitol Heights, MD 20743	PSNS 433.17 Metal Finishing	WSSC
12	Precision Sheet Metal Supply	354 Victory Drive Herndon, VA 20170	PSNS 433 Metal Finishing	Fairfax County
13	Sanofi Pasteur Biologics, Inc.	9920 Medical Center Dr. Rockville, MD 20850	PSNS 439.47 Subpart D Pharmaceutical Mfg	WSSC
14	United Therapeutics Corp.	1040 Spring St. Silver Spring, MD 20910	PSNS 439.47 Subpart D Pharmaceutical Mfg	WSSC
15	University of MD/DOD Physical Sciences Lab	8050 Greenmeade Drive College Park, MD 20740	PSNS 469.18 Electrical & Electronic Components - Semiconductor	WSSC
16	ViaSystems (TTM)	1200 Severn Way Sterling, VA 20166-8904	PSNS 433 Metal Finishing	Loudoun Water

*Adelphi Laboratory Center reclassified as CIU (from SIU) on 5/22/16
**FlexEl reclassified as a Zero Discharger CIU (from CIU) on 5/17/16.

Section I Attachment (continued)
Summary of Blue Plains AWTP Significant Industrial Users

Table 2. List of Significant Non-categorical Industrial Users as of December 31, 2016

#	Significant Non-categorical Industrial User	Address	Jurisdiction
1	Amtrak	1401 W St., NE Washington, DC 20018	DC Water
2	Capitol Power Plant	25 E St., SE Washington, DC 20003	DC Water
3	Coca-Cola Bottling Company Consolidated, Inc. (formerly Coca-Cola Refreshments USA, Inc.)	1710 Elton Road Silver Spring, MD 20903	WSSC
4	District Apartments Realty Holding Company, LLC	1401 S St., NW Washington, DC 20009	DC Water
5	District Photo, Inc.	10619 Baltimore Avenue Beltsville, MD 20705	WSSC
6	Fairfax Water	1295 Fred Morin Road Herndon, VA 20170	Fairfax County
7	Fort Detrick-Forest Glen Annex	9100 Brookville Road Silver Spring, MD 20910	WSSC
8	General Services Administration Central Heating and Refrigeration Plant	13th and C Streets, SW Washington, DC 20407	DC Water
9	George Bush Center for Intelligence	930 Dolly Madison Blvd. McLean, VA 22101	Fairfax County
10	Greenpenz, 2600 Virginia Ave., LLC	2500 Virginia Ave., NW Washington, DC 20037	DC Water
11	Huntsman P&A Americas, LLC	7011 Muirkirk Road Beltsville, MD 20705	WSSC
12	Marva Maid of Landover	6300 Sheriff Road Landover, MD 20785	WSSC
13	MedImmune, Inc.	1 MedImmune Way Gaithersburg, MD 20878	WSSC
14	Metropolitan Washington Airports Authority – Dulles International Airport	44701 Propeller Court Dulles, VA 20166	DC Water
15	National Archives and Records Administration (formerly National Archives II)	8601 Adelphi Road College Park, MD 20740	WSSC
16	National Institute of Standards & Technology	00 Muddy Branch Road Gaithersburg, MD 20899	WSSC
17	National Institutes of Health	9000 Rockville Pike Bethesda, MD 20892	WSSC

Section I Attachment (continued)
Summary of Blue Plains AWTP Significant Industrial Users

Table 2. List of Significant Non-categorical Industrial Users as of December 31, 2016 (cont.)

#	Significant Noncategorical Industrial User	Address	Jurisdiction
18	National Institutes of Health – NIAID Fishers Lane	5625 Fishers Lane Bethesda, MD 20852	WSSC
19	Naval Research Laboratory	4555 Overlook Ave., SW Washington, DC 20375-5320	DC Water
20	Naval Support Activity Bethesda	Building 14, Code 0143 8901 Wisconsin Avenue Bethesda, MD 20889	WSSC
21	Naval Support Facility Carderock	9500 MacArthur Blvd. West Bethesda, MD 20817	DC Water
22	Nixon Uniform Services, Inc.	11860 Old Baltimore Pike Beltsville, MD 20705	WSSC
23	Oaks Sanitary Landfill	6001 Olney-Laytonsville Road Laytonsville, MD 20706	WSSC
24	Pepsi Beverages Company	2611 Pepsi Place Cheverly, MD 20781	WSSC
25	Potomac Water Filtration Plant	12200 River Road Potomac, MD 20854	WSSC
26	Ritchie Rubble Landfill	2001 Ritchie Marlboro Road Upper Marlboro, MD 20774	WSSC
27	UniFirst Corporation	6201 Sheriff Road Landover, MD 20785	WSSC
28	United States Geological Survey	12201 Sunrise Valley Drive Reston, VA 20192	Fairfax County
29	WMATA Bladensburg Bus Division	2250/51 26th Street, NW Washington, DC 20018	DC Water
30	WMATA Brentwood Major Repair and Overhaul Yard (Rail Yard)	601 T Street, NE Washington, DC 20018	DC Water
31	WMATA Greenbelt (Rail Yard)	5801 Sunnyside Ave. Beltsville, MD 20705	WSSC
32	WMATA Northern Bus Division	4615 14th Street, NW Washington, DC 20011	DC Water
33	WMATA Shady Grove (Rail Yard)	15903 Somerville Dr. Rockville, MD 20855	WSSC
34	WMATA Shepherd Parkway Bus Division	2 DC Village, SW Washington, DC 20032	DC Water
35	WMATA Western Bus Division	5230 Wisconsin Ave, NW Washington, DC 20015	DC Water

Section I Attachment (continued)
Summary of Blue Plains AWTP Significant Industrial Users

Additions to the 2015 List of Industrial Users:

1. InnoScience, Inc. (WSSC) – new CIU permit effective October 3, 2016.
2. Potomac Water Filtration Plant (WSSC) – new SIU permit effective October 5, 2016.
3. Ritchie Rubble Landfill (WSSC) – modified SIU permit effective June 2, 2016, to allow for hauling more than 25,000 gpd to WSSC Septage Receiving Stations discharging to Blue Plains.

Deletions to the 2015 List of Industrial Users:

1. Engineering Design Manufacturing Services (Loudoun Water) –facility rerouted to a different sewershed on September 30, 2016, and no longer discharging to the Blue Plains Wastewater Treatment Plant.
2. Ostendo GaN Lab (WSSC) – permit inactivated as of March 1, 2016.

NOTE: The following WSSC industry was reclassified from SIU to CIU in 2016:

1. Adelphi Laboratory Center

Section II Attachment
Summary of Blue Plains AWTP Significant Industrial Users

Table 3. Summary of Categorical Industrial User Inspection and Monitoring Activities for 2016

#	Categorical Industrial User	Permit Issuance[1]	Permit Effective	Permit Expiration	No. of Inspections	No. of Sampling Events		
						by POTW	by IU	Required
1	Adelphi Laboratory Center	05/19/16	05/22/16	06/30/20	1 + 2 [1]	1 + 2* [1]	4 + 8* [1]	2 + 8 [1]
2	ATK Space Systems	06/20/16	06/21/16	06/20/20	2	1	8	8
3	Bethesda Art Metal Works	07/28/16	08/11/16	08/10/20	2	1	8	8
4	Bureau of Engraving and Printing	08/28/14	09/01/14	08/31/18	1	1	6*	6*
5	Eaton Corporation	06/27/16	06/28/16	06/27/20	2	2*	8	8
6	FlexEl	12/18/15	12/18/15	12/17/19	5	0 [2]	2 [2]	2 [2]
7	Human Genome (LSM)	01/10/15	01/10/15	01/09/19	1	1*	8*	8
8	Human Genome (SSM)	10/20/16	10/22/16	10/21/20	1	1*	8*	8
9	InnoScience, Inc.	10/03/16	10/03/16	10/02/20	2	1	2	2
10	Maryland Metal Plating & Polishing	06/09/16	06/12/16	06/11/20	2	1*	10	8
11	Mid-Atlantic Finishing, Inc.	05/22/16	05/22/16	05/21/20	2	1*	8	8
12	Precision Sheet Metal Supply	11/20/13	11/20/13	11/19/18	1	1	2*	2*
13	Sanofi Pasteur Biologics, Co.	10/03/16	10/03/16	10/02/20	2	2	2 [3]	8
14	United Therapeutics Corp.	09/30/15	09/30/15	09/29/19	2	2* - 001 1 - 002	8* – 001 6 - 002	8 8
15	University of MD/DOD Physical Sciences Lab	06/23/16	06/27/16	06/26/20	2	2*	6	8
16	ViaSystems (TTM)	12/01/15	11/01/15	10/31/20	1	1	12	12

*Additional pH monitoring conducted.

(1) Additional inspections and monitoring conducted prior to permit renewal when classified as non-categorical SIU

(2) Industry changed to zero discharge CIU on 5/17/16.

(3) No process flows during 1st, 2nd, or 3rd Quarter. Sampled only in 4th Quarter for CY2016.

(4) Limited flow during 1st and 2nd Quarters, so outfall 002 only sampled one of two days during these quarters.

Section II Attachment (continued)
Summary of Blue Plains AWTP Significant Industrial Users

Table 4. Summary of Significant Non-categorical Industrial User Inspection and Monitoring Activities for 2016

#	Categorical Industrial User	Permit Issuance[1]	Permit Effective	Permit Expiration	No. of Inspections	No. of Sampling Events		
						by POTW	by IU	Required
1	Amtrak	06/28/12	07/01/15	06/30/19	1	1	2*	2*
2	Capitol Power Plant	09/25/15	10/01/15	09/30/19	1	1	2*	2*
3	Coca-Cola Refreshments	06/06/16	06/06/16	06/05/20	2	2*	8*	8
4	District Apartments Realty Holding Co., LLC	12/18/15	12/18/15	12/17/19	1	1	2	2
5	District Photo, Inc.	06/09/16	06/13/16	06/12/20	2	1*	8	8
6	Fairfax Water	12/12/12	01/01/13	12/31/17	1	2	C [2]	C [2]
7	Fort Detrick-Forest Glen Annex	09/22/16	09/22/16	09/21/20	2	2*	8	8
8	GSA Central Heating and Refrigeration Plant	06/10/16	06/12/16	06/11/20	1	1	2*	2*
9	George Bush Center for Intelligence	12/28/16	01/01/17	06/30/17	1	2	0 [3]	0 [3]
10	Greenpenz, 2600 Virginia Ave LLC	11/05/14	11/22/14	11/21/18	1	1	2	2
11	Huntsman P&A Americas	06/28/16	06/28/16	06/27/20	2	2*	8	8
12	Marva Maid of Landover	07/26/16	07/28/16	07/27/20	2	2*	8*	8
13	MedImmune, Inc.	02/01/16	02/04/16	02/03/20	2	2*	9*	8
14	Metropolitan Washington Airports Authority – Dulles	11/05/15	12/01/15	11/30/19	1	1	4+23 [4]	4+23 [4]

Section II Attachment (continued)
Summary of Blue Plains AWTP Significant Industrial Users

Table 4. Summary of Significant Non-categorical Industrial User Inspection and Monitoring Activities for 2016 (continued)

#	Categorical Industrial User	Permit Issuance	Permit Effective	Permit Expiration	No. of Inspections	No. of Sampling Events		
						by POTW	by IU	Required
15	National Archives and Records Administration	10/11/16	10/11/16	10/10/20	2	2*	14	8
16	National Institute of Standards & Technology	05/26/16	06/01/16	05/31/20	1	1*	10	8
17	National Institutes of Health	06/02/16	06/06/16	06/05/20	2	2*	8	8
18	National Institutes of Health – (NIAID/Fishers Lane)	05/19/13	05/19/13	05/18/17	1	2*	8	8
19	Naval Research Laboratory	09/09/16	09/11/16	09/10/20	1	1	2	2
20	Naval Support Activity Bethesda	08/29/16	08/31/16	08/30/20	2	1*	8	8
21	Naval Support Facility Carderock	04/27/16	04/27/16	03/14/20	1	1	2	2
22	Nixon Uniform Services, Inc.	06/27/16	06/28/16	06/27/20	2	1*	8	8
23	Oaks Sanitary Landfill	08/29/16	08/31/16	08/30/20	2	1	12	12
24	Pepsi Beverages Co.	06/20/16	06/22/16	06/21/20	2	1*	8	8
25	Potomac Water Filtration Plant	09/08/16	10/05/16	10/04/20	2	1*	2	2
26	Ritchie Rubble Landfill	02/08/13	02/08/13	02/07/17	2	2	8	8
27	UniFirst Corporation	05/26/16	05/30/16	05/29/20	4	1*	12	8
28	United States Geological Survey	12/18/12	01/01/13	12/31/17	1	2	0 [3]	0 [3]
29	WMATA Bladensburg Bus Division	11/15/16	12/02/16	12/01/20	1	1	2	2
30	WMATA Brentwood MROY	07/08/16	07/22/16	07/21/20	1	1	2	2

Section II Attachment (continued)
Summary of Blue Plains AWTP Significant Industrial Users

Table 4. Summary of Significant Non-categorical Industrial User Inspection and Monitoring Activities for 2016 (continued)

#	Categorical Industrial User	Permit Issuance	Permit Effective	Permit Expiration	No. of Inspections	No. of Sampling Events		
						by POTW	by IU	Required
31	WMATA Greenbelt Yard	09/04/15	09/04/15	09/03/19	2	2*	8	8
32	WMATA Northern Bus Div	06/19/14	06/25/14	06/24/17	1	1	2	2
33	WMATA Shady Grove Yard	03/23/14	03/23/14	03/22/18	1	1*	8	8
34	WMATA Shepherd Parkway Bus Division	09/25/15	09/30/15	09/29/19	1	1	2	2
35	WMATA Western Bus Div	03/10/14	03/15/14	03/14/17	1	1	2	2

* Additional pH monitoring conducted.
(1) Original permit issuance dates.
(2) C = Continuous monitoring for pH only.
(3) Fairfax County conducts all sampling for this IU and does not require self-monitoring.
(4) MWAA Dulles Airport is required to conduct daily monitoring on the glycol discharge. Discharged 23 times during 2016.

Table 5. Summary of Inspection and Monitoring Activities for Users No Longer Permitted to Discharge to Blue Plains as of December 31, 2016

#	Industrial User	Permit Issuance	Permit Effective	Permit Expiration	No. of Inspections	No. of Sampling Events		
						by POTW	by IU	Required
1	Engineering Design Manufacturing Services (EDMS) (Loudoun Water)	10/18/16	11/01/16	10/31/21	1	1	12	12
2	Ostendo GaN Lab (WSSC)	10/24/13	10/24/13	10/23/17	1	0	0	2

Section II Attachment (continued)
Summary of Blue Plains AWTP Significant Industrial Users

List of SIUs Covered by a General Control Mechanism

Not Applicable

List of CIUs Assigned Mass-Based Limits in place of Concentration-Based Limits

None

List of CIUs With Waivers for Categorically Regulated Pollutants

None

List of Facilities Not Inspected During 2016:

None

List of Facilities Not Sampled by POTW During 2016:

1. FlexEl, LLC (WSSC) – CIU became zero discharger on May 17, 2016, prior to WSSC having an opportunity to collect samples.

List of Facilities Submitting Less Than the Required Number of Self-Monitoring Reports:

1. Sanofi Pasteur Biologics Co. (WSSC) – no process flow in 1st, 2nd, or 3rd quarters in 2016. Could only collect 4th quarter sample.
2. United Therapeutics, Corp. (WSSC) – Limited process flow during 1st and 2nd quarters 2016 for outfall 002 only. Collected 1 of 2 days self-monitoring during these quarters.
3. University of MD/DOD (WSSC) - no process flow 2nd quarter 2016.

Notes: (1) George Bush Center for Intelligence and the US Geological Survey are not required to submit self-monitoring reports since all sampling for these SIUs is conducted by Fairfax County.

(2) All self-monitoring reports received by DC Water through 1/18/17 were counted as received in 2016.

Section III Attachment
Summary of Blue Plains AWTP Significant Industrial Users

Table 6. List of SIUs in SNC During 2016

Industrial User	Reason for SNC	Evaluation Period	Actions Planned or Taken	Status
Coca-Cola Bottling Company Consolidated (WSSC)	Failure to monitor pH	Apr – Sept 2016	Notice of Violation, Publication, Additional Monitoring	Pending SIU data submittal
FlexEl, LLC	Technical Review Criteria and Chronic violations for daily and monthly Hg, Zn, and Mn	Jan – Jun 2016	Notice of Violation, Compliance Directive, Publication	In compliance*
National Archives and Records Administration	Failure to resample TTOs	Apr – Sept 2016	Notice of Violation, Publication, Additional Monitoring	Pending SIU data submittal

*Reclassified as a Zero discharger CIU as of 5/17/16

List of Facilities in SNC for 2016 that were also in SNC for 2015:

None

List of Users Previously Designated as Non-significant CIUs that have Violated a Pretreatment Standard or Requirement During 2016:

Not applicable

Newspaper Listing of SIUs in SNC During 2016:

WSSC will provide their newspaper listing of SIUs in SNC no later than June 30, 2017.

Section IV Attachment
Summary of Blue Plains AWTP Significant Industrial Users

Table 7. List of SIUs Receiving Written Notices of Violation in 2016

Categorical Significant Industrial User	**Number of Written Notices Issued**
Adelphi Laboratory Center (WSSC)	1
EDMS* (Loudoun Water)	4
Bethesda Art Metal Works (WSSC)	1
FlexEl, LLC (WSSC)	2
Human Genome - SSM (WSSC)	1
Precision Sheet Metal (Fairfax County)	2
University of MD/DOD (WSSC)	1
Non-Categorical Significant Industrial User	**Number of Written Notices Issued**
Amtrak	1
Capitol Power Plant (DC Water)	3
Coca-Cola Bottling Company Consolidated (WSSC)	1
MedImmune, Inc. (WSSC)	1
National Archives and Records Administration (WSSC)	4
Nixon Uniform Services (WSSC)	1
Unifirst Corporation (WSSC)	6
United Therapeutics Corporation (WSSC)	1

*EDMS no longer discharging to the Blue Plains Service Area as of September 29, 2016.

Section IV Attachment (continued)
Summary of Blue Plains AWTP Significant Industrial Users

Table 8. List of SIUs Receiving Administrative Orders/Enforceable Compliance Schedules in 2016 and First Quarter 2017 (if violation occurred in 2016):

Significant Industrial User	Date Issued	Type of Schedule	Reason	FCD	Status	By FCD ?
FlexEl, LLC (WSSC)	05/09/16	Directive	Corrective Measures	05/31/16	Compliance	NA
Fort Detrick-Forest Glen Annex (WSSC)	06/30/16	Directive	Submit Application for renewal	07/05/16	Compliance	NA
Fort Detrick-Forest Glen Annex (WSSC)	10/20/16	Directive	Submit Application Bldg 501	11/10/16	FCD Extended	NA
Fort Detrick-Forest Glen Annex (WSSC)	11/23/16	Directive	Submit Application Bldg 501 ext	12/15/16	Compliance	NA
Human Genome SSM (WSSC)	02/04/16	Directive	Corrective Measures	02/22/16	Compliance	NA
InnoScience, Inc. (WSSC)	05/11/16	Directive	Install IWMP	05/31/16	NA	NA
InnoScience, Inc. (WSSC)	06/16/16	Directive	Submit Information, Supersede 05/11/16 Dir.	06/28/16	Compliance	NA
InnoScience, Inc. (WSSC)	08/08/16	Directive	Submit Information	**02/16/17**	Interim	Yes
InnoScience, Inc. (WSSC)	08/09/16	Directive	Corrective Measures	08/16/16	Compliance	NA
MedImmune, Inc. (WSSC)	03/14/16	Directive	Corrective Measures	04/01/16	Compliance	NA
National Archives and Records Administration	03/07/16	Directive	Corrective Measures	03/21/16	Compliance	NA
Nixon Uniform Services, Inc. (WSSC)	12/05/16	Directive	Corrective Measures	12/09/16	Compliance	NA
Unifirst Corporation (WSSC)	02/03/16	Directive	Corrective Measures	02/22/16	Compliance	NA
Unifirst Corporation (WSSC)	09/20/16	Directive	Corrective Measures	10/10/16	Compliance	NA
Unifirst Corporation (WSSC)	11/15/16	Directive	Corrective Measures	12/05/16	Compliance	NA

Section IV Attachment (continued)
Summary of Blue Plains AWTP Significant Industrial Users

List of SIUs on compliance schedules that are in writing but not considered "formal":

None

List of SIUs Sued in 2016:

None

Table 9. List of SIUs Assessed/Collected Penalties in 2016:

#	Significant Industrial User	Amount Assessed	Amount Collected	Reason	Assessed in Previous Years?
1	Unifirst Corporation (WSSC)	$250	$250	pH Max	No

Description of all Actions Included as Administrative Orders:

None

Description of "Other Actions":

1. The Town of Herndon issued a verbal Notice of Violation on October 18, 2016, to Precision Sheet Metal for a PCB violation, but followed up with a written NOV.

Note: Other actions listed by Fairfax County on their annual report pertained to permitted waste haulers, not CIUs or SNIUs, and therefore were not included in this list.

List of SIUs with SNC Violations Not Subject to Enforcement:

None

PART B
PRETREATMENT DEVELOPMENTS

I. Summary of POTW Operations

1. There were no NPDES permit violations in 2016 at the Blue Plains Advanced Wastewater Treatment Plant (AWTP). Furthermore, there were no instances of major problems (e.g., corrosion, fire or explosive hazards, sewer blockages) in the collection system that may have been attributable to industrial wastes.

2. As required by the NPDES permit, plant influent, effluent, and biosolids data for all local limit parameters are submitted to EPA Region III on a quarterly basis with the Discharge Monitoring Reports (DMRs) by the 28th day of the following month. Additionally, a complete priority pollutant scan is conducted annually on the influent and biosolids. The 2016 influent, effluent, and biosolids concentrations for the local limit pollutants are provided in a summary table in Attachment 6. The annual priority pollutant scans and additional toxics data collected, but not documented in the summary table, are also provided in Attachment 6.

   Influent values are calculated based on an estimated flow-weighted average of three contributing waste streams and are reported as "<" if at least one of the individual waste streams was non-detect (below the MDL/RDL or method/2reporting detection limit) for that parameter. Influent goals are based on EPA Region III's evaluation of DC Water's local limits published in the DC Register on September 10, 2010. Influent goals were consistently met in 2016, and influent pollutant concentrations have remained fairly consistent with minor fluctuations.

3. DC Water currently accepts hauled waste from domestic, commercial, and pre-approved industrial sources at the headworks to the Blue Plains AWTP. Additional hauled waste is received at designated septage receiving stations from WSSC, Fairfax County, and Loudoun Water. Table B-1 summarizes the hauled waste contributions to the Blue Plains AWTP. Loudoun Water periodically uses the backup septage receiving station that discharges to the Potomac Interceptor (and ultimately to the Blue Plains AWTP) when their main septage receiving facility is down. No brine wastes (oil and gas drilling wastes) are accepted at any of the designated septage receiving stations.

   All jurisdictions require waste hauler permits, although in Fairfax County, the permit is issued by the Health Department. As of December 31, 2016, DC Water had 33 permitted waste haulers, WSSC had 24 permitted waste haulers (excluding buses, RV's, and zero discharge haulers), Fairfax County had 47 permitted waste haulers, and Loudoun Water had 15 permitted waste haulers. DC Water permits require manifest forms, documenting the source and volume of each load, be submitted prior to receiving access to the facility to discharge. WSSC, Fairfax County, and Loudoun Water all require manifest forms at the designated septage receiving stations discharging to the Blue Plains AWTP.

PART B (Continued)
PRETREATMENT DEVELOPMENTS

I. Summary of POTW Operations (Continued)

Table B-1. Summary of Hauled Waste Discharged to the Blue Plains AWTP

Jurisdiction	Discharge Site	Sources of Wastewater*	Estimated Volume/Yr.	Controls on Users
DC Water	Blue Plains AWTP	Domestic and commercial and non-wastewater	19.6M gal/yr	Manned site, permits, manifests, random sampling
WSSC	Muddy Branch	Domestic and commercial	5.9M gal/yr (grease waste) 3.9M gal/yr (septic waste)	Permits, manifests, restricted hours, surveillance cameras, fines, random sampling
WSSC	Muddy Branch	IU - Dickerson Generating Station (domestic sewage sludge)	11,500 gal/year	Contract, self-monitoring
WSSC	Muddy Branch or Tanglewood	SIU – Ritchie Rubble Landfill (leachate)	Avg 40,859 gpd 80,000 gpd max	SIU Permit, self-monitoring
WSSC	Tanglewood	Domestic Septage	174,205 gal/yr	Permits, manifests, restricted hours, surveillance cameras, fines
WSSC	Montgomery Co. Solid Waste Disposal Site	SIU - Oaks Sanitary Landfill (leachate), also includes water from catch basin cleaning in the county	Avg 23,602 gpd 80,000 gpd max	SIU permit, self-monitoring
Fairfax Co.	Colvin Run	Domestic and commercial (54% septage, 10% portable toilets, 22% grease trap waste, 9% commercial septage, 1% car wash, and 4% others)	3.12M gallons/yr (Jan-June 2016)	Permits (Health Dept), restricted access, random sampling, manifests, surveillance camera
Loudoun Water	Manhole S-17	Domestic septage	30,600 gal – discharged in 4th qtr 2016 only	Permits, manifests, restricted access, surveillance camera, random sampling

*Domestic sources of hauled wastewater are primarily septic holding tanks and portable toilets. The majority of commercial wastewater is from grease traps. Other commercial sources of hauled wastewater are from building sumps/sewage ejector pits and car wash interceptors. Industrial waste is from treatment plant sludge and landfill leachate. Non-wastewater sources include groundwater and storm runoff.

PART B (Continued)
PRETREATMENT DEVELOPMENTS

I. Summary of POTW Operations (Continued)

3. In 2016, the Blue Plains AWTP Septage Receiving Facility received on average 1,634,199 gallons of hauled waste or 718 loads per month. Random sampling is conducted by DC Water typically twice a month and waste is analyzed for pH, oil and grease, total metals, PCBs, and conventional pollutants. Trucked waste must meet local limits. Seventeen notices of violation (NOVs) were issued to haulers in 2016 for exceedances of local limits, typically for pH, copper, zinc, and/or total petroleum hydrocarbons. On one occasion, violations for lead and mercury were also detected. One two occasions, PCBs were detected below the reporting limit. Resampling of the truck and/or source is required for any PCB detections or high level metals (>10x the limit). Typical corrective action is to increase the frequency of the pump-out for the customer with elevated metals concentrations. If a source is identified in violation more than once, then it is banned for disposal at the Blue Plains AWTP, until the user can demonstrate compliance through self-monitoring of the waste. No hauled waste violations have resulted in plant upset or interference. Fairfax County also issued five NOVs to haulers for discharging waste generated outside Fairfax County or other infractions.

   Many of the SIUs within the District have waste hauled off-site for disposal. Table B-2 summarizes the information updated during the 2016 inspections. Recycled wastes including used oil, fryer oil, and silver recovery waste are not included in this table.

II. Pretreatment Program Changes

Staffing, Funding, and Local Limits

There were no significant changes in staffing and funding for the District or contributing user jurisdiction pretreatment programs in 2016. Some minor staffing changes occurred in the jurisdiction pretreatment programs and DC Water obtained some part-time temporary assistance. There were no changes to the local limits approved by EPA Region III on May 25, 2010 and adopted by DC Water in a Final Rulemaking published on September 10, 2010.

III. Miscellaneous Developments

Control of Batch Discharges During Wet Weather

As part of the Combined Sewer Overflow (CSO) Nine Minimum Controls, DC Water is required by NPDES permit to 1) use pretreatment regulations to control any industrial discharges that may be identified as impacting CSOs and 2) to require permitted SIUs discharging directly to the CSS to establish management practices to control batch discharges during wet weather conditions whenever possible.

Table B-2. Summary of Hauled Waste from SIUs in the District

Type of Hauled Waste	Description of Operations	Name(s) of Facilities Used by SIUs for Waste Disposal and Disposal Location (if known)
Oily wastewater/ pretreatment sludge and other non-hazardous waste	Maintenance cleaning activities, treatment residuals, printing	Atlantic Wastewater Solutions (Fairfax, VA) Clean Harbors (Baltimore, MD/Reidsville, NC) Clean Ventures (Cycle Chem/Lewisbury, PA) FCC/ Heritage Environmental (Alexandria, VA) IMS (Norfolk, VA) Onsite Environmental Pollution Control Industries Safety Kleen (Manassas, VA) Sphinx (Spirit Services in Williamsport, MD) Tradebe (E. Chicago, IN) Triumvirate Environmental
Grease trap waste	Treatment residuals	Action Tank and Drain (Fairfax, VA) Adams Liming and Septic Tank (Fairfax, VA) Beltway Biodiesel Burns Septic (WSSC) H&R Environmental Clean Harbors (Baltimore, MD) Magnolia Plumbing (WSSC and Blue Plains)
Spent car wash reclaim	Vehicle cleaning activities	Adams Liming and Septic Tank (Fairfax, VA) Capitol Tank and Drain LNT Enterprises Onsite Environmental Safety Kleen (Manassas, VA)
Hazardous waste	Cleaning, lab waste, solvent use, treatment residuals, etc.	Clean Harbors (Baltimore MD/Reidsville, NC) Clean Ventures (Cycle Chem/Lewisbury, PA) EMSI (Env Enterprises/Cincinnati, OH) Tradebe (E. Chicago, IN)

III. Miscellaneous Developments

Control of Batch Discharges During Wet Weather (continued)

As of December 31, 2016, there are six (6) SIUs that currently discharge directly to the combined sewer system. A list of these facilities is provided in Table B-3. Each facility has a permit requirement to prepare an annual report identifying all batch discharges to the combined sewer system, with the exception of the Watergate Hotel, currently permitted as Greenpenz, 2600 Virginia Ave., LLC, and District Apartments Realty Holding Company, LLC, which are only permitted for their groundwater remediation systems and have a continuous operation. These annual reports were due March 31, 2016. Following DC Water review, it was determined that all SIU discharges were either continuous or intermittent and that none of these discharges met the definition of a batch discharge. Some facilities have voluntarily developed management practices to minimize intermittent discharges during wet weather, but DC Water is not requiring development of management practices to control intermittent discharges at this time, since no pollutants of concern in combined sewer overflows have been attributed to these discharges.

PART B (Continued)
PRETREATMENT DEVELOPMENTS

Table B-3. Significant Industrial Users Discharging Directly to Combined Sewers

#	Permit No.	Industrial User	Facility Address	Batch/Intermittent Discharges
1	011	Amtrak (including High Speed Rail facility)	1401 W Street, NE Washington, DC 20018	Train Wash
2	022	Capitol Power Plant	N. Jersey Ave & E St., SE Washington, DC 20003	None
3	057	District Apartments Realty Holding Co., LLC	1401 S St., NW Washington, DC 20009	None (no report required treated groundwater only)
4	039	Greenpenz	2500 Virginia Ave., NW Washington, DC 20037	None (no report required treated groundwater only)
5	053	WMATA Brentwood Yard	601 T Street, NE Washington, DC 20018	Steam Cleaning
6	005	WMATA Northern Garage	4615 14th Street, NW Washington, DC 20011	Steam Cleaning/Bus Wash

WMATA = Washington Metropolitan Area Transit Authority

III. Miscellaneous Developments (continued)

Pollution Prevention

DC Water has incorporated pollution prevention (P2) surveys into the routine annual inspections of SIUs. P2 surveys are conducted every two years and significant P2 accomplishments or deficiencies may be noted annually in the inspection report. These surveys were conducted in 2016. DC Water's public education efforts to reduce influent mercury concentrations include posting educational content on our website, permitting hospitals in the area (as Non-Significant Industrial Users), and promoting mercury amalgam Best Management Practices (BMPs) for dental facilities.

WSSC continued to promote and dedicate resources to a number of pollution prevention initiatives in 2016 including the following:

- Recommendation of amalgam separators and BMPs for dental facilities; and
- Continuation of the annual Pollution Prevention Award program (awarded to Eaton Corporation in June 2016).

PART B (Continued)
PRETREATMENT DEVELOPMENTS

III. Miscellaneous Developments (continued)

Industrial User Survey

DC Water is actively surveying, sampling, and/or inspecting non-permitted commercial/ industrial users to determine whether facilities should be permitted and assist them in conforming to the District of Columbia municipal regulations on wastewater discharges. DC Water has developed a network of contacts at other agencies in the District of Columbia to obtain information on potential violators including the District Department of Public Works, the Mayor's Neighborhood Service Coordinators, and the District Department of Energy & Environment Hazardous Waste and Water Quality Divisions. In addition, DC Water periodically reviews queries of commercial and federal accounts for new connections and users that consume more than 25,000 gpd of water.

Temporary Discharge Authorizations

As of December 31, 2016, DC Water had 72 active Temporary Discharge Authorization (TDA) permits for discharges to the sanitary or combined sewer system consisting primarily of construction dewatering, façade cleaning, and other miscellaneous discharges. The maximum permit term is two years. Most of these permits require periodic self-monitoring, depending on flow and the characteristics of the wastewater discharge.

IV. Signatory Requirements

The Assistant General Manager (AGM) of Wastewater Treatment has signed Part A of this report. This individual is directly responsible for wastewater treatment plant operations and has been authorized to sign the report by the General Manager (written authorization letter to EPA Region III dated January 27, 2016, previously submitted).

Attachment 1

Part A with attachments for Significant Industrial Users (SIUs) in the District of Columbia

PART A
PRETREATMENT PERFORMANCE SUMMARY*

I. General Information

Control Authority Name	*DC Water and Sewer Authority*				
Address	*5000 Overlook Ave., SW*				
City	*Washington*	State	*DC*	Zip+4	*20032*
Contact Person	*Aklile Tesfaye*		Telephone No.	*202-787-4008*	
Contact Title	*AGM Blue Plains*		E-mail Address	*atesfaye@dcwater.com*	
NPDES No.	*DC 0021199*		Reporting Period	*01-01-16 to 12-31-16*	
Issuance Date	*08/31/10*		Expiration Date*	*09/30/15*	
Total CIUs	*1*		Total MTCIUs	*0*	
Total SNIUs	*13*		Total NSCIUs	*0*	

CIUs - Categorical Industrial Users *MTCIUs – Middle Tier Categorical Industrial Users*
SNIUs - Significant Noncategorical Industrial Users *NSCIUs – Nonsignificant Categorical Industrial Users*

II. Compliance Monitoring Program

1.	No. of SIUs with current Control Documents	14
2.	No. of SIU Facilities Inspected	14
3.	No. of SIU Facilities Sampled	14
4.	No. of SIUs Submitting Self-Monitoring Reports	14

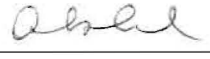
III. Significant Industrial User Compliance

1.	No. of SIUs Violating a Compliance Schedule / No. on a Schedule	0
2.	No. of SIUs in SNC for the July to December Period	0
3.	No. of SIUs in SNC At Any Time During the Calendar Year	0
4.	No. of SIUs in SNC That Were Also in SNC During the Previous Calendar Year	0
5.	No. of NSCIUs that violated any standards or requirements	0

IV. Enforcement Actions

1.	Notices/Letters of Violation Issued to SIUs	4
2.	Enforceable Compliance Schedules Issued to SIUs	0
3.	Civil/Criminal Suits Filed	0
4.	No. of SIUs from which Penalties have been Collected	0
5.	Other Actions (sewer bans, etc.)	0

I certify that the information contained in this report and attachments is complete and accurate to the best of my knowledge (see Part B.V of the instructions).

Aklile Tesfaye	Assistant General Manager, Blue Plains
Name of Authorized Representative (Print)	Title (Print)
	3/27/17
Signature of Authorized Representative	Date

*New NPDES permit has not been issued as of 12/31/16.

Section I Attachment
District of Columbia Significant Industrial Users

Table 1. List of Categorical Industrial Users with DC Water Permits as of December 31, 2016

#	Permit No.	Industrial User	Category	Facility Address
1	017-10	Bureau of Engraving and Printing	PSNS 433 metal finishing	14th and C Streets, SW Washington, DC 20228

Table 2. List of Significant Non-categorical Industrial Users with DC Water Permits as of December 31, 2016

#	Permit No.	Industrial User	Facility Address
1	011-9	Amtrak	1401 W St., NE, Washington, DC 20018
2	022-10	Capitol Power Plant	25 E St., SE, Washington, DC 20003
3	057-1	District Apartments Realty Holding Company, LLC	1401 S St., NW, Washington, DC 20009
4	019-10	GSA Central Heating and Refrigeration Plant	13th and C Streets, SW, Washington, DC 20407
5	039-1	Greenpenz, 2600 Virginia Ave., LLC	2500 Virginia Ave., NW, Washington, DC 20037
6	025-10	MWAA – Dulles International Airport	44701 Propeller Court, Dulles, VA 20166
7	002-9	Naval Research Laboratory	4555 Overlook Ave., SW, Washington, DC 20375-5320
8	028-10	Naval Support Facility Carderock	9500 MacArthur Blvd., West Bethesda, MD 20817
9	008-11	WMATA Bladensburg Bus Division	2250/51 26th St., NW, Washington, DC 20018
10	053-7	WMATA Brentwood Major Repair and Overhaul Yard (Rail Yard)	601 T St., NE, Washington, DC 20018
11	005-10 Rev 1	WMATA Northern Bus Division	4615 14th St., NW, Washington, DC 20011
12	006-10	WMATA Western Bus Division	5230 Wisconsin Ave, NW, Washington, DC 20015
13	055-1	WMATA Shepherd Parkway Bus Division	2 DC Village Lane, SW, Washington, DC 20032

GSA = General Services Administration
MWAA = Metropolitan Washington Airports Authority
WMATA = Washington Metropolitan Area Transit Authority

Section I Attachment (Continued)
District of Columbia Significant Industrial Users

Additions to the 2015 List of Industrial Users:

None

Deletions to the 2015 List of Industrial Users:

None

Section II Attachment
District of Columbia Significant Industrial Users

Table 3. Summary of Industrial User Inspection and Monitoring Activities for 2016

Permit No.	Industrial User	Permit Issuance	Permit Effective	Permit Expiration	Number of POTW Inspections	No. of Sampling Events		
						by POTW	by IU	Required
011-9	Amtrak	06/23/15	07/01/15	06/30/19	1	1	2*	2*
017-10	Bureau of Engraving and Printing	08/28/14	09/01/14	08/31/18	1	1	6*	6*
022-10	Capitol Power Plant	09/25/15	10/01/15	09/30/19	1	1	2*	2*
057-1	District Apartments Realty Holding Company, LLC	12/18/15	12/18/15	12/17/19	1	1	2	2
019-10	GSA Central Heating and Refrigeration Plant	06/10/16	06/12/16	06/11/20	1	1	2*	2*
039-1	Greenpenz, 2600 Va. Ave., LLC	11/05/14	11/22/14	11/21/18	1	1	2	2
025-10	MWAA - Dulles International Airport	11/05/15	12/01/15	11/30/19	1	1	4/ 23 (a)	4/ 23 (a)
002-9	Naval Research Laboratory	09/09/16	09/11/16	09/10/20	1	1	2	2
028-10	Naval Support Facility Carderock	04/27/16	04/27/16	03/14/20	1	1	2	2
008-11	WMATA Bladensburg Bus Div.	11/15/16	12/02/16	12/01/20	1	1	2	2
053-7	WMATA Brentwood Major Repair and Overhaul Yard	07/08/16	07/22/16	07/21/20	1	1	2	2
005-10 Rev 1	WMATA Northern Bus Div.	07/07/14	06/25/14	06/24/17	1	1	2	2
006-10	WMATA Western Bus Div.	03/10/14	03/15/14	03/14/17	1	1	2	2
055-1	WMATA Shepherd Parkway Bus Div.	09/25/15	09/30/15	09/29/19	1	1	2	2

(*) Includes daily pH monitoring when discharging.
(a) MWAA Dulles Airport is required to conduct daily monitoring on the glycol discharge. Discharged 23 times during 2016.

Section II Attachment (Continued)
District of Columbia Significant Industrial Users

List of SIUs Covered by a General Control Mechanism

Not Applicable

List of CIUs Assigned Mass-Based Limits in place of Concentration-Based Limits

None

List of CIUs With Waivers for Categorically Regulated Pollutants

None

List of Facilities Not Inspected During 2016

None

List of Facilities Not Sampled by POTW During 2016

None

List of Facilities Submitting Less Than the Required Number of Self-Monitoring Reports and Reason:

None

Note: All self-monitoring reports received by DC Water by 1/18/17 were counted as received in 2016.

Section II Attachment (Continued)
District of Columbia Significant Industrial Users

List of SIUs Covered by a General Control Mechanism

Not Applicable

List of CIUs Assigned Mass-Based Limits in place of Concentration-Based Limits

None

List of CIUs With Waivers for Categorically Regulated Pollutants

None

List of Facilities Not Inspected During 2016

None

List of Facilities Not Sampled by POTW During 2016

None

List of Facilities Submitting Less Than the Required Number of Self-Monitoring Reports and Reason:

None

Note: All self-monitoring reports received by DC Water by 1/14/17 were counted as received in 2016.

Section III Attachment
District of Columbia Significant Industrial Users

List of SIUs in SNC During 2016:

None

List of SIUs in SNC for 2016 that were also in SNC for 2015:

Not applicable

List of Users Previously Designated as Non-significant CIUs that have Violated a Pretreatment Standard or Requirement During 2016:

Not applicable

Newspaper Listing of SIUs in SNC During 2016:

Not applicable

Section IV Attachment
District of Columbia Significant Industrial Users

Table 4. List of SIUs Receiving Written Notices of Violation in 2016

Significant Industrial User	Number of Written Notices Issued
Amtrak	1
Capitol Power Plant	3

List of SIUs Receiving Administrative Orders/Enforceable Compliance Schedules in 2016 and First Quarter 2017 (if violation occurred in 2016):

None

List of SIUs on Compliance Schedules in writing but not considered Formal:

None

List of SIUs Sued in 2016:

None

List of SIUs Assessed Penalties in 2016:

None

Description of all Actions Included as Administrative Orders:

None

Description of "Other Actions":

None

List of SIUs with SNC Violations Not Subject to Enforcement:

None

Attachment 2

Parts A and B with attachments for Washington Suburban Sanitary Commission (WSSC) SIUs discharging to Blue Plains

PART A
PRETREATMENT PERFORMANCE SUMMARY*

I General Information

Control Authority Name	*Washington Suburban Sanitary Commission*				
Address	*14501 Sweitzer Lane*				
City	*Laurel*	State	*Maryland*	Zip+4	*20707-5901*
Contact Person	*I-Hsin McConnell*		Telephone No.	*301-206-8597*	
Contact Title	*Unit Coordinator*		E-mail Address	*I-Hsin.McConnell@wsscwater.com*	
NPDES No.	*DC 0021199*		Reporting Period	*01-01-16 to 12-31-16*	
Issuance Date	*08/31/10*		Expiration Date*	*09/30/15*	
Total CIUs	*13*		Total MTCIUs	*NA*	
Total SNIUs	*19*		Total NSCIUs	*NA*	

CIUs - Categorical Industrial Users *MTCIUs – Middle Tier Categorical Industrial Users*
SNIUs - Significant Noncategorical Industrial Users *NSCIUs – Nonsignificant Categorical Industrial Users*

II. Compliance Monitoring Program

1.	No. of SIUs with current Control Documents	32
2.	No. of SIU Facilities Inspected	32
3.	No. of SIU Facilities Sampled	31*
4.	No. of SIUs Submitting Self-Monitoring Reports	32

*See attachment E

III. Significant Industrial User Compliance

1.	No. of SIUs Violating a Compliance Schedule / No. on a Schedule	0/1
2.	No. of SIUs in SNC for the July to December Period	0
3.	No. of SIUs in SNC At Any Time During the Calendar Year	3
4.	No. of SIUs in SNC That Were Also in SNC During the Previous Calendar Year	0
5.	No. of NSCIUs that violated any standards or requirements	NA

IV. Enforcement Actions

1.	Notices/Letters of Violation Issued to SIUs	20
2.	Enforceable Compliance Schedules Issued to SIUs	15
3.	Civil/Criminal Suits Filed	0
4.	No. of SIUs from which Penalties have been Collected	1
5.	Other Actions (sewer bans, etc.)	0

I certify that the information contained in this report and attachments is complete and accurate to the best of my knowledge (see Part B.V of the instructions).

I-HSIN MCCONNELL — Name of Authorized Representative (Print)

DC UNIT COORDINATOR — Title (Print)

I-Hsin McConnell — Signature of Authorized Representative

3/21/17 (immediate) — Date

*New NPDES permit has not been issued as of 12/31/16

PART A
PRETREATMENT PERFORMANCE SUMMARY*

I. General Information

Control Authority Name	*Washington Suburban Sanitary Commission*				
Address	*14501 Sweitzer Lane*				
City	*Laurel*	State	*Maryland*	Zip+4	*20707-5901*
Contact Person	*I-Hsin McConnell*		Telephone No.	*301-206-8597*	
Contact Title	*Unit Coordinator*		E-mail Address	*I-Hsin.McConnell@wsscwater.com*	
NPDES No.	*DC 0021199*		Reporting Period	*01-01-16 to 12-31-16*	
Issuance Date	*08/31/10*		Expiration Date*	*09/30/15*	
Total CIUs	*13*		Total MTCIUs	*NA*	
Total SNIUs	*19*		Total NSCIUs	*NA*	

CIUs - Categorical Industrial Users *MTCIUs – Middle Tier Categorical Industrial Users*
SNIUs - Significant Noncategorical Industrial Users *NSCIUs – Nonsignificant Categorical Industrial Users*

II. Compliance Monitoring Program

1.	No. of SIUs with current Control Documents	32
2.	No. of SIU Facilities Inspected	32
3.	No. of SIU Facilities Sampled	31*
4.	No. of SIUs Submitting Self-Monitoring Reports *See attachment E	32

III. Significant Industrial User Compliance

1.	No. of SIUs Violating a Compliance Schedule / No. on a Schedule	0/1
2.	No. of SIUs in SNC for the July to December Period	0
3.	No. of SIUs in SNC At Any Time During the Calendar Year	3
4.	No. of SIUs in SNC That Were Also in SNC During the Previous Calendar Year	0
5.	No. of NSCIUs that violated any standards or requirements	NA

IV. Enforcement Actions

1.	Notices/Letters of Violation Issued to SIUs	20
2.	Enforceable Compliance Schedules Issued to SIUs	15
3.	Civil/Criminal Suits Filed	1
4.	No. of SIUs from which Penalties have been Collected	1
5.	Other Actions (sewer bans, etc.)	0

I certify that the information contained in this report and attachments is complete and accurate to the best of my knowledge (see Part B.V of the instructions).

I-HSIN MCCONNELL — Name of Authorized Representative (Print)

IDC UNIT COORDINATOR — Title (Print)

I-Hsin McConnell — Signature of Authorized Representative

3/15/2017 — Date

*New NPDES permit has not been issued as of 12/31/16.

PART B
PRETREATMENT DEVELOPMENTS

I. Summary of Trucked Wastes

There are two waste hauler disposal sites located within the Washington Suburban Sanitary Commission (WSSC or Commission) that discharge to Blue Plains WWTP: Muddy Branch Disposal Site located in Montgomery County, MD and Tanglewood Disposal Site located in Prince George's County, MD. Of these two sites, only the Muddy Branch disposal site has been designated to accept fats, oil and grease (FOG) wastewaters. The Commission continues to use the surveillance cameras at each site and the cameras are in operation twenty-four hours per day. WSSC Investigators are able to connect to the cameras while at their desk to monitor the sites and download surveillance images. WSSC will issue enforcement actions as outlined in WSSC's enforcement response plan to violators of WSSC's waste hauler permit conditions. In addition, WSSC will notify the waste hauler community by email, when there are urgent matters such as the shutdown of a disposal site.

In April 2016, WSSC completed the repairs to the Muddy Branch disposal site. The repairs were made because of severe deterioration for one of the disposal points identified in July 2015.

WSSC continues to implement a manifest program, first implemented in 2013, to quantify the amount of septage and grease that is being discharged at its sites. In addition, WSSC prohibits the discharge of septage and grease from counties located outside of the Blue Plains Service area. The manifest program also assists WSSC in determining whether the hauled waste was generated within the Blue Plains Service area.

Table 1 (below) outlines the summary of the number septage and FOG events and total volumes discharged in 2016.

Table 1: 2016 Summary of Hauled Waste Discharged to DC Water

	Septage Waste		FOG Waste	
	Number of Events	Volume (gallons/year)	Number of Events	Volume (gallons/year)
Muddy Branch Disposal Site	2956	3,916,788	7343**	5,923.905
Tanglewood Disposal Site	133	174,205	Not applicable	Not applicable

** The volume discharged was not reported during 2 out of the 7343 events.

On February 19, 2016, DC Water amended the IMA requirement for WSSC to conduct random sampling of hauled waste at the Tanglewood disposal site. The amendment requires WSSC to conduct one random sample per year of a hauler at the disposal point. WSSC made every effort to conduct a random sample of hauled waste at the site and also tried to schedule a sampling event with haulers at the site in 2016. However, WSSC was not able to collect any hauled waste samples at the site. Below are all of the dates that WSSC attempted to conduct hauled waste samples at the site.

1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Date Attempted	Date Attempted	Date Attempted	Date Attempted
1/11/16	4/12/16	7/05/16	10/7/16
2/10/16	4/29/16	7/21/16	10/13/16
2/25/16	5/5/16	7/29/16	10/21/16
3/10/16	5/26/16	8/9/16	10/28/16
	6/6/16	8/19/16	11/2/16
	6/21/16	8/25/16	11/10/16
	6/24/16	9/1/16	11/18/16
		9/6/16	12/2/16
		9/8/16	12/9/16
		9/19/16	12/19/16
		9/29/16	12/23/16

Furthermore, since 2015, there has been a significant decrease in the number of hauled waste events at the site. In 2015 there were 211 disposal events, but in 2016 there were only 133 events, a 37 percent decrease. In addition to the decrease in events, the total volume of hauled waste discharged at the site also decreased from 407,045 gallons per year to 174,205 gallons (a decrease of 57 percent). WSSC will continue to document the attempts to collect a sample from a waste hauler in 2017.

WSSC collected random hauled waste samples at Muddy Branch on September 21, 2016. Because of the oversight of missing the January – June 2016 random hauled waste sample event, DC Water indicated that WSSC can conduct an additional hauled waste sample event by collecting random hauled waste samples during the period of January – June 2017 (per telephone conversation with Ms. Elaine Wilson on March 14, 2017). Therefore, WSSC will be conducting a total of 3 random hauled waste sample events at Muddy Branch in 2017. Two of these sample events will be conducted during the period of January - July 2017.

WSSC is continuing with its design phase on our new hauled waste disposal sites. WSSC has identified two disposal sites in Prince George's County and one disposal site in Montgomery County. One of the Prince George's County sites (Anacostia) and the Montgomery County (Rock Creek) site will discharge to the Blue Plains WWTP. WSSC has recently completed its review of the 100% plans and bid documents for these two sites. WSSC is also evaluating alternative methods for billing for hauled waste. Currently, waste haulers are billed an annual permit fee depending on the size of their vehicle. Each permitted hauler is then allowed to discharge unlimitedly for the duration of the permit. WSSC is considering implementing a pay per load debiting system for the future sites.

Oaks Sanitary Landfill, a significant industrial user (SIU), trucks its leachate for disposal to a designated manhole located at the Montgomery County's Shady Grove Processing Facility and Transfer Station located in Derwood, MD. This location discharges to Blue Plains WWTP. WSSC regulates the landfill by a Discharge Authorization Permit, which contains requirements for monitoring, reporting, and pretreating their waste. The amount of wastewater received on a monthly basis varies based on seasonal changes; however, the average amount is approximately 23,602 gallons per day (maximum daily volume discharged was 49,416gallons and the minimum daily volume discharged was 6,177 gallons), not to exceed 80,000 gallons per day of hauled leachate or discharge at a rate of 200 gallons per minute.

Ritchie Rubble Landfill (Ritchie Rubble), an SIU, started to hauled its leachate to either the Muddy Branch or the Tanglewood disposal site in June 2016. Previously, the facility hauled its leachate to WSSC's Ritchie Road disposal site and the facility's discharge was limited to a maximum daily volume of 30,000 gallons per day. The reasons for the change in disposal site was due to WSSC's rehabilitation of the sewer lines around the Ritchie Road disposal site and the facility's request to increase its total daily discharge volume from 30,000 to 70,000 gallons. The increased discharge volume is because of the discharges from Lagoon No. 2 at the facility. The rehabilitation project and the facility's request both occurred in March 2016. WSSC was unable to accommodate the facility's request because the rehabilitation project limited the sewer capacity around the Ritchie Road disposal site. WSSC obtained DC Water's approval to revise the facility's permit to authorize discharge at either the Muddy Branch or the Tanglewood disposal site in April 2016. WSSC issued the revised permit on June 2, 2016.

One nonsignificant industrial user, Dickerson Generating Station (NRG Energy, Inc.) trucks its sewerage sludge to the Muddy Branch disposal site. The Dickerson Generating Station operates a small wastewater treatment plant to treat the domestic wastewaters generated on site. DC Water has authorized Dickerson Generating Station to discharge the sewerage sludges from its wastewater treatment plant. Dickerson Generating Station is required to analyze and submit quarterly sludge results. In 2016, Dickerson Generating Station hauled a total of 11,500 gallons (Quarter 2016: 4,000 gallons, and 4th Quarter 2016: 7,500 gallons) of sewerage sludge to the Muddy Branch disposal site.

II. Pretreatment Program Changes

On April 11, 2016, WSSC hired a new Industrial Discharge Investigator, Jeffery Hillebrand. Mr. Hillebrand is assigned to primarily cover the Montgomery County service area.

WSSC is nearly completed with its local limits re-evaluation. WSSC has hired a consultant to perform a detailed headworks analysis on total toxic organic pollutants, fats, oil and grease, total dissolved solids, biochemical oxygen demand, chemical oxygen demand, and total suspended solids. WSSC has completed its preliminary headworks analysis for the remaining pollutants of concern.

III. Miscellaneous Developments

SIU Information

On March 1, 2016, WSSC inactivated Ostendo GaN Lab's (Ostendo's) Discharge Authorization Permit. Ostendo was a categorical industrial user (CIU) subject to 40 CFR part 469. The facility started its shut-down process in November 2015. WSSC verified the facility's complete shutdown on February 19, 2016.

On May 17, 2016, FlexEl, LLC (FlexEl) changed from a discharging CIU to a zero-discharging CIU. The main reason for the change in discharge practice is because of the high volume ratio between the mass of batteries produced to the volume of wastewater generated. Because FlexEl's batteries are very small and its production is low, the volume of wastewater generated caused the calculated categorical concentration limits (based on the categorical production-based limits) to be extremely low. In most cases, the calculated concentration limits were less the minimum detection level of current established analytical methods.

On May 22, 2016, WSSC added a second monitoring location at Adelphi Laboratory Center (Adelphi). In 2016, WSSC determined that Adelphi is a categorical industrial user because of its

metal finishing, battery manufacturing, and semi-conductor manufacturing processes. All of Adelphi's battery manufacturing wastewater is hauled off-site for disposal, so the only categorically regulated wastewaters are from the facility's metal finishing and semi-conduct manufacturing process. WSSC identified Outfall 001 as Adelphi's categorical end-of-process sampling point. This sampling point is in additional to the facility's local limit end-of-pipe sampling point, Outfall FAC.

On June 2, 2016, WSSC revised Ritchie Ruble Landfill's permit authorizing the facility to haul its leachate to either the Muddy Branch or Tanglewood disposal sites. Because of this change, this facility is now an SIU that discharges to DC Water.

On October 3, 2016, WSSC permitted Innoscience, Inc. as a new CIU subject to the semiconducting manufacturing federal limits.

On October 5, 2106, WSSC permitted Potomac Water Filtration Plant as a non-categorical SIU subject to local and DC Water limits.

Other Miscellaneous Information

On June 6, 2016, WSSC awarded Eaton Corporation of Beltsville, Maryland with the 8th Annual Pretreatment Recognition award. [Note: Eaton Corporation discharges to DC Water.] WSSC chose Eaton Corporation as recipient of the 2015 award based on the facility's consistent compliance, pollutant reductions, water conservation, and cost awareness programs. In addition, the IDC Unit publishes an annual Pretreatment Bulletin to keep our SIU community informed of important topics. This year's topics included information regarding the legislation banning microbeads, analytical report terms to know, permitting requirements, pH effects in wastewater, and how to avoid comment compliance report errors.

The IDC staff is Hazwoper certified and are required to take 12 additional safety classes related to the hazards of their job.

The WSSC follows the Office of National Drug Control Policy's guidelines for disposal of prescription drugs.

The WSSC recommends that dental offices use amalgam separators to remove mercury from their wastestream. WSSC previously developed Best Management Practices (BMPs) for dental facilities located in the Commission's service area.

LIST OF ATTACHMENTS For PART A

Attachment A	List of Categorical Industrial Users and Applicable Categories
Attachment B	List of Non-Categorical Significant Industrial Users
Attachment C	List of Significant Industrial User Control Documents
Attachment D	Compliance Monitoring, Inspection and Self-Monitoring Summary
Attachment E	List of Facilities not Inspected or Sampled and Submitting less than required self-monitoring events
Attachment F	List of Significant Industrial Users in SNC
Attachment G	List of Significant Industrial Users on Formal Compliance Schedules
Attachment H	Copy of Newspaper Listing of Significant Industrial Users in SNC During the Calendar Year
Attachment I	List of Significant Industrial Users Issued Notices of Violation
Attachment J	List of Significant Industrial Users Issued Administrative Orders and Industrial Users That Have Been Sued for Pretreatment Violations
Attachment K	List of Industrial Users Assessed Penalty
Attachment L	Description of all Actions Included in Administrative Orders and List of Significant Industrial Users That had SNC Violations but Were not Subject to Enforcement

BLUE PLAINS DISCHARGERS
CATEGORICAL INDUSTRIAL USERS
December 2016

INDUSTRY NAME & ADDRESS	CATEGORY	STANDARDS
Adelphi Laboratory Center[1] 2800 Powder Mill Road Adelphi, MD 20783	Metal Finishing Battery Manufacturing Semiconductor Manufacturing	PSNS 433.17; 469.18; 40 CFR Part 461 (no discharge)
ATK Space Systems 11313 Frederick Avenue Beltsville, MD 20705	Metal Finishing	PSNS 433.17; As, Cd, CN, Hg, Mo, Ni, O&G[2],PCB[3]; Cu, Pb, pH[4]
Bethesda Art Metal Works, Inc. 4955 Bethesda Avenue Bethesda, MD 20814	Electroplating	PSES 413 <10,000; As, Cd, CN, Hg, Mo, Ni, O&G[2], PCB, Zn[3]; Ag, Cr, Cu, Pb, pH, TTO[4]
Eaton Corporation 11642 Old Baltimore Pike Beltsville, MD 20705-1294	Metal Finishing	PSNS 433.17; As, Cd, CN, Hg, Mo, Ni, O&G[2], PCB[3]; Cu, Pb, pH[4]
FlexEl, LLC[5] 4505 Campus Drive[6] College Park, MD 20740	Battery Manufacturing Leclanche Subcategory	PSNS 461.45; As, Cd, CN, Hg, Mo, Ni, O&G[2], PCB, Zn[3]; Ag, Cr, Cu, Pb, pH, TTO[4]
Human Genome Sciences, Inc. (Large Scale Manufacturing) 9911 Belward Campus Drive Rockville, MD 20850	Pharmaceutical Manufacturing	PSNS 439.17; As, Cd, CN, Hg, Mo, Ni, O&G[2], PCB, Zn[3]; Ag, Cr, Cu, Pb, pH, TTO[4]
Human Genome Sciences, Inc. (Small Scale Manufacturing) 9910 Belward Campus Drive Rockville, MD 20850	Pharmaceutical Manufacturing	PSNS 439.17; As, Cd, CN, Hg, Mo, Ni, O&G[2], PCB, Zn[3]; Ag, Cr, Cu, Pb, pH, TTO[4]
InnoScience, Inc.[7] 15892 Gaither Drive, Suite A Gaithersburg, MD 20877	Semiconductor Manufacturing	PSNS 469.18; As, Cd, CN, Hg, Mo, Ni,O&G[2], PCB, Zn[3]; Ag, Cr, Cu, Pb, pH, TTO[4]
Maryland Metal Plating & Polishing 4110 Howard Avenue Kensington, MD 20895	Metal Finishing	PSNS 433.17; As, Cd, CN, Hg, Mo, Ni, O&G[2], PCB[3]; Cu, Pb, pH[4]

BLUE PLAINS DISCHARGERS
CATEGORICAL INDUSTRIAL USERS
December 2016

INDUSTRY NAME & ADDRESS	CATEGORY	STANDARDS
Mid-Atlantic Finishing, Inc. 4656 Addison Road Capitol Heights, MD 20743	Metal Finishing	PSNS 433.17; As, Cd, CN, Hg, Mo, Ni, O&G[2], PCB[3]; Cu, Pb, pH[4]
Sanofi Pasteur Biologics Co. 9920 Medical Center Dr. Rockville, MD 20850	Pharmaceutical Manufacturing	PSNS 439.47; As, Cd, CN, Hg, Mo, Ni, O&G[2], PCB, Zn[3]; Methylene Chloride, Ag, Cr, Cu, Pb, TTO, pH[4]
United Therapeutics Corp 1040 Spring St. Silver Spring, MD 20910	Pharmaceutical Manufacturing	PSNS 439.47
University of Maryland / Department of Defense Physical Sciences Laboratory 8050 Greenmeade Drive College Park, MD 20740	Electrical & Electronic Components – Semiconductor	PSNS 469.18; As, Cd, CN, Hg, Mo, Ni, O&G[2], PCB, Zn[3]; Ag, Cr, Cu, Pb, pH[4]

[1] Industry Changed to a Categorical Industrial User on 5/22/2016
[2] Oil & Grease (Nonpolar, Petroleum)
[3] Blue Plains' Local Limits
[4] WSSC's Local Limits
[5] Industry Changed to a Zero Discharger on 5/17/2016
[6] Street name changed from Paint Branch Parkway to Campus Drive on 7/1/2016
[7] New permitted Industry as of 10/03/2016

DELETED CATEGORICAL INDUSTRIAL USERS
December 2016

INDUSTRY NAME & ADDRESS	CATEGORY	STANDARDS
Ostendo GaN Lab[8] 12210 Plum Orchard Dr., Suite #214 Silver Spring, MD 20904	Electrical & Electronic Components – Elect. Crystal	PSNS 469.28; As, Cd, CN, Hg, Mo, Ni, O&G[2], PCB, Zn[3]; Ag, Cr, Cu, Pb, pH[4]

Permit inactivated 3/1/2016

BLUE PLAINS DISCHARGERS

CATEGORICAL DISCHARGE LIMITATIONS

40 CFR 433.17 PSNS

POLLUTANT	DAILY MAXIMUM mg/l	MONTHLY AVERAGE mg/l
Cadmium	0.11 (0.07)*	0.07
Chromium	2.77	1.71
Copper	3.38 (2.0)**	2.07
Lead	0.69 (0.4)**	0.43
Nickel	3.98 (2.2)*	2.38
Silver	0.43	0.24
Zinc	2.61	1.48
Cyanide, T	1.20 (0.56)*	0.65
TTO	2.13	(N/A)

40 CFR 433.15 PSES

POLLUTANT	DAILY MAXIMUM mg/l	MONTHLY AVERAGE mg/l
Cadmium	0.69 (0.07)*	0.26
Chromium	2.77	1.71
Copper	3.38 (2.0)**	2.07
Lead	0.69 (0.4)**	0.43
Nickel	3.98 (2.2)*	2.38
Silver	0.43	0.24
Zinc	2.61	1.48
Cyanide, T	1.20 (0.56)*	0.65
TTO	2.13	(N/A)

40 CFR 413 - Limitations for Facilities Discharging less than 10,000 gpd of process wastewater

POLLUTANT	DAILY MAXIMUM mg/l	4 Day AVERAGE mg/l
Cyanide, A	5.0 (0.56)*	2.7
Lead	0.6 (0.4)**	0.4
Cadmium	1.2 (0.07)*	0.7
TTO	4.57 (2.13)**	(N/A)

BLUE PLAINS DISCHARGERS
CATEGORICAL DISCHARGE LIMITATIONS (Continued)

40 CFR 439.17 PSNS

POLLUTANT	DAILY MAXIMUM mg/l	MONTHLY AVERAGE mg/l
Cyanide	33.5 (0.56)*	9.4
Acetone	20.7	8.2
4-Methyl-2-pentanone (MIBK)	20.7	8.2
Isobutyraldehyde	20.7	8.2
n-Amyl acetate	20.7	8.2
n-Butyl acetate	20.7	8.2
Ethyl acetate	20.7	8.2
Isopropyl acetate	20.7	8.2
o-Dichlorobenzene	20.7	8.2
Tetrahydrofuran	9.2	3.4
Benzene†	3	0.7
Chlorobenzene†	3	0.7
Toluene†	0.3	0.1
Xylenes	3	0.7
n-Hexane	3	0.7
n-Heptane	3	0.7
Methylene chloride†	3	0.7
Chloroform†	0.1	0.03
1,2-Dichloroethane†	20.7	8.2
Diethyl amine	255	100
Triethylamine	255	100
Ammonia, nitrogen	84.1	29.4
Methyl formate	20.7	8.2
Isopropyl ether	20.7	8.2

40 CFR 439.47 PSNS

POLLUTANT	DAILY MAXIMUM mg/l	MONTHLY AVERAGE mg/l
Acetone	20.7	8.2
n-Amyl Acetate	20.7	8.2
Ethyl acetate	20.7	8.2
Isopropyl acetate	20.7	8.2
Methylene chloride †	3.0	0.7

BLUE PLAINS DISCHARGERS
CATEGORICAL DISCHARGE LIMITATIONS (Continued)

40 CFR 469.18 PSNS

POLLUTANT	DAILY MAXIMUM mg/l	30-CONSEC. DAY AVG. mg/l
TTO	1.37	(N/A)

40 CFR 469.28 PSNS

POLLUTANT	DAILY MAXIMUM mg/l	30-CONSEC. DAY AVG. mg/l
TTO	1.37	(N/A)
Arsenic	2.09 (0.23)*	0.83

40 CFR 461.45 PSNS

POLLUTANT	DAILY MAXIMUM mg/kg of cells produced	MONTHLY AVERAGE mg/kg of cells produced
Mercury	0.010	0.004
Zinc	0.067	0.030
Manganese	0.019	0.015

* More stringent Blue Plains local limits.
** More stringent WSSC local limit.
† The summation of the values for these compounds shall not exceed 2.13 mg/L.
[8] Industry Permit Inactivated as of 3/1/2016

BLUE PLAINS DISCHARGERS

NONCATEGORICAL SIGNIFICANT INDUSTRIAL USERS
December 2016

INDUSTRY NAME & ADDRESS	CATEGORY	STANDARDS
Adelphi Laboratory Center 2800 Powder Mill Road Adelphi, MD 20783	Federal Facility	As, Cd, Hg, Mo, Ni , Zn, CN, O&G[1], PCB[2]; Ag, Cr, Cu, Pb, pH, TTO[3]
Coca-Cola Bottling Company Consolidated, Inc.[4] 1710 Elton Road Silver Spring, MD 20903	Bottling Company	As, Cd, Hg, Mo, Ni, Zn, CN, O&G[1], PCB[2]; Ag, Cr, Cu, Pb, pH, TTO[3]
District Photo, Inc. 10619 Baltimore Avenue Beltsville, MD 20705	Photoprocessor	As, Cd, Hg, Mo, Ni, Zn, CN, O&G[1], PCB[2]; Ag, Cr, Cu, Pb, pH, TTO[3]
Fort Detrick-Forest Glen Annex 9100 Brookville Road Silver Spring, MD 20910	Federal Facility	As, Cd, Hg, Mo, Ni, Zn, CN, O&G[1], PCB[2]; Ag, Cr, Cu, Pb, pH, TTO[3]
Huntsman P&A Americas, LLC 7011 Muirkirk Road Beltsville, MD 20705	Pigment Production	As, Cd, Hg, Mo, Ni, Zn, CN, O&G[1], PCB[2]; Ag, Cr, Cu, Pb, pH, TTO[3]
Marva Maid of Landover 6300 Sheriff Road Landover, MD 20785	Dairy	As, Cd, Hg, Mo, Ni, Zn, CN, O&G[1], PCB[2]; Ag, Cr, Cu, Pb, pH, TTO[3]
MedImmune, Inc. 1 MedImmune Way Gaithersburg, MD 20878	Pharmaceutical Research and Development	As, Cd, Hg, Mo, Ni, Zn, CN, O&G[1], PCB[2]; Ag, Cr, Cu, Pb, pH, TTO[3]
National Archives and Records Administration 8601 Adelphi Road College Park, MD 20740	Federal Facility	As, Cd, Hg, Mo, Ni, Zn, CN, O&G[1], PCB[2]; Ag, Cr, Cu, Pb, pH, TTO[3]
National Institutes of Health 9000 Rockville Pike Bethesda, MD 20892	Federal Facility	As, Cd, Hg, Mo, Ni, Zn, CN, O&G[1], PCB[2]; Ag, Cr, Cu, Pb, pH, TTO[3]

BLUE PLAINS DISCHARGERS

NONCATEGORICAL SIGNIFICANT INDUSTRIAL USERS
December 2016

INDUSTRY NAME & ADDRESS	CATEGORY	STANDARDS
National Institutes of Health (NIAID) 5625 Fishers Lane Rockville, MD 20852	Federal Facility	As, Cd, Hg, Mo, Ni, Zn, CN, O&G[1], PCB[2]; Ag, Cr, Cu, Pb, pH, TTO[3]
National Institutes of Standards & Technology 00 Muddy Branch Road Gaithersburg, MD 20899	Federal Facility	As, Cd, Hg, Mo, Ni, Zn, CN, O&G[1], PCB[2]; Ag, Cr, Cu, Pb, pH, TTO[3]
Naval Activity Support, Bethesda Environmental Programs Dept. Building 14 - Code 0143 8901 Wisconsin Avenue Bethesda, MD 20889	Federal Facility	As, Cd, Hg, Mo, Ni, Zn, CN, O&G[1], PCB[2]; Ag, Cr, Cu, Pb, pH, TTO[3]
Nixon Uniform Services, Inc. 11860 Old Baltimore Pike Beltsville, MD 20705	Industrial Laundry	As, Cd, Hg, Mo, Ni, Zn, CN, O&G[1], PCB[2]; Ag, Cr, Cu, Pb, pH, TTO[3]
Oaks Sanitary Landfill 6001 Olney-Laytonsville Road Laytonville, MD 20706	Sanitary Landfill	As, Cd, Hg, Mo, Ni, Zn, CN, O&G[1], PCB[2]; Ag, Cr, Cu, Pb, pH, TTO[3]
Pepsi Beverages Company 2611 Pepsi Place Cheverly, MD 20781	Bottling Company	As, Cd, Hg, Mo, Ni, Zn, CN, O&G[1], PCB[2]; Ag, Cr, Cu, Pb, pH, TTO[3]
Potomac Water Filtration Plant[5] 12200 River Road Potomac, MD 20854	Water Filtration Plant	As, Cd, Hg, Mo, Ni, Zn, CN, O&G[1], PCB[2]; Ag, Cr, Cu, Pb, pH, TTO[3]
Ritchie Rubble Landfill[6] 2001 Ritchie Marlboro Road Upper Marlboro, MD 20774	Solid Waste Landfill	As, Cd, Hg, Mo, Ni, Zn, CN, O&G[1], PCB[2]; Ag, Cr, Cu, Pb, pH, TTO[3]
Unifirst Corporation 6201 Sheriff Road Landover, MD 20785	Industrial Laundry	As, Cd, Hg, Mo, Ni, Zn, CN, O&G[1], PCB[2]; Ag, Cr, Cu, Pb, pH, TTO[3]

BLUE PLAINS DISCHARGERS

NONCATEGORICAL SIGNIFICANT INDUSTRIAL USERS
December 2016

INDUSTRY NAME & ADDRESS	CATEGORY	STANDARDS
United Therapeutics Corp 1040 Spring St. Silver Spring, MD 20910	Pharmaceutical Manufacturing	As, Cd, Hg, Mo, Ni, Zn, CN, O&G[1], PCB[2]; Methylene Chloride, Ag, Cr, Cu, Pb, pH, TTO[4]
Washington Metro Transit Authority (Greenbelt) 5801 Sunnyside Avenue Beltsville, MD 20705	Rail Car Maintenance and Cleaning	As, Cd, Hg, Mo, Ni, Zn, CN, O&G[1], PCB[2]; Ag, Cr, Cu, Pb, pH, TTO[3]
Washington Metro Transit Authority (Shady Grove) 15903 Somerville Dr. Rockville, MD 20855	Rail Car Maintenance and Cleaning	As, Cd, Hg, Mo, Ni, Zn, CN, O&G[1], PCB[2]; Ag, Cr, Cu, Pb, pH, TTO[3]

[1] Oil & Grease (Nonpolar, Petroleum)
[2] Blue Plains' local limits
[3] WSSC's local limits
[4] Permit Modified for name change on 3/28/2016
[5] Industry was permitted as a Blue Plains discharger on 10/05/2016
[6] Industry Changed to Blue Plains discharger through Permit modification on 6/2/2016

BLUE PLAINS DISCHARGERS

NONCATEGORICAL SIGNIFICANT INDUSTRIAL USERS
LOCAL DISCHARGE LIMITATIONS

POLLUTANT	LIMIT
Arsenic	0.23 mg/l*
Cadmium	0.07 mg/l*
Chromium	7.0 mg/l
Copper	2.0 mg/l
Cyanide	0.56 mg/l*
Lead	0.4 mg/l
Mercury	<0.001 mg/l*
Molybdenum	0.89 mg/l*
Nickel	2.2 mg/l*
Silver	1.2 mg/l
Zinc	3.4 mg/l*
Polychlorinated Biphenyls	Non-detect[1]*
Total Toxic Organics	2.13 mg/l
BOD (5-day, 20°c)	300 mg/l
COD	500 mg/l
Fats, Oil & Grease (Polar)	100 mg/l
Oil & Grease (Nonpolar,Petroleum)	100 mg/l*
pH	6.0 - 10.0 units
Temperature	140°F
Dissolved Solids	1,500 mg/l
Suspended Solids	400 mg/l
Total Solids	1,900 mg/l

*Alternate limit applicable to Blue Plains' dischargers

[1] Total PCBs shall be measured using EPA Method 608 with a detection limit of at least 0.001 mg/l.

WSSC
Where Water Matters

BLUE PLAINS DISCHARGERS
SIGNIFICANT INDUSTRIAL USER CONTROL DOCUMENTS
2016

Industrial User	Issuance Date	Effective Date	Expiration Date
Adelphi Laboratory Center	05/19/16	05/22/16	06/30/20
ATK Space Systems	06/20/16	06/21/16	06/20/20
Bethesda Art Metal Works, Inc.	07/28/16	08/11/16	08/10/20
Coca-Cola Bottling Company Consolidated.	06/06/16	06/06/16	06/05/20
District Photo, Inc.	06/09/16	06/13/16	06/12/20
Eaton Corporation	06/27/16	06/28/16	06/27/20
FlexEl, LLC[1]	12/18/15	12/18/15	12/17/19
Fort Detrick-Forest Glen Annex	09/22/16	09/22/16	09/21/20
Human Genome Sciences, Inc. (LSM)	01/10/15	01/10/15	01/09/19
Human Genome Sciences, Inc. (SSM)	10/20/16	10/22/16	10/21/20
Huntsman P&A Americas, LLC	06/28/16	06/28/16	06/27/20
InnoScience, Inc[2].	10/03/16	10/03/16	10/02/20
Marva Maid of Landover	07/26/16	07/28/16	07/27/20
Maryland Metal Plating & Polishing	06/09/16	06/12/16	06/11/20
MedImmune, Inc.	02/01/16	02/04/16	02/03/20
Mid-Atlantic Finishing, Inc.	05/22/16	05/22/16	05/21/20
National Archives and Records Administration	10/11/16	10/11/16	10/10/20
National Institute of Standards and Technology	05/26/16	06/01/16	05/31/20
National Institutes of Health	06/02/16	06/06/16	06/05/20
National Institutes of Health (NIAID)	05/19/13	05/19/13	05/18/17
Naval Support Activity, Bethesda	08/29/16	08/31/16	08/30/20
Nixon Uniform Services, Inc.	06/27/16	06/28/16	06/27/20
Oaks Sanitary Landfill	08/29/16	08/31/16	08/30/20
Ostendo GaN Lab[3]	10/24/13	10/24/13	10/23/17
Pepsi Beverages Company	06/20/16	06/22/16	06/21/20
Potomac Water Filtration Plant[4]	09/08/16	10/05/16	10/04/20
Ritchie Rubble Landfill[5]	02/08/13	02/08/13	02/07/17[6]
Sanofi Pasteur Biologics Co.	10/03/16	10/03/16	10/02/20
Unifirst Corporation	05/26/16	05/30/16	05/29/20
United Therapeutics, Corp	09/30/15	09/30/15	09/29/19
University of MD/DOD	06/23/16	06/27/16	06/26/20
Wash. Metro Transit Authority (Greenbelt)	09/04/15	09/04/15	09/03/19
Wash. Metro Transit Authority (Shady Grove)	03/23/14	03/23/14	03/22/18

[1] Industry changed to Zero Discharger on 5/17/2016
[2] Initial Discharge Authorization Permit issued on 10/03/16
[3] Industrial Discharge Authorization Permit was inactivated on 3/1/2016
[4] Initial Discharge Authorization Permit issued on 10/05/16
[5] Industry Changed to Blue Plains discharger through Permit modification on 6/2/2016
[6] Permit renewal issued on 2/8/2017

CATEGORICAL SIGNIFICANT INDUSTRIAL USERS (CIU)
COMPLIANCE SAMPLING AND INVESTIGATION SUMMARY
CY 2016

INDUSTRY NAME AND ADDRESS	ID #	NUMBER OF SAMPLING VISITS	NUMBER OF INSPECTION VISITS	NUMBER OF SELF-MONITORING EVENTS	NUMBER OF SELF-MONITORING EVENTS REQUIRED
Adelphi Laboratory Center[1] 2800 Powder Mill Road Adelphi, MD 20783	00166	1-Outfall 001	1	2 1 metals per NOV 1 extra metals	2
ATK Space 11313 Frederick Avenue Beltsville, MD 20705	08027	1-Outfall 001 1-Outfall 002	2	8 8	8 8
Bethesda Art Metal Works 4955 Bethesda Avenue Bethesda, MD 20814	06720	1	2	8	8
Eaton Corporation 11642 Old Baltimore Pike Beltsville, MD 20705	00405	6[2]-Outfall 003 2-Outfall 004	2	8 8	8 8
FlexEl, LLC[3] 4505 Campus Drive[4] College Park, MD 20740	13995	0[3]	5	2[3]	2[3]
Human Genome (SSM) 9910 Belward Campus Drive Rockville, MD 20850	08093	2[5]	1	8 2 pH per NOV 7 extra pH events	8
Human Genome (LSM) 9911 Belward Campus Drive Rockville, MD 20850	10116	2[5]	1	8 12 extra pH events	8

CATEGORICAL SIGNIFICANT INDUSTRIAL USERS (CIU)
COMPLIANCE SAMPLING AND INVESTIGATION SUMMARY
CY 2016

INDUSTRY NAME AND ADDRESS	ID #	NUMBER OF SAMPLING VISITS	NUMBER OF INSPECTION VISITS	NUMBER OF SELF-MONITORING EVENTS	NUMBER OF SELF-MONITORING EVENTS REQUIRED
Innoscience, Inc[6] 15892 Gaither Drive, Suite A Gaithersburg, MD 20877	13990	1	2	2	2
Maryland Plating & Polishing 4110 Howard Avenue Kensington, MD 20895	07777	3[5]	2	8	8
Mid-Atlantic Finishing, Inc. 4656 Addison Road Capitol Heights, MD 20743	07771	3[5]	2	8	8
Ostendo GaN Lab[7] 12210 Plum Orchard Drive, Suite #214 Silver Spring, MD 20904	08103	0[7]	1	0[7]	2
Sanofi Pasteur Biologics Co. 9920 Medical Center Drive Rockville, MD 20850	10618	2	2	2[8]	8
United Therapeutics, Corp 1040 Spring Street Silver Spring, MD 20910	13288	6[2]-Outfall 001 1-Outfall 002	2	8 7 extra pH event 6[9] 2 pharmaceutical parameters per NOV	8 8
University of MD/DOD 8050 Greenmeade Drive College Park, MD 20740	07987	6[2]	2	6[10]	8

WSSC
Where Water Matters

NON-CATEGORICAL SIGNIFICANT INDUSTRIAL USERS (SIU) COMPLIANCE SAMPLING AND INVESTIGATION SUMMARY CY 2016

INDUSTRY NAME AND ADDRESS	ID #	NUMBER OF SAMPLING VISITS	NUMBER OF INSPECTION VISITS	NUMBER OF SELF-MONITORING EVENTS	NUMBER OF SELF-MONITORING EVENTS REQUIRED
Adelphi Laboratory Center[1] 2800 Powder Mill Road Adelphi, MD 20783	00166	5[2]- Outfall FAC	2	8 2 extra pH events	8
Coca-Cola Bottling Company Consolidated[11] 1710 Elton Road Silver Spring, MD 20903	00080	5[2]	2	8 2 pH per NOV	8
District Photo, Inc. 10619 Baltimore Avenue Beltsville, MD 20705	03812	6[5]	2	8	8
Fort Detrick-Forest Glen Annex 9100 Brookville Road Silver Spring, MD 20910	08091	5[2]	2	8	8
Huntsman P&A Americas, LLC 7011 Muirkirk Road Beltsville, MD 20705	00056	5[2]	2	8	8
Marva Maid of Landover 1805 South Club Dr. Landover, MD 20785	00238	6[2]	2	8 8 extra pH events	8
MedImmune, Inc 1 MedImmune Way Gaithersburg, MD 20878	10801	6[2]	2	8 1 pH per NOV 1 TTO per NOV	8

NON-CATEGORICAL SIGNIFICANT INDUSTRIAL USERS (SIU)
COMPLIANCE SAMPLING AND INVESTIGATION SUMMARY
CY 2016

INDUSTRY NAME AND ADDRESS	ID #	NUMBER OF SAMPLING VISITS	NUMBER OF INSPECTION VISITS	NUMBER OF SELF-MONITORING EVENTS	NUMBER OF SELF-MONITORING EVENTS REQUIRED
National Archives and Records Administration 8601 Adelphi Road College Park, MD 20740	08017	5[2]	2	8 6 TTO per NOV	8
National Institutes of Standards & Technology Building 301, Room 124 Gaithersburg, MD 20899	05813	2[5]	1	8 2 extra O&G (non-polar petroleum)	8
National Institutes of Health 9000 Rockville Pike Bethesda, MD 20892	08111	6[2]	2	8	8
National Institutes of Health (NIAID) 5625 Fishers Lane Rockville, MD 20854	08108	6[2]	1	8	8
Naval Support Activity 8901 Wisconsin Avenue Bethesda, MD 20889	06501	6[5]	2	8	8
Nixon Uniform Services, Inc. 11860 Old Baltimore Pike Beltsville, MD 20705	08095	5[5]	2	8	8

NON-CATEGORICAL SIGNIFICANT INDUSTRIAL USERS (SIU)
COMPLIANCE SAMPLING AND INVESTIGATION SUMMARY
CY 2016

INDUSTRY NAME AND ADDRESS	ID #	NUMBER OF SAMPLING VISITS	NUMBER OF INSPECTION VISITS	NUMBER OF SELF-MONITORING EVENTS	NUMBER OF SELF-MONITORING EVENTS REQUIRED
Oaks Sanitary Landfill 6001 Olney-Laytonsville Rd. Laytonsville, MD 20706	07741	1	2	12	12
Pepsi Beverages Company One Pepsi Place Cheverly, MD 20781	00140	2[5]	2	8	8
Potomac Water Filtration Plant[12] 12200 River Road Potomac, MD 20854	14011	4[5]	2	2	2
Ritchie Rubble Landfill[13] 2001 Ritchie Marlboro Road Upper Marlboro, Maryland 20774	08101	2	2	8	8
Unifirst Corporation 6201 Sheriff Road Landover, MD 20785	00100	7[5]	4	8 4 TTO per NOV 3 O&G per NOV 1 extra CN	8
Washington Metro Transit Authority (Greenbelt) 5801 Sunnyside Avenue Beltsville, MD 20705	10123	6[2]	2	8	8

NON-CATEGORICAL SIGNIFICANT INDUSTRIAL USERS (SIU)
COMPLIANCE SAMPLING AND INVESTIGATION SUMMARY
CY 2016

INDUSTRY NAME AND ADDRESS	ID #	NUMBER OF SAMPLING VISITS	NUMBER OF INSPECTION VISITS	NUMBER OF SELF-MONITORING EVENTS	NUMBER OF SELF-MONITORING EVENTS REQUIRED
Washington Metro Transit Authority (Shady Grove) 15903 Somerville Dr. Rockville, MD 20855	08107	3[5]	1	8	8

[1] Industry changed to Categorical Industrial User through Permit renewal on 5/22/2016
[2] Industry was sampled for 2 full events, remainder of events were pH only
[3] Industry Changed to Zero Discharger on 5/17/2016
[4] Street name changed from Paint Branch Parkway to Campus Drive on 7/1/2016
[5] Industry was sampled for 1 full event, remainder of events were pH only
[6] Industry issued initial Permit on 10/3/2016
[7] No Discharges in 2016, Industry permit inactivated on 3/1/2016, manifests on file for hauled waste
[8] No process flow 1st, 2nd, and 3rd quarters. Therefore, industry only conducted self-monitoring during 4th quarter.
[9] Limited flow during the 1st and 2nd quarters. Therefore, industry only conducted 1 of 2 days self-monitoring during these quarters.
[10] No categorical process discharge during 2nd quarter
[11] Permit modified for name change on 3/28/2016
[12] Industry issued initial Permit on 10/5/2016
[13] Industry Changed to Blue Plains discharger through Permit modification on 6/2/2016

FACILITIES NOT INSPECTED AND REASON
CY2016

FACILITY	REASON
None	

FACILITIES NOT SAMPLED AND REASON
CY 2016

FACILITY	REASON
FlexEl, LLC	Facility became Zero Discharger on 5/17/16, prior to WSSC having an opportunity to collect samples

FACILITIES CONDUCTING LESS THAN THE REQUIRED NUMBER OF SELF-MONITORING EVENTS
CY 2016

FACILITY	REASON
Ostendo GaN Lab	No process flow since August 2015.
Sanofi Pasteur Biologics Co.	No process flow 1st, 2nd, and 3rd quarters. Therefore, industry only conducted self-monitoring during 4th quarter.
United Therapeutics, Corp	Limited process flow during the 1st and 2nd quarters. Therefore, industry only conducted 1 of 2 days self-monitoring during these quarters.
University Of MD/DOD	No process flow 2nd quarter

BLUE PLAINS DISCHARGERS
SIGNIFICANT INDUSTRIAL USERS IN SNC
2016[1]

INDUSTRIAL USER	EVALUATION FOR SNC	PERIOD	ACTIONS PLANNED OR TAKEN	CURRENT STATUS
Coca-Cola Bottling Company Consolidated	SNC Failure to monitor pH	April 2016 – September 2016	Notice of Violation, Additional Monitoring, and Publication	Compliance Pending
FlexEl, LLC	SNC Daily Hg, Zn, Mn SNC Monthly Hg, Zn, Mn	January 2016 – June 2016	Notice of Violation, Compliance Directive & Publication	Compliance
National Archives and Records Administration	SNC Failure to Resample TTOs	April 2016 – September 2016	Notice of Violation, Additional Monitoring, and Publication	Compliance Pending

[1] The evaluation periods include: October 2015-March 2016, January 2016-June 2016, April 2016-September 2016 and July 2016-December 2016.

SIGNIFICANT INDUSTRIAL USER IN SNC FOR THIS REPORTING YEAR AND LAST REPORTING YEAR

INDUSTRIAL USER	REASON FOR SNC
None	

BLUE PLAINS DISCHARGERS
SIGNIFICANT INDUSTRIAL USERS ON FORMAL COMPLIANCE SCHEDULES
2016

INDUSTRIAL USERS	TYPE OF SCHEDULE	DATE OF VIOLATION	DATE COMPLIANCE SCHEDULE ISSUED	REASON	FINAL COMPLIANCE DATE (FCD)	CURRENT STATUS	COMPLIANCE EXPECTED BY FCD
FlexEl, LLC	Directive	3/10/2016	5/9/2016	Corrective Measures	5/31/2016	Compliance	N/A
Fort Detrick-Forest Glen Annex	Directive	N/A	6/30/2016	Submit Application for renewal	7/5/2016	Compliance	N/A
Fort Detrick-Forest Glen Annex	Directive	N/A	10/20/2016	Submit Application Bldg 501	11/10/2016	FCD Extended	N/A
Fort Detrick-Forest Glen Annex	Directive	N/A	11/23/2016	Submit Application Bldg 501 Extension	12/15/2016	Compliance	N/A
Human Genome Sciences, Inc. (SSM)	Directive	1/7/2016	2/4/2016	Corrective Measures	2/22/2016	Compliance	N/A
Innoscience, Inc	Directive[1]	N/A	5/11/2016	Install IWMP	5/31/2016	NA	N/A
Innoscience, Inc	Directive[1]	N/A	6/16/2016	Submit Information Supersede 5/11/16 Directive	6/28/2016	Compliance	N/A
Innoscience, Inc	Directive[1]	N/A	8/8/2016	Submit Information	2/16/2017	Interim	2/16/2017
Innoscience, Inc	Directive[1]	N/A	8/9/2016	Corrective Measures	8/16/2016	Compliance	N/A

INDUSTRIAL USERS	TYPE OF SCHEDULE	DATE OF VIOLATION	DATE COMPLIANCE SCHEDULE ISSUED	REASON	FINAL COMPLIANCE DATE (FCD)	CURRENT STATUS	COMPLIANCE EXPECTED BY FCD
MedImmune, Inc	Directive	1/20/2016	3/14/2016	Corrective Measures	4/1/2016	Compliance	N/A
National Archives & Records Administration	Directive	11/15/2015	3/7/2016	Corrective Measures	3/21/2016	Compliance	N/A
Nixon Uniform Services, Inc.	Directive	4/20/2016	12/5/2016	Corrective Measures	12/9/2016	Compliance	N/A
Unifirst Corporation	Directive	10/19/2015 1/11/2016 1/12/216	2/3/2016	Corrective Measures	2/22/2016	Compliance	N/A
Unifirst Corporation	Directive	7/18/2016	9/20/2016	Corrective Measures	10/10/2016	Compliance	N/A
Unifirst Corporation	Directive	9/22/2016 10/7/2016	11/15/2016	Corrective Measures	12/5/2016	Compliance	N/A

[1] These Directives were issued prior to the issuance of the Discharge Authorization Permit on 10/3/16

COPY OF NEWSPAPER LISTING OF SIGNIFICANT INDUSTRIAL USERS (SIUS) IN SIGNIFICANT NONCOMPLIANCE (SNC) DURING THE CALENDAR YEAR 2016

WSSC has not yet published the list of SIUs in SNC for the calendar year. A copy of the newspaper listing will be forwarded to DC Water no later than June 30.

BLUE PLAINS DISCHARGERS
SIGNIFICANT INDUSTRIAL USERS (SIUs) ISSUED
NOTICES OF VIOLATION (2016)

CATEGORICAL SIU's	NUMBER ISSUED
Adelphi Laboratory Center IWMP 001	1[1]
Bethesda Art Metal Works	1
FlexEl, LLC	2[1]
Human Genome Sciences, Inc. (SSM)	1
University of MD/DOD, Physical Sciences Laboratory	1

NON-CATEGORICAL SIU's	
Coca-Cola Bottling Company Consolidated	1
MedImmune, Inc.	1
National Archives II	4[1]
Nixon Uniform Services	1[1]
Unifirst Corporation	6[1]
United Therapeutics Corporation	1

TOTAL = 20 NOVs

[1] Notice of Violation issued for multiple non-compliance occurrences.

BLUE PLAINS DISCHARGERS

SIGNIFICANT INDUSTRIAL USERS ISSUED ADMINSTRATIVE ORDERS in 2016

INDUSTRIAL USER	ACTION	NUMBER ISSUED
None		

SIGNIFICANT INDUSTRIAL USERS THAT HAVE BEEN SUED FOR PRETREATMENT VIOLATIONS in 2016

INDUSTRIAL USER	DATE FILED	REASON FOR SUIT	STATUS
None			

SIGNIFICANT INDUSTRIAL USERS ASSESSED PENALTIES IN 2016

INDUSTRIAL USER	PENALTY AMOUNT	REASON	AMOUNT COLLECTED
Unifirst Corporation	$250	pH Max	$250

TOTAL ASSESSED: $250 in 2016

TOTAL COLLECTED: $250 in 2016

PENALTIES ASSESSED IN 2015 AND COLLECTED IN 2016

INDUSTRIAL USER	AMOUNT COLLECTED
None	

DESCRIPTION OF ALL ACTIONS WHICH HAVE BEEN INCLUDED AS ADMINISTRATIVE ORDERS 2016

DESCRIPTION OF ANY "OTHER ACTION"

No "other actions" were taken.

LIST OF SIUs THAT HAD SNC VIOLATIONS BUT WERE NOT SUBJECT TO ENFORCEMENT

INDUSTRIAL USER	REASON FOR NO ACTION
None	

Attachment 3

Parts A and B with attachments for Fairfax County SIUs discharging to Blue Plains

PART A
PRETREATMENT PERFORMANCE SUMMARY

I. General Information

Control Authority Name	*Fairfax County, VA (Contributing Jurisdiction) Blue Plains Wastewater Treatment Plant*			
Address	*5000 Overlook Avenue, S.W.*			
City	*Washington, D.C.*	State	Zip+4	*20032-5397*
Contact Name	*John Botts*		*Telephone No.*	*703-550-9740, ext.429*
Contact Title	*Pretreatment Manager*		*E-mail Address*	*John.Botts@fairfaxcounty.gov*
NPDES No.	*DC 0021199*		Reporting Period	*01-01-16 to 12-31-16*
Issuance Date	*08/31/10*		Expiration Date*	*9/30/15*
Total CIUs*	*1*		Total MTCIUs+	*Not applicable*
Total SNIUs**	*3*		Total NSCIUs++	*Not applicable*

* CIUs - Categorical Industrial Users
** SNIUs - Significant Noncategorical Users
+MTCIUs – Middle Tier Categorical Industrial Users
++NSCIUs – Nonsignificant Categorical Industrial Users

II. Compliance Monitoring Program

1.	No. of SIUs# with current Control Documents	4
2.	No. of SIU Facilities Inspected	4
3.	No. of SIU Facilities Sampled	4
4.	No. of SIUs Submitting Self-Monitoring Reports	2##

\# SIUs – significant industrial users, which consist of CIUs and SNIUs
\## Fairfax County monitors 2 of the 4 SIUs in lieu of user self-monitoring. See Attachment II. 1, Table note.

III. Significant Industrial User Compliance

1.	No. of SIUs Violating a Compliance Schedule / No. on a Schedule	0/0
2.	No. of SIUs in SNC for the July to December Period	0
3.	No. of SIUs in SNC At Any Time During the Calendar Year	0
4.	No. of SIUs in SNC That Were Also in SNC During the Previous Calendar Year	0
5.	No. of NSCIUs that violated any standards or requirements	0

IV. Enforcement Actions

1.	Notices/Letters of Violation Issued to SIUs	2
2.	Enforceable Compliance Schedules Issued to SIUs	0
3.	Civil/Criminal Suits Filed	0
4.	No. of SIUs from which Penalties have been Collected	0
5.	Other Actions (written notice of violation to sewage handling contractors)	7

I certify that the information contained in this report and attachments is complete and accurate to the best of my knowledge (see Part B.V of the instructions).

John Reyes — 03/15/2017

Signature of Authorized Representative — Date

PART B
PRETREATMENT DEVELOPMENTS

1. Summary of POTW Operations

Trucked or Hauled Wastewater.

In 2016, Fairfax County's Colvin Run Septage Receiving Facility, located at 9950 Colvin Run Road, Great Falls, Virginia 22066, was the designated location within the Blue Plains service area where hauled septage was permitted to be discharged. Fairfax County temporarily closed the Colvin Run Septage Receiving Facility on June 27, 2016 in order to mitigate safety concerns associated with construction activity at the County's Difficult Run Pump Station located on the same access road. Haulers were advised of alternate (e.g., Blue Plains AWTP, Upper Occoquan Service Authority, and Noman M. Cole, Jr, Pollution Control Plant) septage disposal options. The facility's gate access system has been disabled and the gate has been locked. An ongoing feasibility study examining options for replacing the Colvin Run facility is scheduled to conclude before the pump station renovation project is completed.

In 2016, use of the Colvin Run Septage Receiving Facility was restricted to sewage handlers, who are registered by the Fairfax County Health Department. Access to the facility was regulated through the use of an electronic gate card, which was issued only to registered waste haulers, and by contracted guards, who were present for 30 of the facility's 50 weekly operating hours. The guards confirmed the registration status of haulers and reviewed the hauler waste manifests to verify that the origin and the type of hauled waste met Fairfax County's Sanitary Sewers and Sewage Disposal Code and the requirements of Operating Agreement #5 of the Blue Plains Intermunicipal Agreement (2012). Pretreatment program staff and personnel from the Fairfax County Division of Environmental Health also periodically inspected haulers to ensure compliance with County Code and Operating Agreement #5. In addition, an updated video surveillance system was installed in June 2016 to observe all haulers delivering septage prior to the facility closure and to monitor for potential illegal dumping activity at the facility after its closure. Videos from the two cameras are maintained on cloud storage for two weeks. Videos may be downloaded for permanent archiving.

Fairfax County randomly monitored septage haulers in accordance with Operating Agreement #5. The monitoring results for 2016 were submitted with the second quarter progress report to DC Water. A list of sewage handling contractors that were registered and allowed to delivery septage from January 1 to June 26, 2017 at the Colvin Run Septage Receiving Facility was provided to D.C. Water in the second quarter report.

Hauled septage is restricted to sewage from residential and commercial septic tanks, wastewater from portable toilets, wastewater from food service establishment grease traps and interceptors, and water only from car washes, unless expressly authorized by the WPMD Director. Hazardous waste is not permitted at the Colvin Run Septage Receiving Facility. No industrial waste, landfill leachate, or sludge/residuals are currently allowed to be discharged at the facility. No brine wastes (oil and gas drilling fluids) are known to be discharged at the facility. Wastewater discharged at the facility is primarily domestic-natured, deriving from septic tanks, grease traps/interceptors, and portable toilets (construction sites and special outdoor events). The relative volume and percentage of waste types received at the site was estimated based on manifests collected at the facility. Of the 2,130 deliveries

from January 1 to June 27, 2016, a total of 3.12 million gallons (MG) was received. This total volume consisted of 54.2 percent septic tank waste (1.69 MG), 21.8 percent food service establishment grease waste (0.68 MG), 10.1 percent portable toilet waste (0.32 MG), 9.1 percent commercial septic (0.28 MG), 1.4 percent sewage ejector pit (0.04 MG), 1.1 percent car wash (0.04 MG), and 2.2 percent unspecified waste classification (0.07 MG).

Effective September 1, 2010, Fairfax County prohibited septage and portable toilet waste containing formaldehyde and 1, 4 dichlorobenzene from being discharged to sanitary sewers in Fairfax County. This policy is consistent with the prohibition stated in Operating Agreement #5. Fairfax County periodically reviews safety data sheets (SDS) for portable toilet deodorizer/sanitizer solutions. Neither formaldehyde nor 1, 4 dichlorobenzene were reported to be present in products used by portable toilet waste users of the Colvin Run Septage Receiving Facility.

2. Pretreatment Program Changes

Funding, Staffing, and Equipment

No significant changes in the operation of the pretreatment program were planned or implemented during 2016; including funding and equipment. Fairfax County added and filled one new staff position for the pretreatment program. Pretreatment program staff consists of six full-time equivalents, including one manager and five inspector positions. One inspector is responsible for code compliance assessment and enforcement in the Blue Plains service areas. Approximately half of the inspector's time and twenty percent of manager's time was attributed to pretreatment activities within the Blue Plains service area in 2016. The pretreatment program uses gas meters, pH meters, dissolved oxygen meters, conductivity meters, and manual and automatic samplers to monitor users for compliance with the county code and Blue Plains local limits. Fairfax County operates a Virginia Environmental Laboratory Accreditation Laboratory (VELAP) certified environmental laboratory, which has a gas chromatography and mass spectrometer (GC-MS), inductively coupled plasma optical emission spectrometer (ICP-OES), atomic absorption spectrometer with graphite furnace, PC-BOD biochemical oxygen demand analysis system, Lachat 8500 series flow injection analyzer, Horizon Technology 3000XL oil and grease instrument, and HACH DR UV/VIS spectrophotometers for analyzing samples of user discharges.

Legal Authority

a. State of Virginia

The pretreatment program modifications approved by Virginia's Department of Environmental Quality (VDEQ) in 1994, 2010, and 2012 remain in effect, as described below:

1) Updated Sewer Use Ordinance. Revisions to the County's sewer use ordinance, adopted September 13, 1993, substantially incorporated the EPA Model Ordinance (June 1992). In 2009, the sewer use ordinance was revised to reflect the EPA Pretreatment Streamlining Rule. In 2010, the ordinance was revised to incorporate changes to Virginia law (§15.2-2122 of the Code of Virginia) that enhance the County's ability to collect civil penalties against dischargers that damage the POTW. The draft ordinance was submitted to DEQ's Northern Regional Office on June 11, 2010. It was approved by DEQ and deemed a non-substantial program modification in a letter dated July 28, 2010. The Fairfax County Board of Supervisors adopted the revisions on October 19, 2010. SIU permits were reissued to reflect the changes.

2) Standard Form Wastewater Discharge Permit. Effective November 1993, all permits issued to Fairfax County SIUs that discharge to the Blue Plains AWTP use the standard form Wastewater Discharge Permit approved by VDEQ. The most recent update of the permit form was in November 2010.

3) Local Limits. Fairfax County, Town of Herndon, and Arlington County enforce the local limits adopted by the District of Columbia for service areas that are tributary to the Blue Plains AWTP. Revised local limits for the Blue Plains AWTP became effective September 10, 2010. Fairfax County began enforcement of the new limits upon adoption and added the revised local limits to wastewater discharge permits of SIUs in the Blue Plains service area.

4) Enforcement Response Plan. Fairfax County's Enforcement Response Plan (ERP) was updated in 2009 to reflect EPA's Pretreatment Streamlining Rule changes. The ERP was also updated in 2011 to reflect the County's 2010 Sewer Use Ordinance changes. The revised ERP was approved by VDEQ on February 9, 2012 and remains in effect.

b. Interjurisdictional Pretreatment Agreements (IPA)

1) Town of Herndon. The Town of Herndon's sanitary sewer system discharges to the Blue Plains AWTP via Fairfax County's conveyance system, pursuant to a sewer service agreement between Fairfax County and the Town. Fairfax County and the Town developed an interjurisdictional pretreatment agreement when a CIU was identified within the Town. The agreement was signed by the Fairfax County Board of Supervisors on February 22, 1996. Preceding the agreement's execution, the Town adopted a pretreatment ordinance (Chapter 21 of the Town of Herndon Code) with substantially the same provisions as the County's pretreatment ordinance. On January 23, 2000, the Town renumbered multiple chapters of its municipal code, including pretreatment provisions under Chapter 21, sanitary sewer connection provisions under Chapter 25, and billing provisions under Chapter 26. All applicable pretreatment provisions are now codified under Article II, Sewers and Sewage Disposal, Chapter 74, Utilities. A copy of Chapter 74 was transmitted to the District of Columbia Water and Sewer Authority (DCWASA) as an attachment to the CY 2001 Annual Report.

Chapter 74 of the Herndon Town Code was revised to be consistent with Fairfax's County's Sewer Use Ordinance (as adopted October 19, 2010). The revised Chapter 74 incorporates provisions of the EPA Pretreatment Streamlining Rule (September 27, 2005) and Virginia law (§15.2-2122 of the Code of Virginia). As recommended by EPA, the local limits for cyanide and copper that were previously inconsistent with the District of Columbia Municipal Regulations were deleted from the Town Code. Sections 74-91, 74-93, 74-116, 74-155, 74-201, and 74-206 of Chapter 74 codify the Town's authority to require dischargers to meet the local limits for the Blue AWTP. The Herndon Town Council adopted the revised Chapter 74 on January 24, 2012.

2) Arlington County. An area within Arlington County, consisting of the Gulf Run, Donaldson Run, and Pimmit Run sewersheds, discharges to the Blue Plains AWTP, via Fairfax County, pursuant to a sewer service agreement between Arlington and Fairfax counties.

3. Miscellaneous Developments

None.

Attachment I - General Information

1. **SIU List and Designation**
2. **Changes to SIU List**

ATTACHMENT I — GENERAL INFORMATION

JURISDICTION Fairfax County, Virginia
SERVICE AREA Blue Plains Advanced Wastewater Treatment Plant

1. SIU List and designation

USER ID NUMBER AND NAME		SPECIFY CATEGORY; IF NOT CATEGORICAL INDICATE NOT CIU
A30217-	George Bush Center for Intelligence (GBCI) (formerly CIA Headquarters Rt. 123) 930 Dolly Madison Blvd* McLean, VA 22101	NOT CIU
A30317-	Fairfax Water (formerly Fairfax County Water Authority) James J. Corbalis, Jr. Water Treatment Plant 1295 Fred Morin Road Herndon, VA 20170	NOT CIU
A30917-	U.S. Geological Survey 12201 Sunrise Valley Drive* Reston, VA 20192	NOT CIU
001F-	Precision Sheet Metal Supply, Inc. (within the Town of Herndon) 354 Victory Drive Herndon, VA 20170	CIU 40 CFR §433 (Metal Finishing)

* Addresses listed are users' premises addresses. Users A302 and A309 have mailing addresses that differ from their premises addresses).

2. Changes to SIU list

During calendar year 2016, Fairfax County did not identify any new SIUs in Fairfax County that discharge to the Blue Plains AWTP. The industrial waste survey report for 2016 is provided in Appendix B.

Fairfax County continues to convey wastewater from the entire Town of Herndon to D.C. Water's Blue Plains AWTP under an agreement executed in 1990. The Town of Herndon has developed a pretreatment program to administer permits, assess compliance, and, as needed, take enforcement action to regulate sources of non-domestic wastewater located within the Town. The Interjurisdictional Pretreatment Agreement with the Town of Herndon (dated 1995) requires Fairfax County's review of pretreatment permits issued by the Town, and the submittal of pretreatment reports by the Town to the County. The Town of Herndon currently administers the permit for the single SIU, Precision Sheet Metal Supply, Inc., located in the Town. The Town of Herndon did not identify new SIUs within their jurisdictional boundaries during 2016 (see Appendix C).

Fairfax County continues to convey wastewater from a portion of Arlington County to D.C. Water's Blue Plains AWTP under an agreement executed in 1994. Arlington County did not identify new SIUs in the noted area during 2016 (see Appendix D).

No brine wastes (oil and gas drilling fluids) were known to be discharged to the County's portion of the Blue Plains AWTP service area in 2016.

Attachment II - Compliance Monitoring Program

1. **Control mechanism**
2. **Permits administratively extended**
3. **Facilities not inspected and reason**
4. **Facilities not sampled and reason**
5. **Number of POTW sampling events and inspections, number of self-monitoring events, and reports**

ATTACHMENT II — COMPLIANCE MONITORING PROGRAM

JURISDICTION Fairfax County, Virginia
SERVICE AREA Blue Plains Advanced Wastewater Treatment Plant

1. Control mechanism

USER NO.	TYPE OF CONTROL MECHANISM	PERMIT DATES			PERMIT ACTIONS DURING THE REPORTING PERIOD
		ISSUANCE	EFFECTIVE	EXPIRATION	
A30217 GBCI*	Individual permit	12-28-16	01-01-17	06-30-17	Short-term permit issued to allow sufficient time to identify a new compliance monitoring point
A30317 Fairfax Water	Individual permit	12-12-12	01-01-13	12-31-17	None
A30917 USGS*	Individual permit	12-18-12	01-01-13	12-31-17	None
001F Precision Sheet Metal**	Individual permit	11-20-13	11-20-13	11-19-18	None

* In accordance with 40 CFR § 403.12, paragraphs (g) and (h), in lieu of user self-monitoring, Fairfax County collects and analyzes discharge samples from SIUs A30217 and A30917 to demonstrate continued compliance. Therefore, Part A, Pretreatment Performance Summary, Section II.4., indicates only 2 of the 4 SIUs (i.e. only Users A30317 and 001F) are required to submit self-monitoring reports.

** User's CIU permit incorporates concentration-based limits as specified by 40 CFR Part 433.13 (metal finishing sub-category) and applicable local limits. TTO monitoring requirement is waived because TTOs are not present; initial TTO monitoring conducted in 1991 and follow-up annual inspections confirm TTOs are not present. User implements an approved toxic organics management plan and submits a semi-annual statement certifying that TTOs are not present in the discharge.

2. Permits administratively extended — NONE

3. Facilities not inspected and reason — NONE

4. Facilities not sampled and reason — NONE

ATTACHMENT II — COMPLIANCE MONITORING PROGRAM (Continued)

5. Number of POTW sampling events and inspections for, and number of self-monitoring events and self-monitoring reports submitted by, each SIU.

USER NO.	NO. BY POTW DURING THE YEAR		NO. BY USER DURING THE YEAR			
			SELF-MONITORING EVENTS		SELF-MONITORING REPORTS	
	SAMPLINGS	INSPECTIONS	CONDUCTED	REQUIRED	SUBMITTED	REQUIRED
A30217 GBCI	2	1	0*	0*	0*	0*
A30317 Fairfax Water	2	1	C**	C**	4	4
A30917 USGS	2	1	0*	0*	0*	0*
001F Precision Sheet Metal	1	1	2+	2+	4	4

* Users A30217 and A30917 self-monitored less than twice and submitted less than two self-monitoring reports during the reporting year. In accordance with 40 CFR § 403.12, paragraphs (g) and (h), in lieu of users self-monitoring, Fairfax County (POTW) samples and analyzes the discharges from Users A30217 and A30917 in order to demonstrate continued compliance. Therefore, periodic compliance reporting is not required for these users.

** "C" - User A30317 is required to continuously self-monitor the pH of the facility discharge.

+ User 001F samples and analyzes the discharge from the regulated process for compliance with categorical standards semi-annually. In addition, User 001F tests pH twice daily during any day User 001F operates the regulated process. During calendar year 2016, User 001F operated the regulated process 251 days, and monitored for pH 502 times.

Attachment III - Significant Industrial User Compliance

1. **Users in significant noncompliance (SNC), listed by quarter**
2. **Users on compliance schedules (formal and informal)**
3. **Summary of users' compliance status**

ATTACHMENT III- SIGNIFICANT INDUSTRIAL USER COMPLIANCE

JURISDICTION Fairfax County, Virginia
SERVICE AREA Blue Plains Advanced Wastewater Treatment Plant

1. **Users in significant noncompliance (SNC), listed by quarter — NONE**

2. **Users on compliance schedules (formal and informal) — NONE**

3. **Summary of users' compliance status**

USER NO.	COMPLIANCE SUMMARY
A30217 GBCI	Monitoring conducted indicates user consistently achieved compliance with pretreatment standards and requirements in 2016.
A30317 Fairfax Water	Monitoring conducted indicates user consistently achieved compliance with pretreatment standards and pretreatment requirements in 2016.
A30917 USGS	Monitoring conducted indicates user consistently achieved compliance with pretreatment standards and requirements in 2016.
001F Precision Sheet Metal	Monitoring conducted indicates user inconsistently achieved compliance with pretreatment standards and requirements in 2016. See Attachment IV for description of enforcement action taken.

Attachment IV - Enforcement Actions

1. **Users requiring formal compliance schedules**
2. **Users issued written notices/letters of violation**
3. **Number of criminal suits filed in court**
4. **Users assessed penalties (if assessed, amount, reason, and if paid)**
5. **Users issued administrative orders**
6. **Users subject to "other actions" (written NOV to sewage handling contractors registered by Fairfax County)**
7. **Copy of newspaper listing of users in significant non-compliance**
8. **Users with violations but not subject to enforcement**

ATTACHMENT IV — ENFORCEMENT ACTIONS

JURISDICTION Fairfax County, Virginia
SERVICE AREA Blue Plains Advanced Wastewater Treatment Plant

1. Users requiring formal compliance schedules — NONE

2. Users issued notices/letters of violation

USER NO.	DATE OF ISSUANCE	TYPE OF ORDER
001F Precision Sheet Metal	May 10, 2016 October 18, 2016 November 4, 2016	The Town of Herndon issued a written NOV to the user on May 10, 2016 for improper self-monitoring (i.e., failure to collect samples over equal time intervals and improper sample preservation). The user resampled the discharge on May 17, 2016 using proper procedures and the sample analysis results indicated compliance with the permit, Town of Herndon, Chapter 74, and Blue Plains Service Area local limits. The Town of Herndon issued a verbal notice of violation (NOV) to the user on October 18, 2016 and a follow-up written NOV on November 4, 2016 for the user's violation of the permit limit for polychlorinated biphenyls (PCBs). The permit limit is based on the Blue Plains Service Area local limit. The user submitted a corrective action plan on November 10, 2016 and resampled the discharge. PCB analysis results indicate compliance with the permit limit. The Town of Herndon has required the user to submit a revised corrective action plan that includes certification of the presence/absence of PCBs in manufacturing equipment and continued PCB monitoring to confirm the results of the resample analysis.

3. Number of criminal suits filed in court — NONE

ATTACHMENT IV — ENFORCEMENT ACTIONS (Continued)

4. Users assessed penalties (if assessed, amount, reason, and if paid) — NONE

5. Users issued administrative orders — NONE

6. Users subject to "other actions" (written NOV to sewage handling contractors registered by Fairfax County)

USER NO.	DATE OF ACTION	TYPE OF ACTION
Atlantic Wastewater Solutions, LLC.	February 17, 2016 March 10, 2016	User was issued a written NOV on February 17 for delivering septage that was not collected within Fairfax County to the Colvin Run Septage Receiving Facility and for submitting incomplete and inaccurate waste manifests. User was issued a Notice of Show Cause Hearing on March 10 for failure to submit an accurate corrective action plan. User did not show cause why Fairfax County should not take further enforcement action. In April, the user was prohibited from discharging septage at Fairfax County facilities through 2017.
Don's Johns, Inc.	March 21, 2016	User was issued a written NOV on March 21 for continued violation of County Code that prohibits the delivery of septage originating from outside of the county to the Colvin Run Septage Receiving Facility. On March 25, user submitted a corrective action plan (amended plan from 2015). Fairfax County accepted the plan with conditions on receipt of driver training documentation. This documentation was provided by the user in May.

ATTACHMENT IV — ENFORCEMENT ACTIONS (Continued)

6. Users subject to "other actions" (continued)

USER NO.	DATE OF ACTION	TYPE OF ACTION
Five Star Portables, Inc.	April 4, 2016	User was issued a written NOV on April 4 for discharging septage on the ground, instead of the designated sewer connection port at the Colvin Run Septage Receiving Facility. User submitted a corrective action plan on April 8. Fairfax County accepted the plan with conditions on receipt of driver training documentation. This documentation was not provided by the user. As a result, the user was prohibited from discharging septage at Fairfax County facilities until the documentation is provided.
Vienna Septic/AR-JON	May 2, 2016	User was issued a written NOV and Notice of Show Cause Hearing on May 2 for tampering with the Colvin Run Septage Receiving Facility access gate and using the facility after operating hours. User provided documentation of driver training conducted following the incident. Fairfax County accepted the documentation and reinstated user's privilege to use the Colvin Run Septage Receiving Facility on August 1.

7. Copy of newspaper listing of users in significant non-compliance (submit by March 31 as an addendum if listing is published after report submission) — NOT APPLICABLE

8. Users with violations but not subject to enforcement — NOT APPLICABLE

Attachment 4

Parts A and B with attachments for Loudoun Water SIUs discharging to Blue Plains

PART A
PRETREATMENT PERFORMANCE SUMMARY

I. General Information

Control Authority Name	Loudoun Water				
Address	44865 Loudoun Water Way				
City	Ashburn	State	Virginia	Zip+4	20147-6109
Contact Person	Frank Stokes Jr		Telephone No.	(571) 291 – 7834	
Contact Title	Manager Regulatory Programs		E-mail Address	fstokes@loudounwater.org	
NPDES No.	DC 0021199		Reporting Period	01-01-16 to 12-31-16	
Issuance Date	08/31/10		Expiration Date	09/30/15	
Total CIUs	1		Total MTCIUs	0	
Total SNIUs	0		Total NSCIUs	0	

CIUs - Categorical Industrial Users
MTCIUs – Middle Tier Categorical Industrial Users
SNIUs - Significant Non-categorical Industrial Users
NSCIUs – Non-significant Categorical Industrial Users

II. Compliance Monitoring Program

1.	No. of SIUs with current Control Documents	1
2.	No. of SIU Facilities Inspected	2
3.	No. of SIU Facilities Sampled	2
4.	No. of SIUs Submitting Self-Monitoring Reports	2

III. Significant Industrial User Compliance

1.	No. of SIUs Violating a Compliance Schedule / No. on a Schedule	0
2.	No. of SIUs in SNC for the July to December Period	0
3.	No. of SIUs in SNC At Any Time During the Calendar Year	0
4.	No. of SIUs in SNC That Were Also in SNC During the Previous Calendar Year	0
5.	No. of NSCIUs that violated any standards or requirements	0

IV. Enforcement Actions

1.	Notices/Letters of Violation Issued to SIUs	4
2.	Enforceable Compliance Schedules Issued to SIUs	0
3.	Civil/Criminal Suits Filed	0
4.	No. of SIUs from which Penalties have been Collected	0
5.	Other Actions (sewer bans, etc.)	0

I certify that the information contained in this report and attachments is complete and accurate to the best of my knowledge (see Part B.V of the instructions).

Frank Stokes Jr	Manager Regulatory Program
Name of Authorized Representative (Print)	Title (Print)
Frank L Stokes Jr.	2/8/2017
Signature of Authorized Representative	Date

Attachment for Section I

CATEGORICAL INDUSTRIAL USER (CIU)	CATEGORY
ViaSystems (TTM) 1200 Severn Way Sterling VA 20166-8904	Metal Finisher

Engineering Design Manufacturing Services is no longer discharging to DC Water as of September 30, 2016.

Attachment for Section II

SIGNIFICANT INDUSTRIAL USER (SIU)	CONTROL DOCUMENT ISSUANCE DATE	CONTROL DOCUMENT EFFECTIVE DATE	CONTROL DOCUMENT EXPIRATION DATE	CONDUCTED BY POTW DURING YEAR 2015		SELF MONITOR EVENTS CONDUCTED BY SIU	SELF MONITOR EVENTS REQ'D
				SAMPLING VISITS	INSPECTIONS		
EDMS	10/18/2016	11/01/2016	10/31/2021	1	1	12	12
Viasystems (TTM)	12/01/2015	11/1/2015	10/31/2020	1	1	12	12

Attachment for Section III

No compliance schedules or Significant Non-Compliance violations were issued during the 2016 calendar year. .

Attachment for Section IV

SIGNIFICANT INDUSTRIAL USER (SIU)	USER PERMIT # NO.	NUMBER OF NOTICES OF VIOLATIONS IN YEAR 2016
Engineering Design Manufacturing Services (EDMS)	009	4
(TTM) ViaSystems	005	0

ATTACHMENT FOR PART B – PRETREATMENT DEVELOPMENTS

I. **Summary of POTW Operations**

1. There were no NPDES permit violations at the BRWRF during the 2016 calendar year.

2. Sampling Data – Septic Sewage/Hauled Waste

    a. See the attached report from Pace Analytical for samples collected from the Septage Receiving Facility on June 2, 2016, which are representative of the domestic residential septage/sewage that is hauled and delivered to the Broad Run Water Reclamation Facility Septage Receiving Facility, or disposed of at the S-17 Alternative Disposal site conveying to the DC Water Blue Plains Wastewater Treatment Facility.
    b. Access control to the "Alternative S-17" disposal site, which conveys wastewater to the DC Water Blue Plains Wastewater Treatment Facility via the Potomac Interceptor, is accomplished as follows:
        i. Septage Hauler Discharge Permit
        ii. Pad-Lock Gate entry access.
        iii. S-17 Manhole Cover Lock-Bar w/ Padlock
        iv. Recorded Motion Activated Video Surveillance at the gate entrance.
        v. Septage Receiving Facility Manifest Forms (to be completed at both disposal sites)
        vi. Routine/Random Compliance Sampling Program

3. Trucked & Hauled Waste

Loudoun Water received and disposed of twelve (12) hauled waste loads of domestic sewage that were discharged and conveyed to the DC Water Blue Plains WWTP totaling 30,600 gallons during the 2016 calendar year.

Reporting Period	Total Amount Disposed (Gallons)	Total # of Disposals (Loads)
October – 2016	1800	2
November -2016	5300	2
December – 2016	23500	8
Totals	30,600	12

CY 2016 QUARTERLY TOTAL (GALLONS)				
Q1	Q2	Q3	Q4	YEAR TOTAL
0	0	0	30,600	30,600

Pretreatment Program Changes

The following categorical industrial user, which previously discharged to the DC Water Blue Plains Wastewater Treatment Facility, now flows to and is treated at the Broad Run Water Reclamation Facility. This change occurred on September 30, 2016 at the end of the third quarter reporting period.

- Engineering Design Manufacturing Services, a CIU

Miscellaneous Development

None

Septage Hauler Discharge Permits

Loudoun Water issued (15) fifteen Septage Hauler Discharge Permits authorizing disposal of residential domestic septage at its Septage Receiving Facility and the Alternative Disposal (S-17) site.

Attachment 5

Part A for the Town of Vienna

PART A
PRETREATMENT PERFORMANCE SUMMARY*

I. General Information

Control Authority Name	*Town of Vienna*				
Address	*127 Center Street South*				
City	*Vienna*	State	*VA*	Zip+4	*22180*
Contact Person	*David Donahue*		Telephone No.	*703-319-8610*	
Contact Title	*Deputy Director of Public Works*		E-mail Address	*david.donahue@viennava.gov*	
NPDES No.	*DC 0021199*		Reporting Period	*01-01-16 to 12-31-16*	
Issuance Date	*08/31/10*		Expiration Date	*09/30/15*	
Total CIUs	*0*		Total MTCIUs	*0*	
Total SNIUs	*0*		Total NSCIUs	*0*	

CIUs - Categorical Industrial Users
MTCIUs – Middle Tier Categorical Industrial Users
SNIUs - Significant Noncategorical Industrial Users
NSCIUs – Nonsignificant Categorical Industrial Users

II. Compliance Monitoring Program

1. No. of SIUs with current Control Documents..... 0
2. No. of SIU Facilities Inspected..... 0
3. No. of SIU Facilities Sampled..... 0
4. No. of SIUs Submitting Self-Monitoring Reports..... 0

III. Significant Industrial User Compliance

1. No. of SIUs Violating a Compliance Schedule / No. on a Schedule..... 0
2. No. of SIUs in SNC for the July to December Period..... 0
3. No. of SIUs in SNC At Any Time During the Calendar Year..... 0
4. No. of SIUs in SNC That Were Also in SNC During the Previous Calendar Year 0
5. No. of NSCIUs that violated any standards or requirements 0

IV. Enforcement Actions

1. Notices/Letters of Violation Issued to SIUs..... 0
2. Enforceable Compliance Schedules Issued to SIUs..... 0
3. Civil/Criminal Suits Filed..... 0
4. No. of SIUs from which Penalties have been Collected..... 0
5. Other Actions (sewer bans, etc.)..... 0

I certify that the information contained in this report and attachments is complete and accurate to the best of my knowledge (see Part B.V of the instructions).

David Donahue	Deputy Director of Public Works
Name of Authorized Representative (Print)	Title (Print)
Signature of Authorized Representative	3/22/2017
	Date

Attachment 6

Quarterly influent, effluent, and biosolids data (local limits), and Annual influent and biosolids data (priority pollutants)

Facility Name:	DC WATER AND SEWER AUTHORITY									
Facility ID:	DCP021199	**UNITS:**	MG/L							
Location:	**INFLUENT**			Date	Date	Date	Date	Date	Date	Date
	Pollutant	Goals	Frequency	2/29/2016	3/2/2016	5/10/2016	5/11/2016	5/12/2016	8/29/2016	8/31/2016
01002	ARSENIC- TOTAL	0.0262	4		0.00222	0.001460				<0.000433
00310	BOD- 5-DAY	585.156	0		197			180		
01027	CADMIUM- TOTAL	0.0056	4		<0.000492	0.000176				0.000171
01034	CHROMIUM- TOTAL	1.3889	1		0.00246	0.00221				0.00257
01042	COPPER- TOTAL	0.3043	4		0.0454	0.0503				0.0560
00720	CYANIDE- TOTAL	0.1167	4		0.00400	0.00516				0.00100
01051	LEAD- TOTAL	0.0994	4		0.00511	0.00305				0.00287
71900	MERCURY- TOTAL	0.0043	4	0.0000070			0.0000066		0.0000212	
01062	MOLYBDENUM- TOTAL	0.072	4		0.005	0.0097				0.0169
01067	NICKEL- TOTAL	0.1882	4		0.00846	0.00636				0.00586
00610	NITROGEN- AMMONIA	52.7869	0		21.9			21.5		
04166	PCB- TOTAL	Monitor	4		<0.00037	<0.00039				<0.00035
00665	PHOSPHORUS- TOTAL	11.1498	0		4.39			3.26		
01147	SELENIUM- TOTAL	0.0574	1		0.00097	0.00070				0.00049
01077	SILVER- TOTAL	0.1047	4		0.000504	0.00103				0.00127
00530	SOLIDS- TOTAL SUSPENDED	690.567	0		224			197		
01092	ZINC- TOTAL	0.381	4		0.1062	0.1084				0.1280

Facility Name:	DC WATER AND SEWER AUTHORITY							
Facility ID:	DCP021199							
Location:	**INFLUENT**	Date	Date	Date	Date	Date	Date	Entry Count
	Pollutant	9/1/2016	11/7/2016	11/8/2016	11/9/2016		DTfl	68
01002	ARSENIC- TOTAL				<0.000902			4
00310	BOD- 5-DAY	265			270			4
01027	CADMIUM- TOTAL				<0.000249			4
01034	CHROMIUM- TOTAL				0.00196			4
01042	COPPER- TOTAL				0.0580			4
00720	CYANIDE- TOTAL			0.00100				4
01051	LEAD- TOTAL				0.00254			4
71900	MERCURY- TOTAL		0.0000221					4
01062	MOLYBDENUM- TOTAL				0.0101			4
01067	NICKEL- TOTAL				0.00554			4
00610	NITROGEN- AMMONIA	29.7			31			4
04166	PCB- TOTAL				<0.00039			4
00665	PHOSPHORUS- TOTAL	4.60			4.09			4
01147	SELENIUM- TOTAL				0.00048			4
01077	SILVER- TOTAL				0.00161			4
00530	SOLIDS- TOTAL SUSPENDED	288			353			4
01092	ZINC- TOTAL				0.1236			4
								0
								0
								0
								0
								0
								0
								0
								0
								0
								0
								0
								0
								0
								0
								0
								0

DC WATER AND SEWER AUTHORITY									
DCP021199	**UNITS:**	MG/L							
EFFLUENT			Date	Date	Date	Date	Date	Date	Date
Pollutant	Goals	Frequency	1/7/2016	3/2/2016	3/3/2016	5/10/2016	5/12/2016	7/7/2016	8/31/2016
ARSENIC- TOTAL	0.8408	4		<0.00032		0.00063			0.0027
BOD- 5-DAY	No Goal	0							
CADMIUM- TOTAL	0.0028	4		<0.00012		<0.00012			<0.00012
CHROMIUM- TOTAL	0.95	0		<0.00029		0.00032			0.00053
COPPER- TOTAL	0.0443	4		0.0044		0.0033			0.0071
CYANIDE- TOTAL	0.0397	4		0.007		0.008			0.0049
LEAD- TOTAL	0.0455	4		<0.00011		<0.00011			<0.00011
MERCURY- TOTAL	0.0035	4	0.00000078		0.00000095		0.00000065	0.00000115	
MOLYBDENUM- TOTAL	Monitor	4		0.0042		0.0064			0.01
NICKEL- TOTAL	0.49	4		0.005		0.006			0.0096
NITROGEN- AMMONIA	No Goal	0							
PCB- TOTAL	Monitor	4		<0.00031		<0.00032			<0.00035
PHOSPHORUS- TOTAL	No Goal	0							
SELENIUM- TOTAL	0.0382	0		0.00032		0.00029			<0.00015
SILVER- TOTAL	0.0175	4		<0.00003		<0.00003			<0.00003
SOLIDS- TOTAL SUSPENDED	No Goal	0							
ZINC- TOTAL	0.3741	4		0.017		0.0096			0.0069

DC WATER AND SEWER AUTHORITY

DCP021199

EFFLUENT	Date	Date	Date	Date	Date		Entry Count
Pollutant	9/1/2016	11/3/2016	11/8/2016			DTfl	53 Total
ARSENIC- TOTAL			0.00057				4
BOD- 5-DAY							0
CADMIUM- TOTAL			<0.00012				4
CHROMIUM- TOTAL			<0.00029				4
COPPER- TOTAL			0.0024				4
CYANIDE- TOTAL			0.0048				4
LEAD- TOTAL			<0.00011				4
MERCURY- TOTAL	0.0000019	0.00000125					5
MOLYBDENUM- TOTAL			0.0068				4
NICKEL- TOTAL			0.0054				4
NITROGEN- AMMONIA							0
PCB- TOTAL			<0.00035				4
PHOSPHORUS- TOTAL							0
SELENIUM- TOTAL			0.00024				4
SILVER- TOTAL			<0.00003				4
SOLIDS- TOTAL SUSPENDED							0
ZINC- TOTAL			0.0073				4
							0
							0
							0
							0
							0
							0
							0
							0
							0
							0
							0
							0
							0
							0
							0
							0
							0
							0

Facility Name:	DC WATER AND SEWER AUTHORITY									
Facility ID:	DCP021199	**UNITS:**	MG/KG							
Location:	**SLUDGE**		DRY WT	Date	Date	Date	Date	Date	Date	Date
	Pollutant	Goals	Frequency	1/12/2016	1/19/2016	1/26/2016	2/2/2016	2/9/2016	2/16/2016	2/23/2016
01002	ARSENIC- TOTAL	41	4	4.6	4.5	3.8	4.6	5.1	6.5	4.9
00310	BOD- 5-DAY	No Goal	0							
01027	CADMIUM- TOTAL	25	4	2.1	2.1	2	2.6	2.2	3.2	2.3
01034	CHROMIUM- TOTAL	Monitor	1	55.1	56.8	51.2	61.5	59.9	75.1	54
01042	COPPER- TOTAL	1000	4	392	423	537	537	427	575	391
00720	CYANIDE- TOTAL	Monitor	4							
01051	LEAD- TOTAL	300	4	32.3	34.2	38	34.4	42.8	50.2	36.5
71900	MERCURY- TOTAL	10	4	0.66	0.95	0.65	1.1	0.83	0.73	0.66
01062	MOLYBDENUM- TOTAL	75	4	15	15.1	15.2	17.3	17.8	20.6	13.9
01067	NICKEL- TOTAL	200	4	24.2	26.8	20.2	26.8	26.5	36.9	27.2
00610	NITROGEN- AMMONIA	No Goal	0	7350	8950	7770	6990	5630	7740	6930
04166	PCB- TOTAL	4	4	<0.15	<0.15	<0.10	<0.15	<0.14	<0.10	<0.24
00665	PHOSPHORUS- TOTAL	No Goal	0	32400	37400	39100	34400	35500	32700	28300
01147	SELENIUM- TOTAL	100	1	5.5	4.6	4.3	5.6	5.4	5.9	4.3
01077	SILVER- TOTAL	Monitor	4	7.5	8.7	7.6	9.3	8.6	11.4	8.5
00530	SOLIDS- TOTAL SUSPENDED	No Goal	0							
01092	ZINC- TOTAL	2500	4	848	709	579	821	806	1030	739

Facility Name:	DC WATER AND SEWER AUTHORITY									
Facility ID:	DCP021199									
Location:	**SLUDGE**	Date		Date	Date	Date	Date	Date	Date	Date
	Pollutant	3/1/2016	3/3/2016	3/8/2016	3/15/2016	3/22/2016	3/29/2016	4/5/2016	4/12/2016	4/19/2016
01002	ARSENIC- TOTAL	5.6		7.3	4.5	3.3	4.6	4	5.8	4.4
00310	BOD- 5-DAY									
01027	CADMIUM- TOTAL	2		2.5	1.7	1.3	2	1.9	2.9	2
01034	CHROMIUM- TOTAL	53.6		59.1	41.8	31.9	46.4	47.2	68.2	59.1
01042	COPPER- TOTAL	369		397	302	256	362	345	478	380
00720	CYANIDE- TOTAL		1.8							
01051	LEAD- TOTAL	47.6		48.9	34.6	22.1	28.1	30.9	44.8	29
71900	MERCURY- TOTAL	0.94		0.76	0.7	0.84	0.72	0.52	0.77	0.63
01062	MOLYBDENUM- TOTAL	12		14.5	9.7	7.9	10.8	10.8	17.4	12.7
01067	NICKEL- TOTAL	29		34.4	22.2	18.2	23	23.1	34.9	26
00610	NITROGEN- AMMONIA	6540		5940	7200	7860	7430	9360	13600	7440
04166	PCB- TOTAL	<0.25		<0.25	<0.15	<0.10	<0.26	<0.30	<0.23	<0.22
00665	PHOSPHORUS- TOTAL	24800		29800	27400	30500	32400	36400	32900	34400
01147	SELENIUM- TOTAL	3.6		5.8	3.7	3.1	4.6	4.5	6	4.6
01077	SILVER- TOTAL	7.9		7.5	5.9	4.4	6.4	6.7	10.4	7.1
00530	SOLIDS- TOTAL SUSPENDED									
01092	ZINC- TOTAL	713		773	567	487	721	569	874	690

Facility Name:	DC WATER AND SEWER AUTHORITY									
Facility ID:	DCP021199									
Location:	**SLUDGE**	Date	Date	Date	Date	Date	Date	Date	Date	Date
	Pollutant	4/26/2016	5/3/2016	5/10/2016	5/17/2016	5/24/2016	5/31/2016	6/7/2016	6/14/2016	6/21/2016
01002	ARSENIC- TOTAL	5	4.9	5.8	6.4	6.3	5.3	5.5	4.6	5
00310	BOD- 5-DAY									
01027	CADMIUM- TOTAL	2.3	2.3	2.3	2.3	2	2.2	1.8	1.7	1.9
01034	CHROMIUM- TOTAL	64.3	61	65.4	81.4	67	59.1	60.3	49.9	58.6
01042	COPPER- TOTAL	409	387	490	493	467	430	450	439	524
00720	CYANIDE- TOTAL			0.64						
01051	LEAD- TOTAL	28.5	28.9	35.8	42.3	33.2	29.5	46.2	28.3	53.6
71900	MERCURY- TOTAL	0.77	0.6	0.63	1.6	0.57	0.76	0.78	0.68	1
01062	MOLYBDENUM- TOTAL	14.9	17.2	16.8	19.7	17.7	16.7	14.3	13.2	16.4
01067	NICKEL- TOTAL	26.8	24.4	30.5	34	30.3	24.1	24	20.9	23.6
00610	NITROGEN- AMMONIA	9130	8190	7650	6500	7870	7910	6310	7360	8490
04166	PCB- TOTAL	<0.10	<0.21	<0.22	<0.26	<0.20	<0.23	<0.16	<0.22	<0.25
00665	PHOSPHORUS- TOTAL	34700	26000	29500	40500	38000	6030	33200	38100	34200
01147	SELENIUM- TOTAL	4.9	5.6	5.9	6.4	8	4.8	6.2	4.2	5.2
01077	SILVER- TOTAL	9.2	8.7	8.6	10.8	9.8	10	9.1	7.9	9.3
00530	SOLIDS- TOTAL SUSPENDED									
01092	ZINC- TOTAL	754	704	812	762	807	696	710	614	730

Facility Name:	DC WATER AND SEWER AUTHORITY									
Facility ID:	DCP021199									
Location:	**SLUDGE**	Date	Date	Date	Date	Date	Date		Date	Date
	Pollutant	6/28/2016	7/5/2016	7/12/2016	7/26/2016	8/2/2016	8/9/2016	8/31/2016	9/6/2016	9/13/2016
01002	ARSENIC- TOTAL	5.3	5.5	4.5	5.3	4	5.5		4.1	4.4
00310	BOD- 5-DAY									
01027	CADMIUM- TOTAL	2.1	1.8	1.9	2	1.9	2.1		2	2.1
01034	CHROMIUM- TOTAL	64.7	56.5	58.5	51.2	45.2	61.9		56.4	57.8
01042	COPPER- TOTAL	525	533	491	473	386	469		434	434
00720	CYANIDE- TOTAL							1.2		
01051	LEAD- TOTAL	37.5	42.1	33.6	33.3	33	37.9		34.5	27
71900	MERCURY- TOTAL	1.4	0.61	0.91	0.54	0.58	0.76		0.5	0.67
01062	MOLYBDENUM- TOTAL	18.5	17.5	16.9	16.9	16.1	19.3		20.2	23.1
01067	NICKEL- TOTAL	25.2	23.7	23	23.4	20.2	26.2		23.2	24
00610	NITROGEN- AMMONIA	5350	8140	5960	8430	7580	8070		9430	6510
04166	PCB- TOTAL	<0.098	<0.26	<0.24	<0.27	<0.25	<0.23		<0.023	<0.0095
00665	PHOSPHORUS- TOTAL	37200	36500	35300	33800	31000	31100		31800	21700
01147	SELENIUM- TOTAL	5	5.3	4.4	7.2	3.3	4.8		5	3.9
01077	SILVER- TOTAL	9.3	7.8	8.3	8.2	7.5	8.3		8.6	9.4
00530	SOLIDS- TOTAL SUSPENDED									
01092	ZINC- TOTAL	688	714	648	881	680	790		767	783

Facility Name:	DC WATER AND SEWER AUTHORITY							
Facility ID:	DCP021199							
Location:	**SLUDGE**	Date	Date	Date	Date	Date	Date	Entry Count
	Pollutant	10/4/2016	10/11/2016	11/1/2016	11/8/2016	12/6/2016	12/13/2016	536
01002	ARSENIC- TOTAL	4.5	5	4	2.5	3.9	2.7	38
00310	BOD- 5-DAY							0
01027	CADMIUM- TOTAL	2.2	2.1	2.2	1.3	2	1.5	38
01034	CHROMIUM- TOTAL	67.9	66.5	70.4	41.9	68.3	38.6	38
01042	COPPER- TOTAL	472	491	461	245	469	275	38
00720	CYANIDE- TOTAL				0.82			4
01051	LEAD- TOTAL	38.9	27.5	29.4	14.9	22.8	16.2	38
71900	MERCURY- TOTAL	0.67	0.85	0.47	0.68	0.64	0.64	38
01062	MOLYBDENUM- TOTAL	25.7	23.9	24.3	13.9	23	13.9	38
01067	NICKEL- TOTAL	25.8	24.9	24.4	13.9	22.4	13.5	38
00610	NITROGEN- AMMONIA	6300	5830	8930	6930	6770	5630	38
04166	PCB- TOTAL	<0.015	<0.015	<0.021	<0.024	<0.025	<0.023	38
00665	PHOSPHORUS- TOTAL	31400	37500	33100	32700	35300	34700	38
01147	SELENIUM- TOTAL	4.8	3.5	4.7	<2.6	4.8	3.2	38
01077	SILVER- TOTAL	8.8	6.9	6.8	4.4	9.4	6	38
00530	SOLIDS- TOTAL SUSPENDED							0
01092	ZINC- TOTAL	832	731	707	408	828	477	38
								0
								0
								0
								0
								0
								0
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								0
								0
								0
								0

Influent Priority Pollutant Data

ALS Environmental

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

May 25, 2016

Ms. Elaine Wilson
DC WASA
5000 Overlook Avenue, S.W.
Washington, DC 20032

Certificate of Analysis

Project Name:	Wastewater (WW)	Workorder:	2142648
Purchase Order:	160149	Workorder ID:	WWInfluent Annual

Dear Ms. Wilson:

Enclosed are the analytical results for samples received by the laboratory on Tuesday, May 10, 2016.

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 Ms. Amy K Borden (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.

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

CC: Mr. Ryan Maisano , Mr. Mark Ramirez , Accounts Payable-4th Floor

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

Amy K Borden

Ms. Amy K Borden
Project Coordinator

ALS Environmental

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SAMPLE SUMMARY

Workorder: 2142648 WW/Influent Annual

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
2142648001	16-Influent A-Potomac CS-Grab	Waste Water	5/10/2016 07:30	5/10/2016 20:20	Collected by Client
2142648002	16-Influent A-Potomac CS-Comp	Waste Water	5/10/2016 09:00	5/10/2016 20:20	Collected by Client
2142648003	16-Influent B-Potomac SS-Grab	Waste Water	5/10/2016 08:10	5/10/2016 20:20	Collected by Client
2142648004	16-Influent B-Potomac SS-Comp	Waste Water	5/10/2016 09:00	5/10/2016 20:20	Collected by Client
2142648005	16-Influent C-Bolling-Grab	Waste Water	5/10/2016 08:40	5/10/2016 20:20	Collected by Client
2142648006	16-Influent C-Bolling-Comp	Waste Water	5/10/2016 09:25	5/10/2016 20:20	Collected by Client

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SAMPLE SUMMARY

Workorder: 2142648 WW/Influent Annual

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: 2142648 WW/Influent Annual

Workorder Comments

See attached subcontracted asbestos results from EMSL. SSL 05/20/16

Sample Comments

Lab ID: 2142648001 **Sample ID:** 16-Influent A-Potomac CS-Grab **Sample Type:** SAMPLE

The reporting limits for GCMS volatile analytes were raised due to the dilution of the sample caused by matrix.

Lab ID: 2142648002 **Sample ID:** 16-Influent A-Potomac CS-Comp **Sample Type:** SAMPLE

Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 15% of the initial calibration for the 608 analysis. Multiple compounds were biased low in the bracketing CCV. Data for these compounds may have been impacted.

Lab ID: 2142648003 **Sample ID:** 16-Influent B-Potomac SS-Grab **Sample Type:** SAMPLE

The reporting limits for GCMS volatile analytes were raised due to the dilution of the sample caused by matrix.

Lab ID: 2142648004 **Sample ID:** 16-Influent B-Potomac SS-Comp **Sample Type:** SAMPLE

One or more of the matrix spike compounds for the EPA 625 analysis were recovered outside of the quality control limits due to sample matrix interferences. The LCS sample associated to this sample was within control limits.
Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 15% of the initial calibration for the 608 analysis. Multiple compounds were biased low in the bracketing CCV. Data for these compounds may have been impacted.

Lab ID: 2142648005 **Sample ID:** 16-Influent C-Bolling-Grab **Sample Type:** SAMPLE

The reporting limits for GCMS volatile analytes were raised due to the dilution of the sample caused by matrix.

Lab ID: 2142648006 **Sample ID:** 16-Influent C-Bolling-Comp **Sample Type:** SAMPLE

Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 15% of the initial calibration for the 608 analysis. Multiple compounds were biased low in the bracketing CCV. Data for these compounds may have been impacted.

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ANALYTICAL RESULTS

Workorder: 2142648 WW/Influent Annual

Lab ID: **2142648001** Date Collected: 5/10/2016 07:30 Matrix: Waste Water

Sample ID: **16-Influent A-Potomac CS-Grab** Date Received: 5/10/2016 20:20

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Acrolein	ND		ug/L	50.0	9.5	EPA 624		5/11/16 18:42	SYB	D
Acrylonitrile	ND		ug/L	25.0	6.0	EPA 624		5/11/16 18:42	SYB	D
Benzene	ND		ug/L	5.0	1.2	EPA 624		5/11/16 18:42	SYB	D
Bromodichloromethane	ND		ug/L	5.0	1.4	EPA 624		5/11/16 18:42	SYB	D
Bromoform	ND		ug/L	5.0	2.0	EPA 624		5/11/16 18:42	SYB	D
Bromomethane	ND		ug/L	5.0	2.0	EPA 624		5/11/16 18:42	SYB	D
Carbon Tetrachloride	ND		ug/L	5.0	1.6	EPA 624		5/11/16 18:42	SYB	D
Chlorobenzene	ND		ug/L	5.0	0.95	EPA 624		5/11/16 18:42	SYB	D
Chlorodibromomethane	ND		ug/L	5.0	2.3	EPA 624		5/11/16 18:42	SYB	D
Chloroethane	ND		ug/L	5.0	1.7	EPA 624		5/11/16 18:42	SYB	D
2-Chloroethylvinyl ether	ND		ug/L	10.0	1.9	EPA 624		5/11/16 18:42	SYB	D
Chloroform	6.0		ug/L	5.0	1.1	EPA 624		5/11/16 18:42	SYB	D
Chloromethane	ND		ug/L	5.0	1.6	EPA 624		5/11/16 18:42	SYB	D
1,2-Dichlorobenzene	ND		ug/L	5.0	1.9	EPA 624		5/11/16 18:42	SYB	D
1,3-Dichlorobenzene	ND		ug/L	5.0	1.3	EPA 624		5/11/16 18:42	SYB	D
1,4-Dichlorobenzene	ND		ug/L	5.0	1.4	EPA 624		5/11/16 18:42	SYB	D
1,1-Dichloroethane	ND		ug/L	5.0	1.4	EPA 624		5/11/16 18:42	SYB	D
1,2-Dichloroethane	ND		ug/L	5.0	1.6	EPA 624		5/11/16 18:42	SYB	D
1,1-Dichloroethene	ND		ug/L	5.0	1.5	EPA 624		5/11/16 18:42	SYB	D
trans-1,2-Dichloroethene	ND		ug/L	5.0	1.3	EPA 624		5/11/16 18:42	SYB	D
1,2-Dichloropropane	ND		ug/L	5.0	1.2	EPA 624		5/11/16 18:42	SYB	D
cis-1,3-Dichloropropene	ND		ug/L	5.0	1.6	EPA 624		5/11/16 18:42	SYB	D
trans-1,3-Dichloropropene	ND		ug/L	5.0	1.5	EPA 624		5/11/16 18:42	SYB	D
1,3-Dichloropropene, Total	ND		ug/L	10.0	2.4	EPA 624		5/11/16 18:42	SYB	D
Ethylbenzene	ND		ug/L	5.0	1.7	EPA 624		5/11/16 18:42	SYB	D
Methylene Chloride	ND		ug/L	5.0	2.3	EPA 624		5/11/16 18:42	SYB	D
1,1,2,2-Tetrachloroethane	ND		ug/L	5.0	1.7	EPA 624		5/11/16 18:42	SYB	D
Tetrachloroethene	5.4		ug/L	5.0	1.8	EPA 624		5/11/16 18:42	SYB	D
Toluene	1.6J	J	ug/L	5.0	1.2	EPA 624		5/11/16 18:42	SYB	D
1,1,1-Trichloroethane	ND		ug/L	5.0	1.1	EPA 624		5/11/16 18:42	SYB	D
1,1,2-Trichloroethane	ND		ug/L	5.0	1.7	EPA 624		5/11/16 18:42	SYB	D
Trichloroethene	ND		ug/L	5.0	1.7	EPA 624		5/11/16 18:42	SYB	D
Trichlorofluoromethane	ND		ug/L	5.0	1.2	EPA 624		5/11/16 18:42	SYB	D
Vinyl Chloride	ND		ug/L	5.0	1.5	EPA 624		5/11/16 18:42	SYB	D

Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	92.1		%	72 - 142	EPA 624		5/11/16 18:42	SYB	D

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ANALYTICAL RESULTS

Workorder: 2142648 WW/Influent Annual

Lab ID: **2142648001** Date Collected: 5/10/2016 07:30 Matrix: Waste Water

Sample ID: **16-Influent A-Potomac CS-Grab** Date Received: 5/10/2016 20:20

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	Cntr
4-Bromofluorobenzene (S)	84.6		%	73 - 119		EPA 624		5/11/16 18:42	SYB	D
Dibromofluoromethane (S)	80.1		%	74 - 132		EPA 624		5/11/16 18:42	SYB	D
Toluene-d8 (S)	88.1		%	75 - 133		EPA 624		5/11/16 18:42	SYB	D
WET CHEMISTRY										
Cyanide, Total	0.0040J	J	mg/L	0.0050	0.00058	EPA 335.4	5/13/16 MMA	5/15/16 15:22	LJF	A
Oil/Grease Hexane Extractable	22.1		mg/L	2.3	0.4	EPA 1664B		5/12/16 16:00	AT	B
Oil/Grease Silica Gel Treated	ND		mg/L	2.3	0.9	EPA 1664B		5/12/16 16:00	AT	B
Phenolics	0.026		mg/L	0.005	0.004	EPA 420.4	5/11/16 JLG	5/17/16 12:38	JLG	F

Amy K Borden

Ms. Amy K Borden
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 2142648 WW/Influent Annual

Lab ID: **2142648002** Date Collected: 5/10/2016 09:00 Matrix: Waste Water

Sample ID: **16-Influent A-Potomac CS-Comp** Date Received: 5/10/2016 20:20

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
SEMIVOLATILES											
Acenaphthene	ND		ug/L	1.7	0.17	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
Acenaphthylene	ND		ug/L	1.7	0.21	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
Anthracene	ND		ug/L	1.7	0.17	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
Benzidine	ND		ug/L	8.9	3.4	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
Benzo(a)anthracene	ND		ug/L	1.7	0.14	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
Benzo(a)pyrene	ND		ug/L	1.7	0.24	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
Benzo(b)fluoranthene	ND		ug/L	1.7	0.12	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
Benzo(g,h,i)perylene	ND		ug/L	1.7	0.24	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
Benzo(k)fluoranthene	ND		ug/L	1.7	0.21	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
4-Bromophenyl-phenylether	ND		ug/L	3.3	0.19	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
Butylbenzylphthalate	ND		ug/L	3.3	0.12	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
4-Chloro-3-methylphenol	ND		ug/L	3.3	0.21	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
bis(2-Chloroethoxy)methane	ND		ug/L	3.3	0.23	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
bis(2-Chloroethyl)ether	ND		ug/L	3.3	0.19	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
bis(2-Chloroisopropyl)ether	ND		ug/L	3.3	0.31	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
2-Chloronaphthalene	ND		ug/L	3.3	0.20	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
2-Chlorophenol	ND		ug/L	3.3	0.37	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
4-Chlorophenyl-phenylether	ND		ug/L	3.3	0.16	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
Chrysene	ND		ug/L	1.7	0.13	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
Di-n-Butylphthalate	1.3J	J	ug/L	3.3	0.16	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
Di-n-Octylphthalate	ND		ug/L	3.3	0.11	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
Dibenzo(a,h)anthracene	ND		ug/L	1.7	0.23	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
3,3-Dichlorobenzidine	ND		ug/L	3.3	0.53	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
2,4-Dichlorophenol	ND		ug/L	3.3	0.36	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
Diethylphthalate	2.9J	J	ug/L	3.3	0.20	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
2,4-Dimethylphenol	ND		ug/L	3.3	0.23	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
Dimethylphthalate	ND		ug/L	3.3	0.16	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
2,4-Dinitrophenol	ND		ug/L	6.7	2.0	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
2,4-Dinitrotoluene	ND		ug/L	3.3	0.13	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
2,6-Dinitrotoluene	ND		ug/L	3.3	0.23	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
1,2-Diphenylhydrazine	ND		ug/L	3.3	0.29	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
bis(2-Ethylhexyl)phthalate	10.9		ug/L	3.3	0.24	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
Fluoranthene	ND		ug/L	1.7	0.19	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
Fluorene	ND		ug/L	1.7	0.22	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
Hexachlorobenzene	ND		ug/L	3.3	0.26	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
Hexachlorobutadiene	ND		ug/L	3.3	0.21	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
Hexachlorocyclopentadiene	ND		ug/L	3.3	0.19	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B

ANALYTICAL RESULTS

Workorder: 2142648 WW/Influent Annual

Lab ID: **2142648002** Date Collected: 5/10/2016 09:00 Matrix: Waste Water

Sample ID: **16-Influent A-Potomac CS-Comp** Date Received: 5/10/2016 20:20

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Hexachloroethane	ND		ug/L	3.3	0.33	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
Indeno(1,2,3-cd)pyrene	ND		ug/L	1.7	0.11	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
Isophorone	ND		ug/L	3.3	0.17	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
2-Methyl-4,6-dinitrophenol	ND		ug/L	6.7	0.37	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
Naphthalene	ND		ug/L	1.7	0.13	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
Nitrobenzene	ND		ug/L	3.3	0.31	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
2-Nitrophenol	ND		ug/L	3.3	0.50	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
4-Nitrophenol	ND		ug/L	3.3	1.2	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
N-Nitrosodimethylamine	ND		ug/L	3.3	0.71	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
N-Nitroso-di-n-propylamine	ND		ug/L	3.3	0.27	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
N-Nitrosodiphenylamine	ND		ug/L	3.3	0.20	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
Pentachlorophenol	ND		ug/L	6.7	1.2	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
Phenanthrene	ND		ug/L	1.7	0.14	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
Phenol	2.9J	J	ug/L	8.9	0.26	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
Pyrene	ND		ug/L	1.7	0.18	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
1,2,4-Trichlorobenzene	ND		ug/L	3.3	0.14	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
2,4,6-Trichlorophenol	ND		ug/L	3.3	0.63	EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	85.2		%	47 - 128		EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
2-Fluorobiphenyl (S)	74.1		%	52 - 118		EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
2-Fluorophenol (S)	47.4		%	20 - 87		EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
Nitrobenzene-d5 (S)	77.4		%	27 - 139		EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
Phenol-d5 (S)	33.3		%	10 - 81		EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
Terphenyl-d14 (S)	75.9		%	46 - 133		EPA 625	5/11/16	CAC	5/12/16 03:43	DHF	B
Pesticides and PCBs											
Aldrin	ND		ug/L	0.024	0.0060	EPA 608	5/11/16	JSR	5/13/16 22:44	RWS	D
alpha-BHC	ND		ug/L	0.024	0.0024	EPA 608	5/11/16	JSR	5/13/16 22:44	RWS	D
beta-BHC	ND		ug/L	0.024	0.0095	EPA 608	5/11/16	JSR	5/13/16 22:44	RWS	D
delta-BHC	ND		ug/L	0.024	0.0036	EPA 608	5/11/16	JSR	5/13/16 22:44	RWS	D
gamma-BHC	ND		ug/L	0.024	0.0036	EPA 608	5/11/16	JSR	5/13/16 22:44	RWS	D
Chlordane	ND		ug/L	0.60	0.042	EPA 608	5/11/16	JSR	5/13/16 22:44	RWS	D
4,4'-DDD	ND		ug/L	0.024	0.0083	EPA 608	5/11/16	JSR	5/13/16 22:44	RWS	D
4,4'-DDE	ND		ug/L	0.024	0.0083	EPA 608	5/11/16	JSR	5/13/16 22:44	RWS	D
4,4'-DDT	ND		ug/L	0.024	0.0071	EPA 608	5/11/16	JSR	5/13/16 22:44	RWS	D
Dieldrin	ND		ug/L	0.024	0.0036	EPA 608	5/11/16	JSR	5/13/16 22:44	RWS	D
Endosulfan I	ND		ug/L	0.024	0.0036	EPA 608	5/11/16	JSR	5/13/16 22:44	RWS	D
Endosulfan II	ND		ug/L	0.024	0.0071	EPA 608	5/11/16	JSR	5/13/16 22:44	RWS	D

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

ANALYTICAL RESULTS

Workorder: 2142648 WW/Influent Annual

Lab ID: **2142648002** Date Collected: 5/10/2016 09:00 Matrix: Waste Water

Sample ID: **16-Influent A-Potomac CS-Comp** Date Received: 5/10/2016 20:20

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Endosulfan Sulfate	ND		ug/L	0.024	0.0048	EPA 608	5/11/16	JSR	5/13/16 22:44	RWS	D
Endrin	ND		ug/L	0.024	0.0095	EPA 608	5/11/16	JSR	5/13/16 22:44	RWS	D
Endrin Aldehyde	ND		ug/L	0.024	0.012	EPA 608	5/11/16	JSR	5/13/16 22:44	RWS	D
Heptachlor	ND		ug/L	0.024	0.0036	EPA 608	5/11/16	JSR	5/13/16 22:44	RWS	D
Heptachlor Epoxide	ND		ug/L	0.024	0.0048	EPA 608	5/11/16	JSR	5/13/16 22:44	RWS	D
Mirex	ND		ug/L	0.024	0.0048	EPA 608	5/11/16	JSR	5/13/16 22:44	RWS	D
Toxaphene	ND		ug/L	1.2	0.23	EPA 608	5/11/16	JSR	5/13/16 22:44	RWS	D
Aroclor-1016	ND		ug/L	0.60	0.38	EPA 608	5/11/16	JSR	5/13/16 22:44	RWS	D
Aroclor-1221	ND		ug/L	0.60	0.39	EPA 608	5/11/16	JSR	5/13/16 22:44	RWS	D
Aroclor-1232	ND		ug/L	0.60	0.27	EPA 608	5/11/16	JSR	5/13/16 22:44	RWS	D
Aroclor-1242	ND		ug/L	0.60	0.29	EPA 608	5/11/16	JSR	5/13/16 22:44	RWS	D
Aroclor-1248	ND		ug/L	0.60	0.18	EPA 608	5/11/16	JSR	5/13/16 22:44	RWS	D
Aroclor-1254	ND		ug/L	0.60	0.17	EPA 608	5/11/16	JSR	5/13/16 22:44	RWS	D
Aroclor-1260	ND		ug/L	0.60	0.31	EPA 608	5/11/16	JSR	5/13/16 22:44	RWS	D
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
Decachlorobiphenyls (S)	47.5		%	30 - 150		EPA 608	5/11/16	JSR	5/13/16 22:44	RWS	D
Tetrachloro-m-xylene (S)	55		%	36 - 112		EPA 608	5/11/16	JSR	5/13/16 22:44	RWS	D
WET CHEMISTRY											
Chloride	114		mg/L	5.0	0.31	EPA 300.0			5/11/16 18:33	JP	G
METALS											
Antimony, Total	0.00059J	J	mg/L	0.0010	0.00010	EPA 200.8	5/12/16	JPS	5/16/16 07:37	ZMC	A2
Arsenic, Total	0.0013J	J	mg/L	0.0015	0.00032	EPA 200.8	5/12/16	JPS	5/16/16 07:37	ZMC	A2
Beryllium, Total	0.000083 J	J	mg/L	0.00050	0.00004 0	EPA 200.8	5/12/16	JPS	5/16/16 07:37	ZMC	A2
Cadmium, Total	0.00015J	J	mg/L	0.00050	0.00012	EPA 200.8	5/12/16	JPS	5/16/16 07:37	ZMC	A2
Chromium, Total	0.0017		mg/L	0.0010	0.00029	EPA 200.8	5/12/16	JPS	5/16/16 07:37	ZMC	A2
Copper, Total	0.048		mg/L	0.0025	0.00038	EPA 200.8	5/12/16	JPS	5/16/16 07:37	ZMC	A2
Lead, Total	0.0025		mg/L	0.0010	0.00011	EPA 200.8	5/12/16	JPS	5/16/16 07:37	ZMC	A2
Molybdenum, Total	0.0079		mg/L	0.0010	0.00004 0	EPA 200.8	5/12/16	JPS	5/16/16 07:37	ZMC	A2
Nickel, Total	0.0064		mg/L	0.0025	0.00012	EPA 200.8	5/12/16	JPS	5/16/16 07:37	ZMC	A2
Selenium, Total	0.00080J	J	mg/L	0.0020	0.00015	EPA 200.8	5/12/16	JPS	5/16/16 07:37	ZMC	A2
Silver, Total	0.0011		mg/L	0.0010	0.00003 0	EPA 200.8	5/12/16	JPS	5/16/16 07:37	ZMC	A2
Thallium, Total	ND		mg/L	0.00050	0.00003 0	EPA 200.8	5/12/16	JPS	5/16/16 07:37	ZMC	A2
Zinc, Total	0.11		mg/L	0.0025	0.00057	EPA 200.8	5/12/16	JPS	5/16/16 07:37	ZMC	A2
Sub'd-EMSL Labs											

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ANALYTICAL RESULTS

Workorder: 2142648 WW/Influent Annual

Lab ID: **2142648002** Date Collected: 5/10/2016 09:00 Matrix: Waste Water

Sample ID: **16-Influent A-Potomac CS-Comp** Date Received: 5/10/2016 20:20

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	Cntr
Asbestos	See Attached					Subcontract		5/20/16 00:00	SUB	H

Amy K Borden

Ms. Amy K Borden
Project Coordinator

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ANALYTICAL RESULTS

Workorder: 2142648 WW/Influent Annual

Lab ID: **2142648003** Date Collected: 5/10/2016 08:10 Matrix: Waste Water

Sample ID: **16-Influent B-Potomac SS-Grab** Date Received: 5/10/2016 20:20

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Acrolein	ND		ug/L	50.0	9.5	EPA 624		5/11/16 19:04	SYB	D
Acrylonitrile	ND		ug/L	25.0	6.0	EPA 624		5/11/16 19:04	SYB	D
Benzene	ND		ug/L	5.0	1.2	EPA 624		5/11/16 19:04	SYB	D
Bromodichloromethane	ND		ug/L	5.0	1.4	EPA 624		5/11/16 19:04	SYB	D
Bromoform	ND		ug/L	5.0	2.0	EPA 624		5/11/16 19:04	SYB	D
Bromomethane	ND		ug/L	5.0	2.0	EPA 624		5/11/16 19:04	SYB	D
Carbon Tetrachloride	ND		ug/L	5.0	1.6	EPA 624		5/11/16 19:04	SYB	D
Chlorobenzene	ND		ug/L	5.0	0.95	EPA 624		5/11/16 19:04	SYB	D
Chlorodibromomethane	ND		ug/L	5.0	2.3	EPA 624		5/11/16 19:04	SYB	D
Chloroethane	ND		ug/L	5.0	1.7	EPA 624		5/11/16 19:04	SYB	D
2-Chloroethylvinyl ether	ND		ug/L	10.0	1.9	EPA 624		5/11/16 19:04	SYB	D
Chloroform	6.1		ug/L	5.0	1.1	EPA 624		5/11/16 19:04	SYB	D
Chloromethane	ND		ug/L	5.0	1.6	EPA 624		5/11/16 19:04	SYB	D
1,2-Dichlorobenzene	ND		ug/L	5.0	1.9	EPA 624		5/11/16 19:04	SYB	D
1,3-Dichlorobenzene	ND		ug/L	5.0	1.3	EPA 624		5/11/16 19:04	SYB	D
1,4-Dichlorobenzene	ND		ug/L	5.0	1.4	EPA 624		5/11/16 19:04	SYB	D
1,1-Dichloroethane	ND		ug/L	5.0	1.4	EPA 624		5/11/16 19:04	SYB	D
1,2-Dichloroethane	ND		ug/L	5.0	1.6	EPA 624		5/11/16 19:04	SYB	D
1,1-Dichloroethene	ND		ug/L	5.0	1.5	EPA 624		5/11/16 19:04	SYB	D
trans-1,2-Dichloroethene	ND		ug/L	5.0	1.3	EPA 624		5/11/16 19:04	SYB	D
1,2-Dichloropropane	ND		ug/L	5.0	1.2	EPA 624		5/11/16 19:04	SYB	D
cis-1,3-Dichloropropene	ND		ug/L	5.0	1.6	EPA 624		5/11/16 19:04	SYB	D
trans-1,3-Dichloropropene	ND		ug/L	5.0	1.5	EPA 624		5/11/16 19:04	SYB	D
1,3-Dichloropropene, Total	ND		ug/L	10.0	2.4	EPA 624		5/11/16 19:04	SYB	D
Ethylbenzene	ND		ug/L	5.0	1.7	EPA 624		5/11/16 19:04	SYB	D
Methylene Chloride	ND		ug/L	5.0	2.3	EPA 624		5/11/16 19:04	SYB	D
1,1,2,2-Tetrachloroethane	ND		ug/L	5.0	1.7	EPA 624		5/11/16 19:04	SYB	D
Tetrachloroethene	5.0		ug/L	5.0	1.8	EPA 624		5/11/16 19:04	SYB	D
Toluene	1.4J	J	ug/L	5.0	1.2	EPA 624		5/11/16 19:04	SYB	D
1,1,1-Trichloroethane	ND		ug/L	5.0	1.1	EPA 624		5/11/16 19:04	SYB	D
1,1,2-Trichloroethane	ND		ug/L	5.0	1.7	EPA 624		5/11/16 19:04	SYB	D
Trichloroethene	ND		ug/L	5.0	1.7	EPA 624		5/11/16 19:04	SYB	D
Trichlorofluoromethane	ND		ug/L	5.0	1.2	EPA 624		5/11/16 19:04	SYB	D
Vinyl Chloride	ND		ug/L	5.0	1.5	EPA 624		5/11/16 19:04	SYB	D

Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	92		%	72 - 142	EPA 624		5/11/16 19:04	SYB	D

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ANALYTICAL RESULTS

Workorder: 2142648 WW/Influent Annual

Lab ID: **2142648003** Date Collected: 5/10/2016 08:10 Matrix: Waste Water

Sample ID: **16-Influent B-Potomac SS-Grab** Date Received: 5/10/2016 20:20

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
4-Bromofluorobenzene (S)	85.3		%	73 - 119		EPA 624			5/11/16 19:04	SYB	D
Dibromofluoromethane (S)	82.8		%	74 - 132		EPA 624			5/11/16 19:04	SYB	D
Toluene-d8 (S)	88.3		%	75 - 133		EPA 624			5/11/16 19:04	SYB	D
WET CHEMISTRY											
Cyanide, Total	0.0060		mg/L	0.0050	0.00058	EPA 335.4	5/13/16	MMA	5/15/16 15:22	LJF	A
Oil/Grease Hexane Extractable	22.6		mg/L	2.3	0.4	EPA 1664B			5/12/16 16:00	AT	B
Oil/Grease Silica Gel Treated	ND		mg/L	2.3	0.9	EPA 1664B			5/12/16 16:00	AT	B
Phenolics	0.032		mg/L	0.005	0.004	EPA 420.4	5/11/16	JLG	5/17/16 12:42	JLG	

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ANALYTICAL RESULTS

Workorder: 2142648 WW/Influent Annual

Lab ID: **2142648004** Date Collected: 5/10/2016 09:00 Matrix: Waste Water

Sample ID: **16-Influent B-Potomac SS-Comp** Date Received: 5/10/2016 20:20

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
SEMIVOLATILES											
Acenaphthene	ND		ug/L	1.6	0.16	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
Acenaphthylene	ND		ug/L	1.6	0.20	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
Anthracene	ND		ug/L	1.6	0.16	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
Benzidine	ND		ug/L	8.6	3.3	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
Benzo(a)anthracene	ND		ug/L	1.6	0.14	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
Benzo(a)pyrene	ND		ug/L	1.6	0.24	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
Benzo(b)fluoranthene	ND		ug/L	1.6	0.12	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
Benzo(g,h,i)perylene	ND		ug/L	1.6	0.24	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
Benzo(k)fluoranthene	ND		ug/L	1.6	0.20	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
4-Bromophenyl-phenylether	ND		ug/L	3.2	0.18	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
Butylbenzylphthalate	2.4J	J	ug/L	3.2	0.12	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
4-Chloro-3-methylphenol	ND		ug/L	3.2	0.20	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
bis(2-Chloroethoxy)methane	ND		ug/L	3.2	0.23	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
bis(2-Chloroethyl)ether	ND		ug/L	3.2	0.18	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
bis(2-Chloroisopropyl)ether	ND		ug/L	3.2	0.30	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
2-Chloronaphthalene	ND		ug/L	3.2	0.19	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
2-Chlorophenol	ND		ug/L	3.2	0.35	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
4-Chlorophenyl-phenylether	ND		ug/L	3.2	0.15	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
Chrysene	ND		ug/L	1.6	0.13	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
Di-n-Butylphthalate	ND		ug/L	3.2	0.15	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
Di-n-Octylphthalate	ND		ug/L	3.2	0.11	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
Dibenzo(a,h)anthracene	ND		ug/L	1.6	0.23	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
3,3-Dichlorobenzidine	ND		ug/L	3.2	0.52	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
2,4-Dichlorophenol	ND		ug/L	3.2	0.34	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
Diethylphthalate	2.9J	J	ug/L	3.2	0.19	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
2,4-Dimethylphenol	ND		ug/L	3.2	0.23	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
Dimethylphthalate	ND		ug/L	3.2	0.15	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
2,4-Dinitrophenol	ND		ug/L	6.5	1.9	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
2,4-Dinitrotoluene	ND		ug/L	3.2	0.13	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
2,6-Dinitrotoluene	ND		ug/L	3.2	0.23	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
1,2-Diphenylhydrazine	ND		ug/L	3.2	0.28	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
bis(2-Ethylhexyl)phthalate	11.5		ug/L	3.2	0.24	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
Fluoranthene	ND		ug/L	1.6	0.18	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
Fluorene	ND		ug/L	1.6	0.22	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
Hexachlorobenzene	ND		ug/L	3.2	0.25	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
Hexachlorobutadiene	ND		ug/L	3.2	0.20	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
Hexachlorocyclopentadiene	ND		ug/L	3.2	0.18	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B

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ANALYTICAL RESULTS

Workorder: 2142648 WW/Influent Annual

Lab ID: **2142648004** Date Collected: 5/10/2016 09:00 Matrix: Waste Water

Sample ID: **16-Influent B-Potomac SS-Comp** Date Received: 5/10/2016 20:20

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Hexachloroethane	ND		ug/L	3.2	0.32	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
Indeno(1,2,3-cd)pyrene	ND		ug/L	1.6	0.11	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
Isophorone	ND		ug/L	3.2	0.16	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
2-Methyl-4,6-dinitrophenol	ND		ug/L	6.5	0.35	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
Naphthalene	ND		ug/L	1.6	0.13	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
Nitrobenzene	ND		ug/L	3.2	0.30	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
2-Nitrophenol	ND		ug/L	3.2	0.48	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
4-Nitrophenol	ND		ug/L	3.2	1.1	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
N-Nitrosodimethylamine	ND		ug/L	3.2	0.69	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
N-Nitroso-di-n-propylamine	ND		ug/L	3.2	0.26	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
N-Nitrosodiphenylamine	ND		ug/L	3.2	0.19	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
Pentachlorophenol	ND		ug/L	6.5	1.2	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
Phenanthrene	ND		ug/L	1.6	0.14	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
Phenol	2.4J	J	ug/L	8.6	0.25	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
Pyrene	ND		ug/L	1.6	0.17	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
1,2,4-Trichlorobenzene	ND		ug/L	3.2	0.14	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
2,4,6-Trichlorophenol	ND		ug/L	3.2	0.61	EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	85.8		%	47 - 128		EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
2-Fluorobiphenyl (S)	73.3		%	52 - 118		EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
2-Fluorophenol (S)	44.2		%	20 - 87		EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
Nitrobenzene-d5 (S)	79.2		%	27 - 139		EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
Phenol-d5 (S)	31.2		%	10 - 81		EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
Terphenyl-d14 (S)	79		%	46 - 133		EPA 625	5/11/16	CAC	5/12/16 05:52	DHF	B
Pesticides and PCBs											
Aldrin	ND		ug/L	0.022	0.0056	EPA 608	5/11/16	JSR	5/13/16 23:06	RWS	D
alpha-BHC	ND		ug/L	0.022	0.0022	EPA 608	5/11/16	JSR	5/13/16 23:06	RWS	D
beta-BHC	ND		ug/L	0.022	0.0089	EPA 608	5/11/16	JSR	5/13/16 23:06	RWS	D
delta-BHC	ND		ug/L	0.022	0.0033	EPA 608	5/11/16	JSR	5/13/16 23:06	RWS	D
gamma-BHC	ND		ug/L	0.022	0.0033	EPA 608	5/11/16	JSR	5/13/16 23:06	RWS	D
Chlordane	ND		ug/L	0.56	0.039	EPA 608	5/11/16	JSR	5/13/16 23:06	RWS	D
4,4'-DDD	ND		ug/L	0.022	0.0078	EPA 608	5/11/16	JSR	5/13/16 23:06	RWS	D
4,4'-DDE	ND		ug/L	0.022	0.0078	EPA 608	5/11/16	JSR	5/13/16 23:06	RWS	D
4,4'-DDT	ND		ug/L	0.022	0.0067	EPA 608	5/11/16	JSR	5/13/16 23:06	RWS	D
Dieldrin	ND		ug/L	0.022	0.0033	EPA 608	5/11/16	JSR	5/13/16 23:06	RWS	D
Endosulfan I	ND		ug/L	0.022	0.0033	EPA 608	5/11/16	JSR	5/13/16 23:06	RWS	D
Endosulfan II	ND		ug/L	0.022	0.0067	EPA 608	5/11/16	JSR	5/13/16 23:06	RWS	D

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ANALYTICAL RESULTS

Workorder: 2142648 WW/Influent Annual

Lab ID: **2142648004** Date Collected: 5/10/2016 09:00 Matrix: Waste Water

Sample ID: **16-Influent B-Potomac SS-Comp** Date Received: 5/10/2016 20:20

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Endosulfan Sulfate	ND		ug/L	0.022	0.0044	EPA 608	5/11/16	JSR	5/13/16 23:06	RWS	D
Endrin	ND		ug/L	0.022	0.0089	EPA 608	5/11/16	JSR	5/13/16 23:06	RWS	D
Endrin Aldehyde	ND		ug/L	0.022	0.011	EPA 608	5/11/16	JSR	5/13/16 23:06	RWS	D
Heptachlor	ND		ug/L	0.022	0.0033	EPA 608	5/11/16	JSR	5/13/16 23:06	RWS	D
Heptachlor Epoxide	ND		ug/L	0.022	0.0044	EPA 608	5/11/16	JSR	5/13/16 23:06	RWS	D
Mirex	ND		ug/L	0.022	0.0044	EPA 608	5/11/16	JSR	5/13/16 23:06	RWS	D
Toxaphene	ND		ug/L	1.1	0.21	EPA 608	5/11/16	JSR	5/13/16 23:06	RWS	D
Aroclor-1016	ND		ug/L	0.56	0.36	EPA 608	5/11/16	JSR	5/13/16 23:06	RWS	D
Aroclor-1221	ND		ug/L	0.56	0.37	EPA 608	5/11/16	JSR	5/13/16 23:06	RWS	D
Aroclor-1232	ND		ug/L	0.56	0.26	EPA 608	5/11/16	JSR	5/13/16 23:06	RWS	D
Aroclor-1242	ND		ug/L	0.56	0.27	EPA 608	5/11/16	JSR	5/13/16 23:06	RWS	D
Aroclor-1248	ND		ug/L	0.56	0.17	EPA 608	5/11/16	JSR	5/13/16 23:06	RWS	D
Aroclor-1254	ND		ug/L	0.56	0.16	EPA 608	5/11/16	JSR	5/13/16 23:06	RWS	D
Aroclor-1260	ND		ug/L	0.56	0.29	EPA 608	5/11/16	JSR	5/13/16 23:06	RWS	D
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
Decachlorobiphenyls (S)	44		%	30 - 150		EPA 608	5/11/16	JSR	5/13/16 23:06	RWS	D
Tetrachloro-m-xylene (S)	43.5		%	36 - 112		EPA 608	5/11/16	JSR	5/13/16 23:06	RWS	D
WET CHEMISTRY											
Chloride	102		mg/L	5.0	0.31	EPA 300.0			5/11/16 18:49	JP	H
METALS											
Antimony, Total	0.00069J	J	mg/L	0.0010	0.00010	EPA 200.8	5/12/16	JPS	5/16/16 07:41	ZMC	A2
Arsenic, Total	0.0017		mg/L	0.0015	0.00032	EPA 200.8	5/12/16	JPS	5/16/16 07:41	ZMC	A2
Beryllium, Total	0.000075 J	J	mg/L	0.00050	0.00004 0	EPA 200.8	5/12/16	JPS	5/16/16 07:41	ZMC	A2
Cadmium, Total	0.00021J	J	mg/L	0.00050	0.00012	EPA 200.8	5/12/16	JPS	5/16/16 07:41	ZMC	A2
Chromium, Total	0.0022		mg/L	0.0010	0.00029	EPA 200.8	5/12/16	JPS	5/16/16 07:41	ZMC	A2
Copper, Total	0.057		mg/L	0.0025	0.00038	EPA 200.8	5/12/16	JPS	5/16/16 07:41	ZMC	A2
Lead, Total	0.0030		mg/L	0.0010	0.00011	EPA 200.8	5/12/16	JPS	5/16/16 07:41	ZMC	A2
Molybdenum, Total	0.0083		mg/L	0.0010	0.00004 0	EPA 200.8	5/12/16	JPS	5/16/16 07:41	ZMC	A2
Nickel, Total	0.0068		mg/L	0.0025	0.00012	EPA 200.8	5/12/16	JPS	5/16/16 07:41	ZMC	A2
Selenium, Total	0.00060J	J	mg/L	0.0020	0.00015	EPA 200.8	5/12/16	JPS	5/16/16 07:41	ZMC	A2
Silver, Total	0.0013		mg/L	0.0010	0.00003 0	EPA 200.8	5/12/16	JPS	5/16/16 07:41	ZMC	A2
Thallium, Total	ND		mg/L	0.00050	0.00003 0	EPA 200.8	5/12/16	JPS	5/16/16 07:41	ZMC	A2
Zinc, Total	0.13		mg/L	0.0025	0.00057	EPA 200.8	5/12/16	JPS	5/16/16 07:41	ZMC	A2
Sub'd-EMSL Labs											

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ANALYTICAL RESULTS

Workorder: 2142648 WW/Influent Annual

Lab ID: **2142648004** Date Collected: 5/10/2016 09:00 Matrix: Waste Water

Sample ID: **16-Influent B-Potomac SS-Comp** Date Received: 5/10/2016 20:20

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	Cntr
Asbestos	See Attached					Subcontract		5/20/16 00:00	SUB	G

Amy K Borden

Ms. Amy K Borden
Project Coordinator

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ANALYTICAL RESULTS

Workorder: 2142648 WW/Influent Annual

Lab ID: **2142648005** Date Collected: 5/10/2016 08:40 Matrix: Waste Water

Sample ID: **16-Influent C-Bolling-Grab** Date Received: 5/10/2016 20:20

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Acrolein	ND		ug/L	50.0	9.5	EPA 624		5/11/16 19:26	SYB	D
Acrylonitrile	ND		ug/L	25.0	6.0	EPA 624		5/11/16 19:26	SYB	D
Benzene	ND		ug/L	5.0	1.2	EPA 624		5/11/16 19:26	SYB	D
Bromodichloromethane	ND		ug/L	5.0	1.4	EPA 624		5/11/16 19:26	SYB	D
Bromoform	ND		ug/L	5.0	2.0	EPA 624		5/11/16 19:26	SYB	D
Bromomethane	ND		ug/L	5.0	2.0	EPA 624		5/11/16 19:26	SYB	D
Carbon Tetrachloride	ND		ug/L	5.0	1.6	EPA 624		5/11/16 19:26	SYB	D
Chlorobenzene	ND		ug/L	5.0	0.95	EPA 624		5/11/16 19:26	SYB	D
Chlorodibromomethane	ND		ug/L	5.0	2.3	EPA 624		5/11/16 19:26	SYB	D
Chloroethane	ND		ug/L	5.0	1.7	EPA 624		5/11/16 19:26	SYB	D
2-Chloroethylvinyl ether	ND		ug/L	10.0	1.9	EPA 624		5/11/16 19:26	SYB	D
Chloroform	5.7		ug/L	5.0	1.1	EPA 624		5/11/16 19:26	SYB	D
Chloromethane	ND		ug/L	5.0	1.6	EPA 624		5/11/16 19:26	SYB	D
1,2-Dichlorobenzene	ND		ug/L	5.0	1.9	EPA 624		5/11/16 19:26	SYB	D
1,3-Dichlorobenzene	ND		ug/L	5.0	1.3	EPA 624		5/11/16 19:26	SYB	D
1,4-Dichlorobenzene	ND		ug/L	5.0	1.4	EPA 624		5/11/16 19:26	SYB	D
1,1-Dichloroethane	ND		ug/L	5.0	1.4	EPA 624		5/11/16 19:26	SYB	D
1,2-Dichloroethane	ND		ug/L	5.0	1.6	EPA 624		5/11/16 19:26	SYB	D
1,1-Dichloroethene	ND		ug/L	5.0	1.5	EPA 624		5/11/16 19:26	SYB	D
trans-1,2-Dichloroethene	ND		ug/L	5.0	1.3	EPA 624		5/11/16 19:26	SYB	D
1,2-Dichloropropane	ND		ug/L	5.0	1.2	EPA 624		5/11/16 19:26	SYB	D
cis-1,3-Dichloropropene	ND		ug/L	5.0	1.6	EPA 624		5/11/16 19:26	SYB	D
trans-1,3-Dichloropropene	ND		ug/L	5.0	1.5	EPA 624		5/11/16 19:26	SYB	D
1,3-Dichloropropene, Total	ND		ug/L	10.0	2.4	EPA 624		5/11/16 19:26	SYB	D
Ethylbenzene	ND		ug/L	5.0	1.7	EPA 624		5/11/16 19:26	SYB	D
Methylene Chloride	ND		ug/L	5.0	2.3	EPA 624		5/11/16 19:26	SYB	D
1,1,2,2-Tetrachloroethane	ND		ug/L	5.0	1.7	EPA 624		5/11/16 19:26	SYB	D
Tetrachloroethene	1.9J	J	ug/L	5.0	1.8	EPA 624		5/11/16 19:26	SYB	D
Toluene	1.7J	J	ug/L	5.0	1.2	EPA 624		5/11/16 19:26	SYB	D
1,1,1-Trichloroethane	ND		ug/L	5.0	1.1	EPA 624		5/11/16 19:26	SYB	D
1,1,2-Trichloroethane	ND		ug/L	5.0	1.7	EPA 624		5/11/16 19:26	SYB	D
Trichloroethene	ND		ug/L	5.0	1.7	EPA 624		5/11/16 19:26	SYB	D
Trichlorofluoromethane	ND		ug/L	5.0	1.2	EPA 624		5/11/16 19:26	SYB	D
Vinyl Chloride	ND		ug/L	5.0	1.5	EPA 624		5/11/16 19:26	SYB	D

Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	92.3		%	72 - 142	EPA 624		5/11/16 19:26	SYB	D

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ANALYTICAL RESULTS

Workorder: 2142648 WW/Influent Annual

Lab ID: **2142648005** Date Collected: 5/10/2016 08:40 Matrix: Waste Water

Sample ID: **16-Influent C-Bolling-Grab** Date Received: 5/10/2016 20:20

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
4-Bromofluorobenzene (S)	85.1		%	73 - 119		EPA 624			5/11/16 19:26	SYB	D
Dibromofluoromethane (S)	83.3		%	74 - 132		EPA 624			5/11/16 19:26	SYB	D
Toluene-d8 (S)	88.2		%	75 - 133		EPA 624			5/11/16 19:26	SYB	D
WET CHEMISTRY											
Cyanide, Total	0.0054		mg/L	0.0050	0.00058	EPA 335.4	5/13/16	MMA	5/15/16 15:22	LJF	A
Oil/Grease Hexane Extractable	27.0		mg/L	2.4	0.4	EPA 1664B			5/12/16 16:00	AT	B
Oil/Grease Silica Gel Treated	ND		mg/L	2.4	1	EPA 1664B			5/12/16 16:00	AT	B
Phenolics	0.022		mg/L	0.005	0.004	EPA 420.4	5/11/16	JLG	5/17/16 12:43	JLG	F

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ANALYTICAL RESULTS

Workorder: 2142648 WW/Influent Annual

Lab ID: **2142648006** Date Collected: 5/10/2016 09:25 Matrix: Waste Water

Sample ID: **16-Influent C-Bolling-Comp** Date Received: 5/10/2016 20:20

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
SEMIVOLATILES											
Acenaphthene	ND		ug/L	1.5	0.15	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
Acenaphthylene	ND		ug/L	1.5	0.19	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
Anthracene	ND		ug/L	1.5	0.15	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
Benzidine	ND		ug/L	8.1	3.1	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
Benzo(a)anthracene	ND		ug/L	1.5	0.13	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
Benzo(a)pyrene	ND		ug/L	1.5	0.22	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
Benzo(b)fluoranthene	ND		ug/L	1.5	0.11	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
Benzo(g,h,i)perylene	ND		ug/L	1.5	0.22	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
Benzo(k)fluoranthene	ND		ug/L	1.5	0.19	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
4-Bromophenyl-phenylether	ND		ug/L	3.0	0.17	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
Butylbenzylphthalate	ND		ug/L	3.0	0.11	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
4-Chloro-3-methylphenol	ND		ug/L	3.0	0.19	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
bis(2-Chloroethoxy)methane	ND		ug/L	3.0	0.21	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
bis(2-Chloroethyl)ether	ND		ug/L	3.0	0.17	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
bis(2-Chloroisopropyl)ether	ND		ug/L	3.0	0.28	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
2-Chloronaphthalene	ND		ug/L	3.0	0.18	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
2-Chlorophenol	ND		ug/L	3.0	0.33	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
4-Chlorophenyl-phenylether	ND		ug/L	3.0	0.14	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
Chrysene	ND		ug/L	1.5	0.12	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
Di-n-Butylphthalate	1.3J	J	ug/L	3.0	0.14	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
Di-n-Octylphthalate	ND		ug/L	3.0	0.10	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
Dibenzo(a,h)anthracene	ND		ug/L	1.5	0.21	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
3,3-Dichlorobenzidine	ND		ug/L	3.0	0.48	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
2,4-Dichlorophenol	ND		ug/L	3.0	0.32	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
Diethylphthalate	2.6J	J	ug/L	3.0	0.18	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
2,4-Dimethylphenol	ND		ug/L	3.0	0.21	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
Dimethylphthalate	ND		ug/L	3.0	0.14	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
2,4-Dinitrophenol	ND		ug/L	6.1	1.8	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
2,4-Dinitrotoluene	ND		ug/L	3.0	0.12	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
2,6-Dinitrotoluene	ND		ug/L	3.0	0.21	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
1,2-Diphenylhydrazine	ND		ug/L	3.0	0.26	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
bis(2-Ethylhexyl)phthalate	8.2		ug/L	3.0	0.22	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
Fluoranthene	ND		ug/L	1.5	0.17	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
Fluorene	ND		ug/L	1.5	0.20	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
Hexachlorobenzene	ND		ug/L	3.0	0.23	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
Hexachlorobutadiene	ND		ug/L	3.0	0.19	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
Hexachlorocyclopentadiene	ND		ug/L	3.0	0.17	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B

ANALYTICAL RESULTS

Workorder: 2142648 WW/Influent Annual

Lab ID: **2142648006** Date Collected: 5/10/2016 09:25 Matrix: Waste Water

Sample ID: **16-Influent C-Bolling-Comp** Date Received: 5/10/2016 20:20

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Hexachloroethane	ND		ug/L	3.0	0.30	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
Indeno(1,2,3-cd)pyrene	ND		ug/L	1.5	0.10	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
Isophorone	ND		ug/L	3.0	0.15	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
2-Methyl-4,6-dinitrophenol	ND		ug/L	6.1	0.33	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
Naphthalene	ND		ug/L	1.5	0.12	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
Nitrobenzene	ND		ug/L	3.0	0.28	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
2-Nitrophenol	ND		ug/L	3.0	0.45	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
4-Nitrophenol	ND		ug/L	3.0	1.1	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
N-Nitrosodimethylamine	ND		ug/L	3.0	0.65	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
N-Nitroso-di-n-propylamine	ND		ug/L	3.0	0.24	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
N-Nitrosodiphenylamine	ND		ug/L	3.0	0.18	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
Pentachlorophenol	ND		ug/L	6.1	1.1	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
Phenanthrene	ND		ug/L	1.5	0.13	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
Phenol	2.5J	J	ug/L	8.1	0.23	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
Pyrene	ND		ug/L	1.5	0.16	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
1,2,4-Trichlorobenzene	ND		ug/L	3.0	0.13	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
2,4,6-Trichlorophenol	ND		ug/L	3.0	0.58	EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	77.8		%	47 - 128		EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
2-Fluorobiphenyl (S)	72.5		%	52 - 118		EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
2-Fluorophenol (S)	38.6		%	20 - 87		EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
Nitrobenzene-d5 (S)	74.2		%	27 - 139		EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
Phenol-d5 (S)	27.1		%	10 - 81		EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
Terphenyl-d14 (S)	73		%	46 - 133		EPA 625	5/11/16	CAC	5/12/16 04:09	DHF	B
Pesticides and PCBs											
Aldrin	ND		ug/L	0.022	0.0055	EPA 608	5/11/16	JSR	5/13/16 23:28	RWS	D
alpha-BHC	ND		ug/L	0.022	0.0022	EPA 608	5/11/16	JSR	5/13/16 23:28	RWS	D
beta-BHC	ND		ug/L	0.022	0.0088	EPA 608	5/11/16	JSR	5/13/16 23:28	RWS	D
delta-BHC	ND		ug/L	0.022	0.0033	EPA 608	5/11/16	JSR	5/13/16 23:28	RWS	D
gamma-BHC	ND		ug/L	0.022	0.0033	EPA 608	5/11/16	JSR	5/13/16 23:28	RWS	D
Chlordane	ND		ug/L	0.55	0.038	EPA 608	5/11/16	JSR	5/13/16 23:28	RWS	D
4,4'-DDD	ND		ug/L	0.022	0.0077	EPA 608	5/11/16	JSR	5/13/16 23:28	RWS	D
4,4'-DDE	ND		ug/L	0.022	0.0077	EPA 608	5/11/16	JSR	5/13/16 23:28	RWS	D
4,4'-DDT	ND		ug/L	0.022	0.0066	EPA 608	5/11/16	JSR	5/13/16 23:28	RWS	D
Dieldrin	ND		ug/L	0.022	0.0033	EPA 608	5/11/16	JSR	5/13/16 23:28	RWS	D
Endosulfan I	ND		ug/L	0.022	0.0033	EPA 608	5/11/16	JSR	5/13/16 23:28	RWS	D
Endosulfan II	ND		ug/L	0.022	0.0066	EPA 608	5/11/16	JSR	5/13/16 23:28	RWS	D

ALS Environmental

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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

ANALYTICAL RESULTS

Workorder: 2142648 WW/Influent Annual

Lab ID: **2142648006** Date Collected: 5/10/2016 09:25 Matrix: Waste Water

Sample ID: **16-Influent C-Bolling-Comp** Date Received: 5/10/2016 20:20

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Endosulfan Sulfate	ND		ug/L	0.022	0.0044	EPA 608	5/11/16	JSR	5/13/16 23:28	RWS	D
Endrin	ND		ug/L	0.022	0.0088	EPA 608	5/11/16	JSR	5/13/16 23:28	RWS	D
Endrin Aldehyde	ND		ug/L	0.022	0.011	EPA 608	5/11/16	JSR	5/13/16 23:28	RWS	D
Heptachlor	ND		ug/L	0.022	0.0033	EPA 608	5/11/16	JSR	5/13/16 23:28	RWS	D
Heptachlor Epoxide	ND		ug/L	0.022	0.0044	EPA 608	5/11/16	JSR	5/13/16 23:28	RWS	D
Mirex	ND		ug/L	0.022	0.0044	EPA 608	5/11/16	JSR	5/13/16 23:28	RWS	D
Toxaphene	ND		ug/L	1.1	0.21	EPA 608	5/11/16	JSR	5/13/16 23:28	RWS	D
Aroclor-1016	ND		ug/L	0.55	0.35	EPA 608	5/11/16	JSR	5/13/16 23:28	RWS	D
Aroclor-1221	ND		ug/L	0.55	0.36	EPA 608	5/11/16	JSR	5/13/16 23:28	RWS	D
Aroclor-1232	ND		ug/L	0.55	0.25	EPA 608	5/11/16	JSR	5/13/16 23:28	RWS	D
Aroclor-1242	ND		ug/L	0.55	0.26	EPA 608	5/11/16	JSR	5/13/16 23:28	RWS	D
Aroclor-1248	ND		ug/L	0.55	0.16	EPA 608	5/11/16	JSR	5/13/16 23:28	RWS	D
Aroclor-1254	ND		ug/L	0.55	0.15	EPA 608	5/11/16	JSR	5/13/16 23:28	RWS	D
Aroclor-1260	ND		ug/L	0.55	0.29	EPA 608	5/11/16	JSR	5/13/16 23:28	RWS	D
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
Decachlorobiphenyls (S)	39.8		%	30 - 150		EPA 608	5/11/16	JSR	5/13/16 23:28	RWS	D
Tetrachloro-m-xylene (S)	37.8		%	36 - 112		EPA 608	5/11/16	JSR	5/13/16 23:28	RWS	D
WET CHEMISTRY											
Chloride	123		mg/L	5.0	0.31	EPA 300.0			5/11/16 19:05	JP	H
METALS											
Antimony, Total	0.00050J	J	mg/L	0.0010	0.00010	EPA 200.8	5/12/16	JPS	5/16/16 07:45	ZMC	A2
Arsenic, Total	0.0014J	J	mg/L	0.0015	0.00032	EPA 200.8	5/12/16	JPS	5/16/16 07:45	ZMC	A2
Beryllium, Total	0.000064 J	J	mg/L	0.00050	0.00004 0	EPA 200.8	5/12/16	JPS	5/16/16 07:45	ZMC	A2
Cadmium, Total	0.00017J	J	mg/L	0.00050	0.00012	EPA 200.8	5/12/16	JPS	5/16/16 07:45	ZMC	A2
Chromium, Total	0.0026		mg/L	0.0010	0.00029	EPA 200.8	5/12/16	JPS	5/16/16 07:45	ZMC	A2
Copper, Total	0.047		mg/L	0.0025	0.00038	EPA 200.8	5/12/16	JPS	5/16/16 07:45	ZMC	A2
Lead, Total	0.0035		mg/L	0.0010	0.00011	EPA 200.8	5/12/16	JPS	5/16/16 07:45	ZMC	A2
Molybdenum, Total	0.012		mg/L	0.0010	0.00004 0	EPA 200.8	5/12/16	JPS	5/16/16 07:45	ZMC	A2
Nickel, Total	0.0060		mg/L	0.0025	0.00012	EPA 200.8	5/12/16	JPS	5/16/16 07:45	ZMC	A2
Selenium, Total	0.00069J	J	mg/L	0.0020	0.00015	EPA 200.8	5/12/16	JPS	5/16/16 07:45	ZMC	A2
Silver, Total	0.00077J	J	mg/L	0.0010	0.00003 0	EPA 200.8	5/12/16	JPS	5/16/16 07:45	ZMC	A2
Thallium, Total	ND		mg/L	0.00050	0.00003 0	EPA 200.8	5/12/16	JPS	5/16/16 07:45	ZMC	A2
Zinc, Total	0.091		mg/L	0.0025	0.00057	EPA 200.8	5/12/16	JPS	5/16/16 07:45	ZMC	A2
Sub'd-EMSL Labs											

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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

ANALYTICAL RESULTS

Workorder: 2142648 WW/Influent Annual

Lab ID: **2142648006** Date Collected: 5/10/2016 09:25 Matrix: Waste Water

Sample ID: **16-Influent C-Bolling-Comp** Date Received: 5/10/2016 20:20

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	Cntr
Asbestos	See Attached					Subcontract		5/20/16 00:00	SUB	G

Amy K Borden

Ms. Amy K Borden
Project Coordinator

Analytical Laboratory Services, Inc.
Environmental w Industrial Hygiene w Field Services
34 Dogwood Lane w Middletown, PA 17057 w 717.944.5541 w Fax: 717.944.1430

CHAIN OF CUSTODY / REQUEST FOR ANALYSIS

Generated by ALSI

COC ALSI A

* 2 1 4 2 6 4 8 *

zxzx of xyxy

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

Client Name: DCWASA - OTHERS
Address: 5000 Overlook Ave, SW
Washington, D.C. 20032
Contact: Elaine Wilson
Phone#: 202-787-4177
Project Name/#: WW/Influent Annual
Bill To: Accounts Payable Office- 4th Floor

TAT [X] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALSI approval and surcharges.
Date Required: _____ Approved By: _____
Email? [X]-Y
Fax? [ ]-Y No.: _____

Container Type	PL	AG/CG	CG	PL	PL	AG	AG	AG	PL
Container Size	500 mL	1L	40 mL	500 mL	250 mL	1L	1L	1L	1L
Preservative	NaOH	H2SO4	HCl	HNO3	None	None	None	H2SO4	None

ANALYSES/METHOD REQUESTED

Sample Description/Location (as it will appear on the lab report)	Sample Date	Time	*G or C	**Matrix	Cyanide	TPH plus total O&G	VOC - 624	200.8 (As, Cd, Cr, Cu, Pb, Mo, Ni, Se, Ag, Zn, Sb, Be, Tl)	Chloride	Semivolatiles - EPA 625 - including TCDD dioxin	Pesticides/PCBs EPA 608	Total Phenolic Compounds	Asbestos	
					Enter Number of Containers Per Sample or Field Results Below.									Sample/COC Comments
16 - Influent A - Potomac CS - Annual	5/10/16	0730	G	WW	1	2	2					1		
16 - Influent A - Potomac CS - Annual	5/10/16	0900	C	WW				1	1	2	2		1	24-h composite
														-
16 - Influent B - Potomac SS - Annual	5/10/16	0810	G	WW	1	2	2					1		
16 - Influent B - Potomac SS - Annual	5/10/16	0900	C	WW				1	1	2	2		1	24-h composite
16 - Influent C - Bolling - Annual	5/10/16	0840	G	WW	1	2	2					1		
16 - Influent C - Bolling - Annual	5/10/16	0925	C	WW				1	1	2	2		1	24-h composite

Cooler Temp: 1 Therm ID: 392
No. of Coolers: _____

	Y	N	Initial
Custody Seals Present?			TMH
(if present) Seals Intact?			
Received on Ice?	✓		
COC/Labels Complete/Accurate?	✓		
Cont. in Good Cond.?	✓		
Correct Containers?	✓		
Correct Sample Volumes?	✓		
Correct Preservation?	✓		
Headspace/Volatiles?			

Courier/Tracking #:

ALSI Field Services: oPickup oLabor oComposite Sampling oRental Equipment oOther: _____

Project Comments: Need lowest detection limit available for all metals, report J Flags

LOGGED BY(signature): _____ DATE 5/11 TIME 0535
REVIEWED BY(signature): _____ DATE _____ TIME _____

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 [illegible]	5-6-16	1407	2 [illegible]	5/6	1600
3 [illegible]	5/10	1700	4 [illegible]	5/10	1700
5 [illegible]	5/10	2020	6 [illegible]	5/10	2020
7			8		
9			10		

Data Deliverables: [ ] Standard [ ] CLP-like [ ] USACE [ ]
Special Processing: USACE [ ] Navy [ ]
State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] NC [ ]
Reportable to PADEP? Yes [ ]
PWSID # _____
Sample Disposal: Lab [ ] Special [ ]
EDDS: Format Type- _____

*G=Grab; C=Composite **Matrix - AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

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

CHAIN OF CUSTODY / REQUEST FOR ANALYSIS

Generated by ALSI

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

COC #: 1 of 1

ALSI Quote #:

Client Name: ALS Environmental

Address: 34 Dogwood Lane
Middletown PA 17057

Contact: Amy Borden

Phone#: 717-944-5541

Project Name/#: DCWASA

Bill To: Same

TAT [x] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.

Date Required: _____ Approved By: _____

Email? [x] Y almdt.subcontract@alsglobal.com

Fax? [ ] Y No.: _____

Container Type	P									
Container Size	1L									
Preservative	UNP									

ANALYSES/METHOD REQUESTED

Sample Description/Location (as it will appear on the lab report)	Sample Date	Time	*G or C	**Matrix	Asbestos									
					Enter Number of Containers Per Sample or Field Results Below.									
2142648002	5/10/16	09:00	C	WW	1									
2142648004	5/10/16	09:00	C	WW	1									
2142648006	5/10/16	09:25	C	WW	1									

Receipt Information (completed by Receiving Lab)

Cooler Temp: _____ Therm ID: _____

No. of Coolers: _____

	Y	N	Initial
Custody Seals Present?			
(If present) Seals Intact?			
Received on Ice?			
COC/Labels Complete/Accurate?			
Cont. in Good Cond.?			
Correct Containers?			
Correct Sample Volumes?			
Correct Preservation?			
Headspace/Volatiles?			

Courier/Tracking #:

Sample/COC Comments

Sub to: EMSL

ALSI Field Services: oPickup oLabor oComposite Sampling oRental Equipment oOther: _____

Project Comments:

LOGGED BY (signature): Date: Time:

REVIEWED BY (signature): Date: Time:

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1	5/11/16	1715	2		
3			4		
5			6		
7			8		
9			10		

Data Deliverables: [ ] Standard [ ] CLP-like [ ] USACE [ ]

Special Processing: USACE [ ] Navy [ ]

State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] NC [ ] MD

Reportable to PADEP? Yes [ ]

PWSID # _____

Sample Disposal: Lab [ ] Special [ ]

EDDS: Format Type: _____

*G=Grab; C=Composite **Matrix - AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

Copies: WHITE - ORIGINAL CANARY - CUSTOMER MAILING PINK - FILE GOLDENROD - CUSTOMER COPY

Rev 8/04

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EMSL Analytical, Inc.
200 Route 130 North Cinnaminson, NJ 08077
Phone/Fax: (800) 220-3675 / (856) 786-5974
http://www.EMSL.com / cinnasblab@EMSL.com

EMSL Order ID:	041612665
Customer ID:	WRIG51
Customer PO:	
Project ID:	

Attn:	Amy Borden	Phone:	(717) 944-5541
	ALS Environmental	Fax:	(717) 944-1430
	34 Dogwood Lane	Collected:	05/10/2016
	Middletown, PA 17057	Received:	05/12/2016
		Analyzed:	05/20/2016
Proj:	DCWASA		

Test Report: Determination of Asbestos Structures > 10µm in Water Performed by the 100.2 Method (EPA 600/R-94/134)

Sample ID Client / EMSL	Sample Filtration Date/Time	Original Sample Vol. Filtered (ml)	Effective Filter Area (mm²)	Area Analyzed (mm²)	ASBESTOS Asbestos Types	Fibers Detected	Analytical Sensitivity	Concentration	Confidence Limits
							MFL (million fibers per liter)		
2142648002 041612665-0001	5/12/2016 12:00 PM	1	1392	0.2800	None Detected	ND	5.40	<5.40	0.00 - 20.00
Due to excessive particulate the analytical sensitivity of 0.2 MFL as required by the method was not reached.									
2142648004 041612665-0002	5/12/2016 12:00 PM	0.20	1392	0.2800	None Detected	ND	27.00	<27.00	0.00 - 99.00
Due to excessive particulate the analytical sensitivity of 0.2 MFL as required by the method was not reached.									
2142648006 041612665-0003	5/12/2016 12:00 PM	0.10	1392	0.2800	None Detected	ND	54.00	<54.00	0.00 - 200.00
Due to excessive particulate the analytical sensitivity of 0.2 MFL as required by the method was not reached.									

All samples ozonated prior to analysis due to lab receipt time exceeding 48hr method hold time.

Analyst(s)
Ted Young (3)

Benjamin Ellis, Laboratory Manager
or Other Approved Signatory

Any questions please contact Benjamin Ellis.

Initial report from: 05/20/2016 10:55:06

ALS Environmental

34 Dogwood Lane ▪ Middletown, PA 17057 ▪ Phone: 717-944-5541 ▪ Fax: 717-944-1430 ▪ www.alsglobal.com

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

May 26, 2016

Ms. Elaine Wilson
DC WASA
5000 Overlook Avenue, S.W.
Washington, DC 20032

Certificate of Analysis

Project Name:	**Wastewater (WW)**	**Workorder:**	**2143529**
Purchase Order:	**160149**	**Workorder ID:**	**WW/Effluent Evry Other Month**

Dear Ms. Wilson:

Enclosed are the analytical results for samples received by the laboratory on Thursday, May 12, 2016.

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 Ms. Amy K Borden (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.

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

CC: Mr. Ryan Maisano , Mr. Mark Ramirez , Accounts Payable-4th Floor

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

Amy K Borden

Ms. Amy K Borden
Project Coordinator

ALS Environmental

34 Dogwood Lane ▪ Middletown, PA 17057 ▪ Phone: 717-944-5541 ▪ Fax: 717-944-1430 ▪ www.alsglobal.com

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

SAMPLE SUMMARY

Workorder: 2143529 WW/Effluent Evry Other Month

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
2143529001	16-2nd Qtr-Infl A-Potomac CS	Waste Water	5/11/2016 16:10	5/12/2016 20:50	Collected by Client
2143529002	16-2nd Qtr-Infl A-Potom-CS-DUP	Waste Water	5/11/2016 16:10	5/12/2016 20:50	Collected by Client
2143529003	16-2nd Qtr-Field Blank-A	Waste Water	5/11/2016 16:00	5/12/2016 20:50	Collected by Client
2143529004	16-2nd Qtr-Field Blank-B	Waste Water	5/11/2016 16:05	5/12/2016 20:50	Collected by Client
2143529005	16-2nd Qtr-Infl B-Potomac SS	Waste Water	5/11/2016 16:15	5/12/2016 20:50	Collected by Client
2143529006	16-2nd Qtr-Infl B-Potom SS-Dup	Waste Water	5/11/2016 16:15	5/12/2016 20:50	Collected by Client
2143529007	16-2nd Qtr-Infl C-Bolling	Waste Water	5/11/2016 16:25	5/12/2016 20:50	Collected by Client
2143529008	16-2nd Qtr-Infl C-Bolling Dup	Waste Water	5/11/2016 16:25	5/12/2016 20:50	Collected by Client
2143529009	16-2nd Qtr-Field Blank-C	Waste Water	5/11/2016 16:20	5/12/2016 20:50	Collected by Client

ALS Environmental

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

SAMPLE SUMMARY

Workorder: 2143529 WW/Effluent Evry Other Month

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

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 2143529 WW/Effluent Evry Other Month

Lab ID: **2143529001** Date Collected: 5/11/2016 16:10 Matrix: Waste Water

Sample ID: **16-2nd Qtr-Infl A-Potomac CS** Date Received: 5/12/2016 20:50

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Mercury, Total	7.6		ng/L	2.5	0.84	EPA 1631E	5/25/16	MNP	5/25/16 09:41	MNP	A1

Amy K Borden

Ms. Amy K Borden
Project Coordinator

ALS Environmental

34 Dogwood Lane ▪ Middletown, PA 17057 ▪ Phone: 717-944-5541 ▪ Fax: 717-944-1430 ▪ www.alsglobal.com

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ANALYTICAL RESULTS

Workorder: 2143529 WW/Effluent Evry Other Month

Lab ID: **2143529002** Date Collected: 5/11/2016 16:10 Matrix: Waste Water

Sample ID: **16-2nd Qtr-Infl A-Potom-CS-DUP** Date Received: 5/12/2016 20:50

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Mercury, Total	10.3		ng/L	2.5	0.84	EPA 1631E	5/25/16	MNP	5/25/16 10:04	MNP	A1

Amy K Borden

Ms. Amy K Borden
Project Coordinator

ALS Environmental

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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

ANALYTICAL RESULTS

Workorder: 2143529 WW/Effluent Evry Other Month

Lab ID: **2143529003** Date Collected: 5/11/2016 16:00 Matrix: Waste Water

Sample ID: **16-2nd Qtr-Field Blank-A** Date Received: 5/12/2016 20:50

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Mercury, Total	ND		ng/L	0.50	0.17	EPA 1631E	5/25/16	MNP	5/25/16 10:12	MNP	A1

Amy K Borden

Ms. Amy K Borden
Project Coordinator

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ANALYTICAL RESULTS

Workorder: 2143529 WW/Effluent Evry Other Month

Lab ID: **2143529004** Date Collected: 5/11/2016 16:05 Matrix: Waste Water

Sample ID: **16-2nd Qtr-Field Blank-B** Date Received: 5/12/2016 20:50

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Mercury, Total	ND		ng/L	0.50	0.17	EPA 1631E	5/25/16	MNP	5/25/16 10:20	MNP	A1

Amy K Borden

Ms. Amy K Borden
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 2143529 WW/Effluent Evry Other Month

Lab ID: **2143529005** Date Collected: 5/11/2016 16:15 Matrix: Waste Water

Sample ID: **16-2nd Qtr-Infl B-Potomac SS** Date Received: 5/12/2016 20:50

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Mercury, Total	5.2		ng/L	2.5	0.84	EPA 1631E	5/25/16	MNP	5/25/16 10:27	MNP	A1

Amy K Borden

Ms. Amy K Borden
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 2143529 WW/Effluent Evry Other Month

Lab ID: **2143529006** Date Collected: 5/11/2016 16:15 Matrix: Waste Water

Sample ID: **16-2nd Qtr-Infl B-Potom SS-Dup** Date Received: 5/12/2016 20:50

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Mercury, Total	6.0		ng/L	2.5	0.84	EPA 1631E	5/25/16	MNP	5/25/16 10:35	MNP	A1

Ms. Amy K Borden
Project Coordinator

ALS Environmental

34 Dogwood Lane ▪ Middletown, PA 17057 ▪ Phone: 717-944-5541 ▪ Fax: 717-944-1430 ▪ www.alsglobal.com

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ANALYTICAL RESULTS

Workorder: 2143529 WW/Effluent Evry Other Month

Lab ID: **2143529007** Date Collected: 5/11/2016 16:25 Matrix: Waste Water

Sample ID: **16-2nd Qtr-Infl C-Bolling** Date Received: 5/12/2016 20:50

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Mercury, Total	0.91J	J	ng/L	2.5	0.84	EPA 1631E	5/25/16	MNP	5/25/16 11:12	MNP	A1

Amy K Borden

Ms. Amy K Borden
Project Coordinator

ALS Environmental

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

ANALYTICAL RESULTS

Workorder: 2143529 WW/Effluent Evry Other Month

Lab ID: **2143529008** Date Collected: 5/11/2016 16:25 Matrix: Waste Water

Sample ID: **16-2nd Qtr-Infl C-Boiling Dup** Date Received: 5/12/2016 20:50

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	Cntr
Mercury, Total	2.0J	J	ng/L	2.5	0.84	EPA 1631E	5/25/16	5/25/16 11:35	MNP	A1

Ms. Amy K Borden
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 2143529 WW/Effluent Evry Other Month

Lab ID: **2143529009** Date Collected: 5/11/2016 16:20 Matrix: Waste Water

Sample ID: **16-2nd Qtr-Field Blank-C** Date Received: 5/12/2016 20:50

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Mercury, Total	1.3		ng/L	0.50	0.17	EPA 1631E	5/25/16	MNP	5/25/16 11:43	MNP	A1

Amy K Borden

Ms. Amy K Borden
Project Coordinator

Analytical Laboratory Services, Inc.
Environmental w Industrial Hygiene w Field Services
34 Dogwood Lane w Middletown, PA 17057 w 717.944.5541 w Fax: 717.944.1430

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

Generated by ALSI: A

COC ALSI

2143529

zxzx of xyxy

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

Client Name: DCWASA-Others
Address: 5000 Overlook Ave, SW
Washington, D.C. 20032
Contact: Elaine Wilson
Phone#: 202-787-4177
Project Name/#: WW/Effluent Every Other Month
Bill To: Accounts Payable Office- 4th Floor

TAT [x] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALSI approval and surcharges.
Date Required: _____ Approved By: _____
Email? [x] -Y
Fax? [ ] -Y No.: _____

Container Type	AG	AG
Container Size	250 mL	250 mL
Preservative	HCl	None

ANALYSES/METHOD REQUESTED

Sample Description/Location (as it will appear on the lab report)	Sample Date	Time	*G or C	**Matrix	Total Hg (1631 E)	Total Hg (1631 E)	Enter Number of Containers Per Sample or Field Results Below.	Sample/COC Comments
16-2nd qtr-Infl A - Potomac CS	5/11/16	1610	*	WW		1	4 bottles	Composite 0705, 940, 1330, and 1610
16-2nd qtr-Infl A - Potomac CS - Dup	5/11/16	1610	*	WW		1	4 bottles	Composite 0705, 940, 1330, and 1610
16-2nd qtr - Field Blank - A	5/11/16	1600	G	QC	1		4 bottles	Composite 0655, 0930, 1320, and 1600
16-2nd qtr-Field Blank - B	5/11/16	1605	G	QC	1		4 bottles	Composite 0700, 0935, 1325, and 1605
16-2nd qtr-Infl B - Potomac SS	5/11/16	1615	*	WW		1	4 bottles	Composite 0710, 0945, 1335, and 1615
16-2nd qtr-Infl B - Potomac SS - Dup	5/11/16	1615	*	WW		1	4 bottles	Composite 0710, 0945, 1335, and 1615
16-2nd qtr-Infl C - Bolling	5/11/16	1625	*	WW		1	4 bottles	Composite 0720, 0955, 1345, and 1625
16-2nd qtr-Infl C - Bolling Dup	5/11/16	1625	*	WW		1	4 bottles	Composite 0720, 0955, 1345, and 1625
16-2nd qtr-Field Blank - C	5/11/16	1620	G	QC	1		4 bottles	Composite 0715, 950, 1340, and 1620
plus 12 bottles of field blank water								

Receipt Information (completed by Receiving Lab)
Cooler Temp: 1 Therm ID: 352
No. of Coolers: _____

	Y	N	Initial
Custody Seals Present?			
(if present) Seals Intact?			
Received on Ice?			
COC/Labels Complete/Accurate?			
Cont. in Good Cond.?			
Correct Containers?			
Correct Sample Volumes?			
Correct Preservation?			
Headspace/Volatiles?			

Courier/Tracking #:

Project Comments:

LOGGED BY(signature): _____ Date: 5/13 Time: 814
REVIEWED BY(signature): _____ Date: _____ Time: _____

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1	5/12	845	2	5/12	1337
3	5/12	1700	4	5/12	1700
5	5/12	2050	6	5/12	2050
7			8		
9			10		

Data Deliverables: [ ] Standard [ ] CLP-like [ ] USACE
Special Processing: USACE [ ] Navy [ ]
State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] NC
Reportable to PADEP? Yes [ ]
PWSID # _____
Sample Disposal: Lab [ ] Special [ ]
EDDS: Format Type-

*G=Grab; C=Composite **Matrix - AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

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Rev 8/04

ALS

Biosolids Priority Pollutant Data

ALS Environmental

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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

May 25, 2016

Ms. Elaine Wilson
DC WASA
5000 Overlook Avenue, S.W.
Washington, DC 20032

Certificate of Analysis

Project Name:	**Bio/Twice per Month**	**Workorder:**	**2142646**
Purchase Order:	**160149**	**Workorder ID:**	**Bio/Twice per Month**

Dear Ms. Wilson:

Enclosed are the analytical results for samples received by the laboratory on Tuesday, May 10, 2016.

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 Ms. Amy K Borden (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.

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

CC: Mr. Ryan Maisano , Mr. Mark Ramirez , Accounts Payable-4th Floor

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

Amy K. Borden

Ms. Amy K Borden
Project Coordinator

ALS Environmental

34 Dogwood Lane ▪ Middletown, PA 17057 ▪ Phone: 717-944-5541 ▪ Fax: 717-944-1430 ▪ www.alsglobal.com

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

SAMPLE SUMMARY

Workorder: 2142646 Bio/Twice per Month

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
2142646001	Digest BFP BOC	Solid	5/10/2016 08:00	5/10/2016 20:20	Collected by Client
2142646002	Digest BFP BOC	Solid	5/10/2016 15:00	5/10/2016 20:20	Collected by Client
2142646003	SBT #2 (I02)	Solid	5/9/2016 18:00	5/10/2016 20:20	Collected by Client

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
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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

ANALYTICAL RESULTS

Workorder: 2142646 Bio/Twice per Month

Lab ID: **2142646001** Date Collected: 5/10/2016 08:00 Matrix: Solid

Sample ID: **Digest BFP BOC** Date Received: 5/10/2016 20:20

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
PCBs											
Total Polychlorinated Biphenyl	ND		mg/kg	0.22	0.22	SW846 8082A	5/12/16	CMA	5/12/16 17:56	KJH	A
Aroclor-1016	ND		mg/kg	0.22	0.040	SW846 8082A	5/12/16	CMA	5/12/16 17:56	KJH	A
Aroclor-1221	ND		mg/kg	0.22	0.020	SW846 8082A	5/12/16	CMA	5/12/16 17:56	KJH	A
Aroclor-1232	ND		mg/kg	0.22	0.040	SW846 8082A	5/12/16	CMA	5/12/16 17:56	KJH	A
Aroclor-1242	ND		mg/kg	0.22	0.060	SW846 8082A	5/12/16	CMA	5/12/16 17:56	KJH	A
Aroclor-1248	ND		mg/kg	0.22	0.040	SW846 8082A	5/12/16	CMA	5/12/16 17:56	KJH	A
Aroclor-1254	ND		mg/kg	0.22	0.040	SW846 8082A	5/12/16	CMA	5/12/16 17:56	KJH	A
Aroclor-1260	ND		mg/kg	0.22	0.040	SW846 8082A	5/12/16	CMA	5/12/16 17:56	KJH	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
Decachlorobiphenyls (S)	71.7		%	49 - 115		SW846 8082A	5/12/16	CMA	5/12/16 17:56	KJH	A
Tetrachloro-m-xylene (S)	86		%	27 - 137		SW846 8082A	5/12/16	CMA	5/12/16 17:56	KJH	A
WET CHEMISTRY											
Ammonia, Total (Moist Basis)	2450		mg/kg	7.5	2	S4500NH3D	5/17/16	J1H	5/23/16 08:26	J1H	A
Ammonia-nitrogen, Total	7650		mg/kg	23.4	5	S4500NH3D	5/17/16	J1H	5/23/16 08:26	J1H	A
Chloride	333		mg/kg	312	3.2	300.0/9056A	5/13/16	JP	5/13/16 14:05	JP	A2
Moisture	67.9		%	0.1	0.01	S2540G-11			5/16/16 14:19	KAM	C
Neutralization Potential % CEC	4.08		%	1.61		AOAC 955.01			5/13/16 11:55	DRM	A
Nitrate-N	ND		mg/kg	31.2	1.7	300.0/9056A	5/13/16	JP	5/13/16 14:05	JP	A2
Phosphorus, Total	29500		mg/kg	1650	189	EPA 365.1	5/15/16	LJF	5/15/16 23:12	LJF	A
Solids, Total Volatile	59.8		%	1.0	0.1	S2540G-11			5/16/16 14:19	KAM	A
Tot. Kjeldahl Nitrogen,(Moist)	18800		mg/kg	577	200	S4500NH3D	5/12/16	DRM	5/16/16 15:33	J1H	A
Total Kjeldahl Nitrogen	58500		mg/kg	1800	700	S4500NH3D	5/12/16	DRM	5/16/16 15:33	J1H	A
Total Solids	32.1		%	0.1	0.01	S2540G-11			5/16/16 14:19	KAM	C
METALS											
Sulfur	15100		mg/kg	26.4	8.8	SW846 6010C	5/11/16	JPS	5/13/16 04:32	TSS	A1
Aluminum, Total	7240		mg/kg	106	34.4	SW846 6020A	5/11/16	JPS	5/17/16 14:01	MO	A1
Antimony, Total	3.0		mg/kg	2.6	0.87	SW846 6020A	5/11/16	JPS	5/17/16 15:35	MO	A1
Arsenic, Total	5.8		mg/kg	4.0	1.3	SW846 6020A	5/11/16	JPS	5/17/16 14:01	MO	A1
Beryllium, Total	0.66J	J	mg/kg	1.3	0.44	SW846 6020A	5/11/16	JPS	5/17/16 14:01	MO	A1
Boron, Total	20.5J	J	mg/kg	26.4	8.8	SW846 6010C	5/11/16	JPS	5/13/16 04:32	TSS	A1
Cadmium, Total	2.3		mg/kg	1.3	0.44	SW846 6020A	5/11/16	JPS	5/17/16 14:01	MO	A1
Calcium, Total	27600		mg/kg	26.4	8.8	SW846 6010C	5/11/16	JPS	5/13/16 04:32	TSS	A1
Chromium, Total	65.4		mg/kg	2.6	0.87	SW846 6020A	5/11/16	JPS	5/17/16 14:01	MO	A1
Copper, Total	490		mg/kg	6.6	2.1	SW846 6020A	5/11/16	JPS	5/17/16 14:01	MO	A1

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ANALYTICAL RESULTS

Workorder: 2142646 Bio/Twice per Month

Lab ID: **2142646001** Date Collected: 5/10/2016 08:00 Matrix: Solid

Sample ID: **Digest BFP BOC** Date Received: 5/10/2016 20:20

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Iron, Total	88700		mg/kg	26.4	8.8	SW846 6010C	5/11/16	JPS	5/13/16 04:32	TSS	A1
Lead, Total	35.8		mg/kg	2.6	0.87	SW846 6020A	5/11/16	JPS	5/17/16 15:35	MO	A1
Magnesium, Total	3350		mg/kg	26.4	8.8	SW846 6010C	5/11/16	JPS	5/13/16 04:32	TSS	A1
Manganese, Total	349		mg/kg	2.6	0.88	SW846 6010C	5/11/16	JPS	5/13/16 04:32	TSS	A1
Mercury, Total	0.63		mg/kg	0.15	0.048	SW846 74/1B	5/16/16	MNP	5/16/16 13:04	MNP	A3
Molybdenum, Total	16.8		mg/kg	2.6	0.87	SW846 6020A	5/11/16	JPS	5/17/16 14:01	MO	A1
Nickel, Total	30.5		mg/kg	6.6	2.1	SW846 6020A	5/11/16	JPS	5/17/16 14:01	MO	A1
Potassium, Total	1000		mg/kg	132	44.1	SW846 6010C	5/11/16	JPS	5/13/16 04:32	TSS	A1
Selenium, Total	5.9J	J	mg/kg	6.6	2.1	SW846 6020A	5/11/16	JPS	5/17/16 14:01	MO	A1
Silver, Total	8.6		mg/kg	2.6	0.87	SW846 6020A	5/11/16	JPS	5/17/16 14:01	MO	A1
Thallium, Total	ND		mg/kg	7.9	2.6	SW846 6010C	5/11/16	JPS	5/13/16 04:32	TSS	A1
Zinc, Total	812		mg/kg	6.6	2.1	SW846 6020A	5/11/16	JPS	5/17/16 14:01	MO	A1

Amy K Borden

Ms. Amy K Borden
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 2142646 Bio/Twice per Month

Lab ID: **2142646002** Date Collected: 5/10/2016 15:00 Matrix: Solid

Sample ID: **Digest BFP BOC** Date Received: 5/10/2016 20:20

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	Qntr
WET CHEMISTRY										
Moisture	68.1		%	0.1	0.01	S2540G-11		5/16/16 14:19	KAM	A
Total Solids	31.9		%	0.1	0.01	S2540G-11		5/16/16 14:19	KAM	A
York Cert-PA67-00042,NJ#PA065										
Fecal Coliforms	ND		MPN/gram	6	6	EPA 1680		5/10/16 21:35	ABL	A

Amy K Borden

Ms. Amy K Borden
Project Coordinator

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ANALYTICAL RESULTS

Workorder: 2142646 Bio/Twice per Month

Lab ID: **2142646003** Date Collected: 5/9/2016 18:00 Matrix: Solid

Sample ID: **SBT #2 (I02)** Date Received: 5/10/2016 20:20

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	Cntr
WET CHEMISTRY										
Moisture	94.5		%	0.1	0.01	S2540G-11		5/16/16 14:19	KAM	A
Solids, Total Volatile	79.3		%	1.0	0.1	S2540G-11		5/16/16 14:19	KAM	A
Total Solids	5.5		%	0.1	0.01	S2540G-11		5/16/16 14:19	KAM	A

Amy K Borden

Ms. Amy K Borden
Project Coordinator

Analytical Laboratory Services, Inc.
Environmental w Industrial Hygiene w Field Services
34 Dogwood Lane w Middletown, PA 17057 w 717.944.5541 w Fax 717.944.1430

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

Generated by ALSI

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

* 2 1 4 2 6 4 6 *

Client Name: DCWASA-Others
Address: 5000 Overlook Ave, SW
Washington, D.C. 20032
Contact: Mark Ramirez
Phone#: 202-787-4002
Project Name/#: Bio/Twice per Month
Bill To: Accounts Payable Office- 4th Floor

TAT [x] Normal-Standard TAT is 7 business days. [ ] Rush-Subject to ALSI approval and surcharges.
Date Required: Approved By:
Email? [ ] -Y
Fax? [ ] -Y No.:

Sample Description/Location (as it will appear on the lab report)	Sample Date	Time	*G or C	**Matrix	Container Type	Container Size	Preservative	Al, As, B, Cd, Cu, Cr, Pb, Zn, Ni, Fe, Hg, Ag, Mn, Mo, Ca, Mg, S, Se, K, Sb, Be, Tl, % CaCO3 Equiv., % T. Solids, Chlorides,	TKN, TP, NH3-N, NO3-N, % TS, % TVS	PCB - 8082	Fecal Coliform-MPN	% TS, % TVS					
					G	G	AG	PL	~~PT~~	AG							
					8 oz.	8 oz.	4 oz.	8 oz.	~~16 oz.~~	4 oz.							
					None	None	None	None	None								
					Enter Number of Containers Per Sample or Field Results Below.												
Digest BFP BOC	5/10/16	0800	G	SL	1	1	1										
Digest BFP BOC	5/10/15	1500	G	SL				1									
SBT #2 (I02)	5/09/16	0600-1800	C	SL					1								

Receipt Information (completed by Recei
Cooler Temp: 1 Therm ID: 352
No. of Coolers:

	Y	N
Custody Seals Present?		✓
(If present) Seals Intact?		
Received on Ice?	✓	
COC/Labels Complete/Accurate?	✓	
Cont. in Good Cond.?	✓	
Correct Containers?	✓	
Correct Sample Volumes?	✓	
Correct Preservation?	✓	
Headspace/Volatiles?		

Courier/Tracking #:

Sample/COC Comments

MICRO REC'D 5/10/16 1020

ALSI Field Services: oPickup
oComposite Sampling oRental Eq
oOther:

Project Comments: *Run % solids and report data as mg/kg dry weight

LOGGED BY(signature): DATE 5/11 TIME 1532
REVIEWED BY(signature): DATE TIME

	Relinquished By / Company Name	Date	Time		Received By / Company Name	Date	Time
1		5/10/16	1300	2		5/10	1600
3		5/10	1700	4		5/10	1700
5		5/10	2020	6		5/10	2020
7				8			
9				10			

Data Deliverables: [ ] Standard [ ] CLP-like [ ] USACE
Special Processing: USACE [ ] Navy [ ]
Reportable to PADEP? [ ] Yes
PWSID #
Sample Disposal: Lab [ ] Special [ ]
EDDS: Format Type-

* G=Grab; C=Composite **Matrix - AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

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June 1, 2016

Ms. Elaine Wilson
DC WASA
5000 Overlook Avenue, S.W.
Washington, DC 20032

Certificate of Analysis

Project Name:	Biosolids 05/10/16	Workorder:	2142576
Purchase Order:	160149	Workorder ID:	Biosolids 05/10/16

Dear Ms. Wilson:

Enclosed are the analytical results for samples received by the laboratory on Tuesday, May 10, 2016.

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 Ms. Amy K Borden (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.

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

CC: Mr. Ryan Maisano , Mr. Mark Ramirez , Accounts Payable-4th Floor

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

Amy K Borden

Ms. Amy K Borden
Project Coordinator

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SAMPLE SUMMARY

Workorder: 2142576 Biosolids 05/10/16

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
2142576001	Digest BFP BOCA 2nd Qtr 2016	Solid	5/10/2016 10:55	5/10/2016 20:20	Collected by Client

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".
-- For microbiological analyses, the "Prepared" value is the date/time into the incurbator 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: 2142576 Biosolids 05/10/16

Workorder Comments

See attached subcontracted asbestos results from EMSL. SSL 05/31/16

Sample Comments

Lab ID: 2142576001 **Sample ID:** Digest BFP BOCA 2nd Qtr 2016 **Sample Type:** SAMPLE

This sample was analyzed at a dilution in the 8081 Pesticide analysis due to sample matrix interference. Reporting limits were adjusted accordingly.

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ANALYTICAL RESULTS

Workorder: 2142576 Biosolids 05/10/16

Lab ID: **2142576001** Date Collected: 5/10/2016 10:55 Matrix: Solid

Sample ID: **Digest BFP BOCA 2nd Qtr 2016** Date Received: 5/10/2016 20:20

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	866		ug/kg	43.3	19.9	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
Benzene	9.9		ug/kg	8.7	2.2	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
Bromochloromethane	ND		ug/kg	8.7	2.2	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
Bromodichloromethane	ND		ug/kg	8.7	3.1	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
Bromoform	ND		ug/kg	8.7	2.3	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
Bromomethane	ND		ug/kg	8.7	2.3	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
2-Butanone	395		ug/kg	43.3	13.9	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
Carbon Disulfide	20.7		ug/kg	8.7	2.7	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
Carbon Tetrachloride	ND		ug/kg	8.7	2.2	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
Chlorobenzene	ND		ug/kg	8.7	2.2	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
Chlorodibromomethane	ND		ug/kg	8.7	2.9	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
Chloroethane	ND		ug/kg	21.7	3.7	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
Chloroform	ND		ug/kg	8.7	2.3	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
Chloromethane	ND		ug/kg	8.7	2.4	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
1,2-Dibromo-3-chloropropane	ND		ug/kg	21.7	12.6	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
1,2-Dibromoethane	ND		ug/kg	8.7	2.3	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
1,1-Dichloroethane	ND		ug/kg	8.7	2.2	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
1,2-Dichloroethane	ND		ug/kg	8.7	2.2	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
1,1-Dichloroethene	ND		ug/kg	8.7	2.3	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
cis-1,2-Dichloroethene	ND		ug/kg	8.7	2.2	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
trans-1,2-Dichloroethene	ND		ug/kg	8.7	2.3	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
1,2-Dichloropropane	ND		ug/kg	8.7	2.6	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
cis-1,3-Dichloropropene	ND		ug/kg	8.7	2.4	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
trans-1,3-Dichloropropene	ND		ug/kg	8.7	2.5	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
Ethylbenzene	7.2J	J	ug/kg	8.7	2.9	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
2-Hexanone	ND		ug/kg	43.3	12.1	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
4-Methyl-2-Pentanone(MIBK)	ND		ug/kg	43.3	16.5	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
Methylene Chloride	21.8		ug/kg	8.7	3.4	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
Styrene	ND		ug/kg	8.7	2.2	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
1,1,2,2-Tetrachloroethane	ND		ug/kg	8.7	2.4	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
Tetrachloroethene	ND		ug/kg	8.7	2.6	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
Toluene	70.8		ug/kg	8.7	2.9	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
Total Xylenes	66.7		ug/kg	26.0	6.1	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
1,1,1-Trichloroethane	ND		ug/kg	8.7	2.7	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
1,1,2-Trichloroethane	ND		ug/kg	8.7	2.4	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
Trichloroethene	4.2J	J	ug/kg	8.7	2.2	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2

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ANALYTICAL RESULTS

Workorder: 2142576 Biosolids 05/10/16

Lab ID: **2142576001** Date Collected: 5/10/2016 10:55 Matrix: Solid

Sample ID: **Digest BFP BOCA 2nd Qtr 2016** Date Received: 5/10/2016 20:20

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Vinyl Chloride	ND		ug/kg	8.7	2.2	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
o-Xylene	ND		ug/kg	8.7	2.5	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
mp-Xylene	66.7		ug/kg	17.3	3.6	SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	98.3		%	56 - 124		SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
4-Bromofluorobenzene (S)	104		%	51 - 128		SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
Dibromofluoromethane (S)	103		%	62 - 123		SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
Toluene-d8 (S)	101		%	59 - 131		SW846 8260B	5/11/16 00:49	SYB	5/12/16 06:25	SYB	F2
SEMIVOLATILES											
Acenaphthene	228J	J	ug/kg	322	38.7	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
Acenaphthylene	ND		ug/kg	322	45.1	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
Anthracene	164J	J	ug/kg	322	51.6	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
Benzo(a)anthracene	316J	J	ug/kg	322	32.2	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
Benzo(a)pyrene	275J	J	ug/kg	322	25.8	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
Benzo(b)fluoranthene	424		ug/kg	322	32.2	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
Benzo(g,h,i)perylene	ND		ug/kg	322	32.2	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
Benzo(k)fluoranthene	144J	J	ug/kg	322	32.2	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
4-Bromophenyl-phenylether	ND		ug/kg	645	58.0	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
Butylbenzylphthalate	2080		ug/kg	645	45.1	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
Carbazole	598J	J	ug/kg	645	45.1	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
4-Chloro-3-methylphenol	ND		ug/kg	1290	64.5	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
4-Chloroaniline	1130J	J	ug/kg	1290	77.4	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
bis(2-Chloroethoxy)methane	ND		ug/kg	645	58.0	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
bis(2-Chloroethyl)ether	ND		ug/kg	645	83.8	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
bis(2-Chloroisopropyl)ether	ND		ug/kg	645	96.7	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
2-Chloronaphthalene	ND		ug/kg	645	38.7	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
2-Chlorophenol	ND		ug/kg	1290	51.6	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
4-Chlorophenyl-phenylether	ND		ug/kg	645	51.6	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
Chrysene	344		ug/kg	322	32.2	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
mp-Cresol	1650		ug/kg	1290	51.6	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
o-Cresol	ND		ug/kg	1290	70.9	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
Di-n-Butylphthalate	469J	J	ug/kg	645	51.6	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
Di-n-Octylphthalate	1010		ug/kg	645	45.1	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
Dibenzo(a,h)anthracene	ND		ug/kg	322	38.7	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
Dibenzofuran	83.3J	J	ug/kg	645	51.6	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
1,2-Dichlorobenzene	ND		ug/kg	645	58.0	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
1,3-Dichlorobenzene	ND		ug/kg	645	45.1	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A

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

ANALYTICAL RESULTS

Workorder: 2142576 Biosolids 05/10/18

Lab ID: **2142576001** Date Collected: 5/10/2016 10:55 Matrix: Solid

Sample ID: **Digest BFP BOCA 2nd Qtr 2016** Date Received: 5/10/2016 20:20

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,4-Dichlorobenzene	ND		ug/kg	645	45.1	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
3,3-Dichlorobenzidine	ND		ug/kg	1290	245	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
2,4-Dichlorophenol	259J	J	ug/kg	1290	51.6	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
Diethylphthalate	ND		ug/kg	645	51.6	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
2,4 Dimethylphenol	ND		ug/kg	1290	96.7	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
Dimethylphthalate	ND		ug/kg	645	45.1	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
2,4-Dinitrophenol	ND		ug/kg	1290	258	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
2,4-Dinitrotoluene	ND		ug/kg	645	58.0	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
2,6-Dinitrotoluene	ND		ug/kg	645	77.4	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
bis(2-Ethylhexyl)phthalate	46500		ug/kg	645	45.1	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
Fluoranthene	777		ug/kg	322	32.2	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
Fluorene	177J	J	ug/kg	322	38.7	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
Hexachlorobenzene	ND		ug/kg	645	70.9	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
Hexachlorobutadiene	ND		ug/kg	645	64.5	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
Hexachlorocyclopentadiene	ND		ug/kg	1290	70.9	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
Hexachloroethane	ND		ug/kg	645	58.0	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
Indeno(1,2,3-cd)pyrene	1600		ug/kg	322	45.1	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
Isophorone	ND		ug/kg	645	38.7	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
2-Methyl-4,6-dinitrophenol	ND		ug/kg	1290	168	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
2-Methylnaphthalene	331J	J	ug/kg	645	32.2	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
Naphthalene	319J	J	ug/kg	322	38.7	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
2-Nitroaniline	ND		ug/kg	1290	77.4	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
3-Nitroaniline	ND		ug/kg	1290	129	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
4-Nitroaniline	ND		ug/kg	1290	51.6	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
Nitrobenzene	ND		ug/kg	645	77.4	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
2-Nitrophenol	ND		ug/kg	1290	70.9	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
4-Nitrophenol	ND		ug/kg	1290	90.3	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
N-Nitrosodimethylamine	ND		ug/kg	645	96.7	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
N-Nitroso-di-n-propylamine	ND		ug/kg	645	51.6	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
N-Nitrosodiphenylamine	ND		ug/kg	645	51.6	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
Pentachlorophenol	ND		ug/kg	1290	168	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
Phenanthrene	793		ug/kg	322	32.2	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
Phenol	13500		ug/kg	1290	64.5	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
Pyrene	772		ug/kg	322	32.2	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
1,2,4-Trichlorobenzene	ND		ug/kg	645	38.7	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
2,4,5-Trichlorophenol	ND		ug/kg	1290	77.4	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
2,4,6-Trichlorophenol	ND		ug/kg	1290	77.4	SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*

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

ANALYTICAL RESULTS

Workorder: 2142576 Biosolids 05/10/16

Lab ID: **2142576001** Date Collected: 5/10/2016 10:55 Matrix: Solid

Sample ID: **Digest BFP BOCA 2nd Qtr 2016** Date Received: 5/10/2016 20:20

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
2,4,6-Tribromophenol (S)	66.8		%	19 - 132		SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
2-Fluorobiphenyl (S)	81.6		%	40 - 110		SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
2-Fluorophenol (S)	73		%	26 - 116		SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
Nitrobenzene-d5 (S)	54.6		%	38 - 112		SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
Phenol-d5 (S)	76.4		%	35 - 111		SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
Terphenyl-d14 (S)	77.9		%	45 - 126		SW846 8270D	5/12/16 05:25	CMA	5/12/16 19:18	CGS	A
PESTICIDES											
Aldrin	ND		ug/kg	58.8		SW846 8081B	5/11/16 03:45	CMA	5/12/16 22:06	RWS	A
alpha-BHC	ND		ug/kg	58.8		SW846 8081B	5/11/16 03:45	CMA	5/12/16 22:06	RWS	A
beta-BHC	ND		ug/kg	58.8		SW846 8081B	5/11/16 03:45	CMA	5/12/16 22:06	RWS	A
delta-BHC	ND		ug/kg	58.8		SW846 8081B	5/11/16 03:45	CMA	5/12/16 22:06	RWS	A
gamma-BHC	ND		ug/kg	58.8		SW846 8081B	5/11/16 03:45	CMA	5/12/16 22:06	RWS	A
alpha-Chlordane	ND		ug/kg	58.8		SW846 8081B	5/11/16 03:45	CMA	5/12/16 22:06	RWS	A
gamma-Chlordane	ND		ug/kg	58.8		SW846 8081B	5/11/16 03:45	CMA	5/12/16 22:06	RWS	A
4,4'-DDD	ND		ug/kg	114		SW846 8081B	5/11/16 03:45	CMA	5/12/16 22:06	RWS	A
4,4'-DDE	ND		ug/kg	114		SW846 8081B	5/11/16 03:45	CMA	5/12/16 22:06	RWS	A
4,4'-DDT	ND		ug/kg	114		SW846 8081B	5/11/16 03:45	CMA	5/12/16 22:06	RWS	A
Dieldrin	ND		ug/kg	114		SW846 8081B	5/11/16 03:45	CMA	5/12/16 22:06	RWS	A
Endosulfan I	ND		ug/kg	58.8		SW846 8081B	5/11/16 03:45	CMA	5/12/16 22:06	RWS	A
Endosulfan II	ND		ug/kg	114		SW846 8081B	5/11/16 03:45	CMA	5/12/16 22:06	RWS	A
Endosulfan Sulfate	ND		ug/kg	114		SW846 8081B	5/11/16 03:45	CMA	5/12/16 22:06	RWS	A
Endrin	ND		ug/kg	114		SW846 8081B	5/11/16 03:45	CMA	5/12/16 22:06	RWS	A
Endrin Aldehyde	ND		ug/kg	114		SW846 8081B	5/11/16 03:45	CMA	5/12/16 22:06	RWS	A
Endrin Ketone	ND		ug/kg	114		SW846 8081B	5/11/16 03:45	CMA	5/12/16 22:06	RWS	A
Heptachlor	ND		ug/kg	58.8		SW846 8081B	5/11/16 03:45	CMA	5/12/16 22:06	RWS	A
Heptachlor Epoxide	ND		ug/kg	58.8		SW846 8081B	5/11/16 03:45	CMA	5/12/16 22:06	RWS	A
Methoxychlor	ND		ug/kg	114		SW846 8081B	5/11/16 03:45	CMA	5/12/16 22:06	RWS	A
Toxaphene	ND		ug/kg	1210		SW846 8081B	5/11/16 03:45	CMA	5/12/16 22:06	RWS	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
Decachlorobiphenyls (S)	60.3		%	30 - 135		SW846 8081B	5/11/16 03:45	CMA	5/12/16 22:06	RWS	A
Tetrachloro-m-xylene (S)	51.8		%	30 - 111		SW846 8081B	5/11/16 03:45	CMA	5/12/16 22:06	RWS	A
WET CHEMISTRY											
Cyanide, Total	0.64J	J	mg/kg	0.80	0.29	SW846 9012B	5/12/16 12:51	MMA	5/13/16 03:18	LJF	A
Hexane Extractable Material	90700		mg/kg	636	200	SW846 9071B			5/12/16 15:20	AT	A
Moisture	68.6		%	0.1	0.01	S2540G-11			5/14/16 03:24	JP	A
Phenolics	21.7		mg/kg	1.5	0.7	SW846 9066	5/18/16 23:00	NV	5/24/16 13:15	JLG	A
Silica Gel Treated HEM	8880		mg/kg	636	100	SW846 9071B			5/12/16 15:20	AT	A

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

ANALYTICAL RESULTS

Workorder: 2142576 Biosolids 05/10/16

Lab ID: **2142576001** Date Collected: 5/10/2016 10:55 Matrix: Solid

Sample ID: **Digest BFP BOCA 2nd Qtr 2016** Date Received: 5/10/2016 20:20

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	Cntr
Total Solids	31.4		%	0.1	0.01	S2540G-11		5/14/16 03:24	JP	A
SUBCONTRACTED ANALYSIS										
Asbestos	See Attached					Subcontract		5/31/16 00:00	SUB	A

Amy K Borden

Ms. Amy K Borden
Project Coordinator

Analytical Laboratory Services, Inc.
Environmental w Industrial Hygiene w Field Services
34 Dogwood Lane w Middletown, PA 17057 w 717.944.5541 w Fax: 717.944.1430

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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

Generated by ALSI

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

* 2 1 4 2 5 7 6 *

ZXZX of XYXY

Client Name: DCWASA-OTHER

Address: 5000 Overlook Ave, SW
Washington, D.C. 20032

Contact: Elaine Wilson

Phone#: 202-787-4177

Project Name/#: Bio/Quarterly

Bill To: Accounts Payable Office- 4th Floor

TAT [X] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALSI approval and surcharges.

Date Required: _____ Approved By: _____

Email? [X] -Y

Fax? [ ] -Y No.: _____

Sample Description/Location (as it will appear on the lab report)	Sample Date	Time	*G or C	**Matrix	Container Type	Container Size	Preservative	Cyanide, % solids	TPH & O&G- SW 846-9071	VOC (SW846- 8260)	semi-volatiles (SW846-8270) - including TCDD dioxin (see comments)	Pesticides (SW846-8081)	Phenols (SW846-9066, Asbestos
					CG	CG	CG	AG	AG				
					8 OZ	8 OZ	4 oz	8 OZ	8 OZ				
					None	None	None	None	None				
					ANALYSES/METHOD REQUESTED								
					Enter Number of Containers Per Sample or Field Results Below.								
Digest BFP BOCA 2nd Qtr 2016	5/10/16	1055	G	SL	1	1	1	1*	1	1			

Cooler Temp: 1 Therm ID: 352

No. of Coolers: _____

	Y	N	Initial
Custody Seals Present?			
(If present) Seals Intact?			
Received on Ice?	✓		
COC/Labels Complete/Accurate?	✓		
Cont. in Good Cond.?	✓		
Correct Containers?	✓		
Correct Sample Volumes?	✓		
Correct Preservation?	✓		
Headspace/Volatiles?			

Courier/Tracking #:

Sample/COC Comments

*plus hexachlorobenzene, hexachlorobutadiene and toxaphene

ALSI Field Services: oPickup oLabor oComposite Sampling oRental Equipment oOther: _____

Project Comments: *Run % solids and report data as mg/kg dry weight

LOGGED BY(signature): _____ Date: 5/10/16 Time: 1015

REVIEWED BY(signature): _____ Date: _____ Time: _____

	Relinquished By / Company Name	Date	Time		Received By / Company Name	Date	Time
1	[illegible] /DCWater	5-10-16	1200	2	[illegible]	5/10	1600
3	[illegible]	5/10	1700	4	[illegible]	5/10	1700
5	[illegible]	5/10	2000	6	[illegible]	5/10	2320
7				8			
9				10			

Data Deliverables: [ ] Standard [ ] CLP-like [ ] USACE [ ]

Special Processing: USACE [ ] Navy [ ]

State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] NC [ ]

Reportable to PADEP? Yes [ ]

PWSID # _____

Sample Disposal: Lab [ ] Special [ ]

EDDS: Format Type- _____

*G=Grab; C=Composite **Matrix - AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

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Middletown, PA 17057
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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

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

COC #: 1of1

ALS Quote #:

Client Name:	ALS Environmental
Address:	34 Dogwood Lane Middletown, PA 17057
Contact:	Amy Borden
Phone#:	(717) 944-5541
Project Name/#:	2142576
Bill To:	ALS Environmental
TAT	[ ] Normal-Standard TAT is 10-12 business days. [X] Rush-Subject to ALSI approval and surcharges.
Date Required:	Approved By:
Email?	[X] -Y ALMDT.Subcontract@ALSGlobal.co
Fax?	[ ] -Y No.:

Sample Description/Location (as it will appear on the lab report)	Sample Date	Time	*G or C	**Matrix	Container Type	Container Size	Preservative	Bulk Asbestos								Sample/COC Comments
					G	4oz	UNP	ANALYSES/METHOD REQUESTED								
					Enter Number of Containers Per Sample or Field Results Below.											
2142576 001	5/10/16	1055	G	SW	1											
																Sub to EMSL

Receipt Information (completed by Receiving Lab)

Cooler Temp: _____ Therm ID: _____

No. of Coolers: _____

	Y	N	Initial
Custody Seals Present?			
(If present) Seals Intact?			
Received on Ice?			
COC/Labels Complete/Accurate?			
Cont. in Good Cond.?			
Correct Containers?			
Correct Sample Volumes?			
Correct Preservation?			
Headspace/Volatiles?			

Courier/Tracking #:

ALS Field Services: __Pickup __Labor __Composite Sampling __Rental Equipment __Other: _____

Project Comments:

LOGGED BY(signature): Date: Time:

REVIEWED BY(signature): Date: Time:

	Relinquished By / Company Name	Date	Time		Received By / Company Name	Date	Time
1	[signature]	5/16	1635	2			
3				4			
5				6			
7				8			
9				10			

Data Deliverables: [ ] Standard [ ] CLP-like [ ] USACE [ ]

Special Processing: USACE [ ] Navy [ ]

State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] NC [ ]

Reportable to PADEP? Yes [ ] PWSID #:

Sample Disposal: Lab [ ] Special [ ]

EDDS: Format Type:

*G=Grab; C=Composite **Matrix - A=Air; DW=Drinking Water; GW=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

ALS Environmental
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 #: 1of1

ALS Quote #:

Client Name: ALS Environmental	
Address: 34 Dogwood Lane Middletown, PA 17057	
Contact: Amy Borden	
Phone#: (717) 944-5541	
Project Name/#: 2142576	
Bill To: ALS Environmental	

TAT: [ ] Normal-Standard TAT is 10-12 business days. [X] Rush-Subject to ALSL approval and surcharges.
Date Required: Approved By:
Email? [X] Y ALMDT.Subcontract@ALSGlobal.co
Fax? [ ] Y No:

Container Type	G										
Container Size	4oz										
Preservative	UNP										

ANALYSES/METHOD REQUESTED

Sample Description/Location (as it will appear on the lab report)	Sample Date	Time	*G or C	**Matrix	Bulk Asbestos									
					Enter Number of Containers Per Sample or Field Results Below.									
2142576-001	5/10/16	1055	G	SW	1									

Receipt Information (completed by Receiving Lab)

Cooler Temp: ____ Therm ID: ____

No. of Coolers: ____	Y	N	Initial
Custody Seals Present?			
(If present) Seals Intact?			
Received on Ice?			
COC/Labels Complete/Accurate?			
Cont. in Good Cond.?			
Correct Containers?			
Correct Sample Volumes?			
Correct Preservation?			
Headspace/Volatiles?			

Courier/Tracking #:

Sample/COC Comments

Sub to EMSL

ALS Field Services: _Pickup _Labor _Composite Sampling _Rental Equipment _Other:

Project Comments:

LOGGED BY (signature): Date: Time:

REVIEWED BY (signature): Date: Time:

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1	5/11/16	1635	2	5/11	1635
3	5/11/16	1930	4	5/11	1930
5	5/12/16	0841	6	5/12/16	0841
7	5/12/16	1039	8	5/12/16	1039
9			10		

Data Deliverables: [ ] Standard [ ] CLP-like [ ] USACE

Special Processing: [ ] USACE [ ] Navy [ ]

State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] MD [ ]

Reportable to PADEP? [ ] Yes

Sample Disposal: [ ] Lab [ ] Special

PWSID #:

EDDS: Format Type:

*G=Grab; C=Composite **Matrix - Al=Air; DW=Drinking Water; GW=Groundwater; OI=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

2016 MAY 17 A 10:39
CINNAMINSON, N.J.

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (800) 220-3675 / (856) 786-5974
http://www.EMSL.com cinnaablab@EMSL.com

EMSL Order:	041613244
CustomerID:	WRIG51
CustomerPO:	
ProjectID:	

Attn: **Amy Borden**
ALS Environmental
34 Dogwood Lane
Middletown, PA 17057

Phone:	(717) 944-5541
Fax:	(717) 944-1430
Received:	05/18/16 2:30 PM
Analysis Date:	5/31/2016
Collected:	5/10/2016

Project: **2142576**

Test Report: PLM Analysis of Bulk Samples for Asbestos via EPA 600/R-93/116 Method with CARB 435 Prep (Milling) Level A for 0.25% Target Analytical Sensitivity

Sample	Description	Appearance	Non-Asbestos % Fibrous	Non-Asbestos % Non-Fibrous	Asbestos % Type
2142576-001 *041613244-0001*		Brown Fibrous Homogeneous	5.00% Cellulose	95.00% Non-fibrous (other)	None Detected

Recommend TEM

Analyst(s)

Garret Vliet (1)

Benjamin Ellis, Laboratory Manager
or other approved signatory

Initial report from 05/31/2016 16:04:28

Test Report PLMPTC-7.25.0 Printed: 5/31/2016 4:04:28 PM

THIS IS THE LAST PAGE OF THE REPORT.

Additional Biosolids Toxic Organics Pollutant Data

ALS Environmental

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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

March 10, 2016

Ms. Elaine Wilson
DC WASA
5000 Overlook Avenue, S.W.
Washington, DC 20032

Certificate of Analysis

Project Name:	Bio/Quarterly	Workorder:	2128093
Purchase Order:	160149	Workorder ID:	Bio/Quarterly

Dear Ms. Wilson:

Enclosed are the analytical results for samples received by the laboratory on Friday, March 4, 2016.

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 Ms. Amy K Borden (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.

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

CC: Mr. Ryan Maisano , Mr. Mark Ramirez , Accounts Payable-4th Floor

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

Amy K Borden

Ms. Amy K Borden
Project Coordinator

ALS Environmental

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

SAMPLE SUMMARY

Workorder: 2128093 Bio/Quarterly

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
2128093001	Digest BFP BOCA 1st QTR 2016	Solid	3/3/2016 07:40	3/4/2016 19:40	Collected by Client

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

PROJECT SUMMARY

Workorder: 2128093 Bio/Quarterly

Sample Comments

Lab ID: 2128093001 **Sample ID:** Digest BFP BOCA 1st QTR 2016 **Sample Type:** SAMPLE

This sample was analyzed at a dilution in the 8081 Pesticide analysis due to sample matrix interference. Reporting limits were adjusted accordingly.

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ANALYTICAL RESULTS

Workorder: 2128093 Bio/Quarterly

Lab ID: **2128093001** Date Collected: 3/3/2016 07:40 Matrix: Solid

Sample ID: **Digest BFP BOCA 1st QTR 2016** Date Received: 3/4/2016 19:40

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	4120		ug/kg	45.5	20.9	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
Benzene	15.7		ug/kg	9.1	2.3	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
Bromochloromethane	ND		ug/kg	9.1	2.3	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
Bromodichloromethane	ND		ug/kg	9.1	3.2	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
Bromoform	ND		ug/kg	9.1	2.4	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
Bromomethane	ND		ug/kg	9.1	2.4	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
2-Butanone	1360		ug/kg	45.5	14.6	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
Carbon Disulfide	180		ug/kg	9.1	2.9	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
Carbon Tetrachloride	ND		ug/kg	9.1	2.3	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
Chlorobenzene	ND		ug/kg	9.1	2.3	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
Chlorodibromomethane	ND		ug/kg	9.1	3.1	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
Chloroethane	ND		ug/kg	22.7	3.9	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
Chloroform	ND		ug/kg	9.1	2.4	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
Chloromethane	ND		ug/kg	9.1	2.5	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
1,2-Dibromo-3-chloropropane	ND		ug/kg	22.7	13.2	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
1,2-Dibromoethane	ND		ug/kg	9.1	2.5	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
1,1-Dichloroethane	ND		ug/kg	9.1	2.3	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
1,2-Dichloroethane	ND		ug/kg	9.1	2.3	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
1,1-Dichloroethene	ND		ug/kg	9.1	2.4	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
cis-1,2-Dichloroethene	ND		ug/kg	9.1	2.3	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
trans-1,2-Dichloroethene	ND		ug/kg	9.1	2.4	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
1,2-Dichloropropane	ND		ug/kg	9.1	2.7	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
cis-1,3-Dichloropropene	ND		ug/kg	9.1	2.5	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
trans-1,3-Dichloropropene	ND		ug/kg	9.1	2.6	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
Ethylbenzene	12.4		ug/kg	9.1	3.1	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
2-Hexanone	ND		ug/kg	45.5	12.7	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
4-Methyl-2-Pentanone(MIBK)	ND		ug/kg	45.5	17.3	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
Methylene Chloride	101	2	ug/kg	9.1	3.5	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
Styrene	ND		ug/kg	9.1	2.3	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
1,1,2,2-Tetrachloroethane	ND		ug/kg	9.1	2.5	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
Tetrachloroethene	ND		ug/kg	9.1	2.7	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
Toluene	149		ug/kg	9.1	3.0	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
Total Xylenes	143		ug/kg	27.3	6.4	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
1,1,1-Trichloroethane	ND		ug/kg	9.1	2.8	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
1,1,2-Trichloroethane	ND		ug/kg	9.1	2.5	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
Trichloroethene	ND		ug/kg	9.1	2.3	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2

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

ANALYTICAL RESULTS

Workorder: 2128093 Bio/Quarterly

Lab ID: **2128093001** Date Collected: 3/3/2016 07:40 Matrix: Solid

Sample ID: **Digest BFP BOCA 1st QTR 2016** Date Received: 3/4/2016 19:40

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Vinyl Chloride	ND		ug/kg	9.1	2.3	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
o-Xylene	4.2J	J	ug/kg	9.1	2.6	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
mp-Xylene	139		ug/kg	18.2	3.8	SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	78.1		%	56 - 124		SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
4-Bromofluorobenzene (S)	85.1		%	51 - 128		SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
Dibromofluoromethane (S)	85.2		%	62 - 123		SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
Toluene-d8 (S)	82.2		%	59 - 131		SW846 8260C	3/4/16	SYB	3/9/16 06:47	SYB	A2
SEMIVOLATILES											
Acenaphthene	198J	J	ug/kg	440	52.8	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
Acenaphthylene	ND		ug/kg	440	61.5	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
Anthracene	159J	J	ug/kg	440	70.3	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
Benzo(a)anthracene	409J	J	ug/kg	440	44.0	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
Benzo(a)pyrene	406J	J	ug/kg	440	35.2	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
Benzo(b)fluoranthene	ND		ug/kg	440	44.0	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
Benzo(g,h,i)perylene	ND		ug/kg	440	44.0	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
Benzo(k)fluoranthene	186J	J	ug/kg	440	44.0	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
4-Bromophenyl-phenylether	ND		ug/kg	879	79.1	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
Butylbenzylphthalate	2130		ug/kg	879	61.5	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
Carbazole	670J	J	ug/kg	879	61.5	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
4-Chloro-3-methylphenol	ND		ug/kg	1760	87.9	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
4-Chloroaniline	932J	J	ug/kg	1760	106	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
bis(2-Chloroethoxy)methane	ND		ug/kg	879	79.1	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
bis(2-Chloroethyl)ether	ND		ug/kg	879	114	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
bis(2-Chloroisopropyl)ether	ND		ug/kg	879	132	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
2-Chloronaphthalene	ND		ug/kg	879	52.8	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
2-Chlorophenol	ND		ug/kg	1760	70.3	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
4-Chlorophenyl-phenylether	ND		ug/kg	879	70.3	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
Chrysene	455		ug/kg	440	44.0	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
mp-Cresol	2440		ug/kg	1760	70.3	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
o-Cresol	ND		ug/kg	1760	96.7	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
Di-n-Butylphthalate	740J	J	ug/kg	879	70.3	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
Di-n-Octylphthalate	ND		ug/kg	879	61.5	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
Dibenzo(a,h)anthracene	ND		ug/kg	440	52.8	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
Dibenzofuran	124J	J	ug/kg	879	70.3	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
1,2-Dichlorobenzene	ND		ug/kg	879	79.1	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
1,3-Dichlorobenzene	ND		ug/kg	879	61.5	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A

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

ANALYTICAL RESULTS

Workorder: 2128093 Bio/Quarterly

Lab ID: **2128093001** Date Collected: 3/3/2016 07:40 Matrix: Solid

Sample ID: **Digest BFP BOCA 1st QTR 2016** Date Received: 3/4/2016 19:40

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,4-Dichlorobenzene	ND		ug/kg	879	61.5	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
3,3-Dichlorobenzidine	ND		ug/kg	1760	334	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
2,4-Dichlorophenol	365J	J	ug/kg	1760	70.3	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
Diethylphthalate	ND		ug/kg	879	70.3	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
2,4-Dimethylphenol	ND		ug/kg	1760	132	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
Dimethylphthalate	ND		ug/kg	879	61.5	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
2,4-Dinitrophenol	ND		ug/kg	1760	352	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
2,4-Dinitrotoluene	ND		ug/kg	879	79.1	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
2,6-Dinitrotoluene	ND		ug/kg	879	106	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
bis(2-Ethylhexyl)phthalate	44000		ug/kg	879	61.5	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
Fluoranthene	ND		ug/kg	440	44.0	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
Fluorene	225J	J	ug/kg	440	52.8	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
Hexachlorobenzene	ND		ug/kg	879	96.7	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
Hexachlorobutadiene	ND		ug/kg	879	87.9	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
Hexachlorocyclopentadiene	ND		ug/kg	1760	96.7	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
Hexachloroethane	ND		ug/kg	879	79.1	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
Indeno(1,2,3-cd)pyrene	ND		ug/kg	440	61.5	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
Isophorone	ND		ug/kg	879	52.8	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
2-Methyl-4,6-dinitrophenol	ND		ug/kg	1760	229	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
2-Methylnaphthalene	373J	J	ug/kg	879	44.0	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
Naphthalene	263J	J	ug/kg	440	52.8	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
2-Nitroaniline	ND		ug/kg	1760	106	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
3-Nitroaniline	ND		ug/kg	1760	176	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
4-Nitroaniline	ND		ug/kg	1760	70.3	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
Nitrobenzene	ND		ug/kg	879	106	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
2-Nitrophenol	ND		ug/kg	1760	96.7	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
4-Nitrophenol	ND		ug/kg	1760	123	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
N-Nitrosodimethylamine	ND		ug/kg	879	132	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
N-Nitroso-di-n-propylamine	ND		ug/kg	879	70.3	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
N-Nitrosodiphenylamine	ND		ug/kg	879	70.3	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
Pentachlorophenol	ND		ug/kg	1760	229	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
Phenanthrene	944		ug/kg	440	44.0	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
Phenol	34400		ug/kg	1760	87.9	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
Pyrene	893		ug/kg	440	44.0	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
1,2,4-Trichlorobenzene	ND		ug/kg	879	52.8	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
2,4,5-Trichlorophenol	ND		ug/kg	1760	106	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
2,4,6-Trichlorophenol	ND		ug/kg	1760	106	SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A

Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*

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

ANALYTICAL RESULTS

Workorder: 2128093 Bio/Quarterly

Lab ID: **2128093001** Date Collected: 3/3/2016 07:40 Matrix: Solid

Sample ID: **Digest BFP BOCA 1st QTR 2016** Date Received: 3/4/2016 19:40

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
2,4,6-Tribromophenol (S)	66.8		%	19 - 132		SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
2-Fluorobiphenyl (S)	72.3		%	40 - 110		SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
2-Fluorophenol (S)	67		%	26 - 116		SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
Nitrobenzene-d5 (S)	64.2		%	38 - 112		SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
Phenol-d5 (S)	75		%	35 - 111		SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
Terphenyl-d14 (S)	76.2		%	45 - 126		SW846 8270D	3/8/16	CMA	3/8/16 15:43	CGS	A
PESTICIDES											
Aldrin	ND		ug/kg	74.7	24.2	SW846 8081B	3/8/16	CMA	3/9/16 15:31	RWS	A
alpha-BHC	ND		ug/kg	74.7	6.6	SW846 8081B	3/8/16	CMA	3/9/16 15:31	RWS	A
beta-BHC	ND		ug/kg	74.7	7.9	SW846 8081B	3/8/16	CMA	3/9/16 15:31	RWS	A
delta-BHC	ND		ug/kg	74.7	5.7	SW846 8081B	3/8/16	CMA	3/9/16 15:31	RWS	A
gamma-BHC	ND		ug/kg	74.7	6.2	SW846 8081B	3/8/16	CMA	3/9/16 15:31	RWS	A
alpha-Chlordane	ND		ug/kg	74.7	7.9	SW846 8081B	3/8/16	CMA	3/9/16 15:31	RWS	A
gamma-Chlordane	ND		ug/kg	74.7	12.7	SW846 8081B	3/8/16	CMA	3/9/16 15:31	RWS	A
4,4'-DDD	ND		ug/kg	145	11.9	SW846 8081B	3/8/16	CMA	3/9/16 15:31	RWS	A
4,4'-DDE	ND		ug/kg	145	19.8	SW846 8081B	3/8/16	CMA	3/9/16 15:31	RWS	A
4,4'-DDT	ND		ug/kg	145	16.7	SW846 8081B	3/8/16	CMA	3/9/16 15:31	RWS	A
Dieldrin	ND		ug/kg	145	16.7	SW846 8081B	3/8/16	CMA	3/9/16 15:31	RWS	A
Endosulfan I	ND		ug/kg	74.7	9.2	SW846 8081B	3/8/16	CMA	3/9/16 15:31	RWS	A
Endosulfan II	ND		ug/kg	145	30.3	SW846 8081B	3/8/16	CMA	3/9/16 15:31	RWS	A
Endosulfan Sulfate	ND		ug/kg	145	9.7	SW846 8081B	3/8/16	CMA	3/9/16 15:31	RWS	A
Endrin	ND		ug/kg	145	10.6	SW846 8081B	3/8/16	CMA	3/9/16 15:31	RWS	A
Endrin Aldehyde	ND		ug/kg	145	15.8	SW846 8081B	3/8/16	CMA	3/9/16 15:31	RWS	A
Endrin Ketone	ND		ug/kg	145	20.2	SW846 8081B	3/8/16	CMA	3/9/16 15:31	RWS	A
Heptachlor	ND		ug/kg	74.7	7.5	SW846 8081B	3/8/16	CMA	3/9/16 15:31	RWS	A
Heptachlor Epoxide	ND		ug/kg	74.7	7.5	SW846 8081B	3/8/16	CMA	3/9/16 15:31	RWS	A
Methoxychlor	ND		ug/kg	145	19.3	SW846 8081B	3/8/16	CMA	3/9/16 15:31	RWS	A
Toxaphene	ND		ug/kg	1540	255	SW846 8081B	3/8/16	CMA	3/9/16 15:31	RWS	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
Decachlorobiphenyls (S)	87.7		%	30 - 135		SW846 8081B	3/8/16	CMA	3/9/16 15:31	RWS	A
Tetrachloro-m-xylene (S)	496	1	%	30 - 111		SW846 8081B	3/8/16	CMA	3/9/16 15:31	RWS	A
WET CHEMISTRY											
Cyanide, Total	1.8		mg/kg	0.76	0.27	SW846 9012B	3/7/16	MMA	3/8/16 06:54	LJF	A
Hexane Extractable Material	74100		mg/kg	610	200	SW846 9071B			3/8/16 15:00	AT	A
Moisture	67.2		%	0.1	0.01	S2540G-11			3/8/16 14:17	KAM	A
Silica Gel Treated HEM	10700		mg/kg	610	100	SW846 9071B			3/8/16 15:00	AT	A
Total Solids	32.8		%	0.1	0.01	S2540G-11			3/8/16 14:17	KAM	A

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ANALYTICAL RESULTS

Workorder: 2128093 Bio/Quarterly

Lab ID:	**2128093001**	Date Collected:	3/3/2016 07:40	Matrix:	Solid
Sample ID:	**Digest BFP BOCA 1st QTR 2016**	Date Received:	3/4/2016 19:40		

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

Amy K Borden

Ms. Amy K Borden
Project Coordinator

PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
2128093001	1	Digest BFP BOCA 1st QTR 2016	SW846 8081B	Tetrachloro-m-xylene

The surrogate Tetrachloro-m-xylene for method SW846 8081B was outside of control limits. The % Recovery was reported as 496 and the control limits were 30 to 111. This result was reported at a dilution of 5.

2128093001	2	Digest BFP BOCA 1st QTR 2016	SW846 8260C	Methylene Chloride

The Method Blank for method SW846 8260C reported a value greater than the reporting level for the analyte Methylene Chloride.

Analytical Laboratory Services, Inc.
Environmental ▼ Industrial Hygiene ▼ Field Services
34 Dogwood Lane ▼ Middletown, PA 17057 ▼ 717.944.5541 ▼ Fax 717.944.1430

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

Generated by ALSI

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

COC #: *2126093*

ALSI Qu

Client Name: DCWASA-Others

Address: 5000 Overlook Ave, SW
Washington, D.C. 20032

Contact: Mark Ramirez

Phone#: 202-787-4002

Project Name/#: Bio/Quarterly

Bill To: Accounts Payable Office- 4th Floor

TAT [x] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALSI approval and surcharges.

Date Required: _____ Approved By: _____

Email? [x] -Y

Fax? [ ] -Y No.:

Sample Description/Location (as it will appear on the lab report)	Sample Date	Time	*G or C	**Matrix	Container Type	Container Size	Preservative	Cyanide, % solids	Total O&G plus TPH - SW9071	VOC (SW 8260)	semi-volatiles (SW846-8270) - including TCDD dioxin (see comments)	Pesticides (SW846-8081)	Sample/COC Comments
					AG	4 OZ	None	Enter Number of Containers Per Sample or Field Results Below.					
Moc Blend			G	SL									*plus hexachlorobenzene, hexachlorobutadiene
Digest BFP BOCA 1st Qtr 2016	3/3/16	0740	G	SL	AG	4 OZ	None	1	1	1	1*	1	and toxaphene
					AG	4 OZ	None						
					AG	8 OZ	None						
					AG	8 OZ	None						

Receipt Information (completed by Receiving Lab)

Cooler Temp: 3°C Therm ID: 352

No. of Coolers: _____

	Y	N	Initial
Custody Seals Present?		X	
(If present) Seals Intact?			
Received on Ice?	X		
COC/Labels Complete/Accurate?	X		
Cont. in Good Cond.?	X		
Correct Containers?	X		
Correct Sample Volumes?	X		
Correct Preservation?	X		
Headspace/Volatiles?			

Courier/Tracking #:

ALSI Field Services: oPickup oLabor
oComposite Sampling oRental Equipment
oOther:

Project Comments: *Run % solids and report data as mg/kg dry weight

LOGGED BY(signature): _____ Date: 3/4 Time: 2050

REVIEWED BY(signature): _____ Date: _____ Time: _____

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1	3-4-16	900	2	3/4	1312
3	3/4		4	3/4/16	1550
5	3/4/16	1940	6	3/4	1541
7			8		
9			10		

Data Deliverables: [ ] Standard [ ] CLP-like [ ] USACE [ ]

Special Processing: USACE [ ] Navy [ ]

State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] NC [ ]

Reportable to PADEP? Yes [ ]

PWSID #

Sample Disposal: Lab [ ] Special [ ]

EDDS: Format Type-

* G=Grab; C=Composite ** Matrix - AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

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Rev 8/04

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

September 12, 2016

Ms. Elaine Wilson
DC WASA
5000 Overlook Avenue, S.W.
Washington, DC 20032

Certificate of Analysis

Project Name:	Bio/Quarterly	Workorder:	2172219
Purchase Order:	160831	Workorder ID:	Bio/Quarterly

Dear Ms. Wilson:

Enclosed are the analytical results for samples received by the laboratory on Friday, September 2, 2016.

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 Ms. Amy K Borden (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.

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

CC: Mr. Ryan Maisano , Mr. Mark Ramirez , Accounts Payable-4th Floor

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

Amy K Borden

Ms. Amy K Borden
Project Coordinator

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SAMPLE SUMMARY

Workorder: 2172219 Bio/Quarterly

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
2172219001	Digest BFP BOC 3rd Qtr 2016	Solid	8/31/2016 10:30	9/2/2016 21:00	Collected by Client

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".
-- For microbiological analyses, the "Prepared" value is the date/time into the incurbator 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: 2172219 Bio/Quarterly

Sample Comments

Lab ID: 2172219001 **Sample ID:** Digest BFP BOC 3rd Qtr 2016 **Sample Type:** SAMPLE

This sample was analyzed at a dilution in the 8081 Pesticide analysis due to sample matrix interference. Reporting limits were adjusted accordingly.

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ANALYTICAL RESULTS

Workorder: 2172219 Bio/Quarterly

Lab ID: **2172219001** Date Collected: 8/31/2016 10:30 Matrix: Solid

Sample ID: **Digest BFP BOC 3rd Qtr 2016** Date Received: 9/2/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	2770	1	ug/kg	42.5	19.6	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
Benzene	14.5		ug/kg	8.5	2.1	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
Bromochloromethane	ND		ug/kg	8.5	2.1	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
Bromodichloromethane	ND		ug/kg	8.5	3.0	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
Bromoform	ND		ug/kg	8.5	2.2	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
Bromomethane	ND		ug/kg	8.5	2.2	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
2-Butanone	988		ug/kg	42.5	13.6	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
Carbon Disulfide	112		ug/kg	8.5	2.7	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
Carbon Tetrachloride	ND		ug/kg	8.5	2.2	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
Chlorobenzene	ND		ug/kg	8.5	2.2	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
Chlorodibromomethane	ND		ug/kg	8.5	2.9	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
Chloroethane	ND		ug/kg	21.3	3.6	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
Chloroform	ND		ug/kg	8.5	2.3	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
Chloromethane	ND		ug/kg	8.5	2.3	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
1,2-Dibromo-3-chloropropane	ND		ug/kg	21.3	12.3	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
1,2-Dibromoethane	ND		ug/kg	8.5	2.3	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
1,1-Dichloroethane	ND		ug/kg	8.5	2.1	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
1,2-Dichloroethane	ND		ug/kg	8.5	2.1	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
1,1-Dichloroethene	ND		ug/kg	8.5	2.2	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
cis-1,2-Dichloroethene	ND		ug/kg	8.5	2.1	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
trans-1,2-Dichloroethene	ND		ug/kg	8.5	2.2	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
1,2-Dichloropropane	ND		ug/kg	8.5	2.6	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
cis-1,3-Dichloropropene	ND		ug/kg	8.5	2.3	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
trans-1,3-Dichloropropene	ND		ug/kg	8.5	2.5	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
Ethylbenzene	15.4		ug/kg	8.5	2.9	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
2-Hexanone	36.2J	J	ug/kg	42.5	11.9	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
4-Methyl-2-Pentanone(MIBK)	61.2		ug/kg	42.5	16.2	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
Methylene Chloride	100		ug/kg	8.5	3.3	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
Styrene	ND		ug/kg	8.5	2.1	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
1,1,2,2-Tetrachloroethane	ND		ug/kg	8.5	2.4	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
Tetrachloroethene	5.6J	J	ug/kg	8.5	2.6	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
Toluene	238		ug/kg	8.5	2.8	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
Total Xylenes	210		ug/kg	25.5	6.0	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
1,1,1-Trichloroethane	ND		ug/kg	8.5	2.6	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
1,1,2-Trichloroethane	ND		ug/kg	8.5	2.4	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
Trichloroethene	7.2J	J	ug/kg	8.5	2.1	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2

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

ANALYTICAL RESULTS

Workorder: 2172219 Bio/Quarterly

Lab ID: **2172219001** Date Collected: 8/31/2016 10:30 Matrix: Solid

Sample ID: **Digest BFP BOC 3rd Qtr 2016** Date Received: 9/2/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Vinyl Chloride	ND		ug/kg	8.5	2.1	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
o-Xylene	4.5J	J	ug/kg	8.5	2.5	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
mp-Xylene	205		ug/kg	17.0	3.5	SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	87.2		%	56 - 124		SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
4-Bromofluorobenzene (S)	104		%	51 - 128		SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
Dibromofluoromethane (S)	97.4		%	62 - 123		SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
Toluene-d8 (S)	104		%	59 - 131		SW846 8260B	9/3/16 02:32	CJG	9/7/16 00:37	CJG	A2
SEMIVOLATILES											
Acenaphthene	ND		ug/kg	2130	255	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
Acenaphthylene	ND		ug/kg	2130	298	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
Anthracene	ND		ug/kg	2130	340	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
Benzo(a)anthracene	ND		ug/kg	2130	213	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
Benzo(a)pyrene	ND		ug/kg	2130	170	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
Benzo(b)fluoranthene	ND		ug/kg	2130	213	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
Benzo(g,h,i)perylene	ND		ug/kg	2130	213	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
Benzo(k)fluoranthene	ND		ug/kg	2130	213	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
4-Bromophenyl-phenylether	ND		ug/kg	4250	383	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
Butylbenzylphthalate	4470		ug/kg	4250	298	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
Carbazole	ND		ug/kg	4250	298	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
4-Chloro-3-methylphenol	ND		ug/kg	8500	425	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
4-Chloroaniline	1320J	J	ug/kg	8500	510	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
bis(2-Chloroethoxy)methane	ND		ug/kg	4250	383	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
bis(2-Chloroethyl)ether	ND		ug/kg	4250	553	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
bis(2-Chloroisopropyl)ether	ND		ug/kg	4250	638	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
2-Chloronaphthalene	ND		ug/kg	4250	255	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
2-Chlorophenol	ND		ug/kg	8500	340	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
4-Chlorophenyl-phenylether	ND		ug/kg	4250	340	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
Chrysene	394J	J	ug/kg	2130	213	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
mp-Cresol	1230J	J	ug/kg	8500	340	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
o-Cresol	ND		ug/kg	8500	468	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
Di-n-Butylphthalate	605J	J	ug/kg	4250	340	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
Di-n-Octylphthalate	ND		ug/kg	4250	298	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
Dibenzo(a,h)anthracene	ND		ug/kg	2130	255	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
Dibenzofuran	ND		ug/kg	4250	340	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
1,2-Dichlorobenzene	ND		ug/kg	4250	383	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
1,3-Dichlorobenzene	ND		ug/kg	4250	298	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A

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ANALYTICAL RESULTS

Workorder: 2172219 Bio/Quarterly

Lab ID: **2172219001** Date Collected: 8/31/2016 10:30 Matrix: Solid

Sample ID: **Digest BFP BOC 3rd Qtr 2016** Date Received: 9/2/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
1,4-Dichlorobenzene	ND		ug/kg	4250	298	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
3,3-Dichlorobenzidine	ND		ug/kg	8500	1620	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
2,4-Dichlorophenol	ND		ug/kg	8500	340	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
Diethylphthalate	ND		ug/kg	4250	340	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
2,4-Dimethylphenol	ND		ug/kg	8500	638	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
Dimethylphthalate	ND		ug/kg	4250	298	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
2,4-Dinitrophenol	ND		ug/kg	8500	1700	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
2,4-Dinitrotoluene	ND		ug/kg	4250	383	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
2,6-Dinitrotoluene	ND		ug/kg	4250	510	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
bis(2-Ethylhexyl)phthalate	50000		ug/kg	4250	298	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
Fluoranthene	478J	J	ug/kg	2130	213	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
Fluorene	ND		ug/kg	2130	255	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
Hexachlorobenzene	ND		ug/kg	4250	468	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
Hexachlorobutadiene	ND		ug/kg	4250	425	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
Hexachlorocyclopentadiene	ND		ug/kg	8500	468	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
Hexachloroethane	ND		ug/kg	4250	383	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
Indeno(1,2,3-cd)pyrene	ND		ug/kg	2130	298	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
Isophorone	ND		ug/kg	4250	255	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
2-Methyl-4,6-dinitrophenol	ND		ug/kg	8500	1110	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
2-Methylnaphthalene	ND		ug/kg	4250	213	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
Naphthalene	ND		ug/kg	2130	255	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
2-Nitroaniline	ND		ug/kg	8500	510	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
3-Nitroaniline	ND		ug/kg	8500	850	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
4-Nitroaniline	ND		ug/kg	8500	340	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
Nitrobenzene	ND		ug/kg	4250	510	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
2-Nitrophenol	ND		ug/kg	8500	468	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
4-Nitrophenol	ND		ug/kg	8500	595	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
N-Nitrosodimethylamine	ND		ug/kg	4250	638	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
N-Nitroso-di-n-propylamine	ND		ug/kg	4250	340	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
N-Nitrosodiphenylamine	ND		ug/kg	4250	340	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
Pentachlorophenol	ND		ug/kg	8500	1110	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
Phenanthrene	544J	J	ug/kg	2130	213	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
Phenol	32100		ug/kg	8500	425	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
Pyrene	565J	J	ug/kg	2130	213	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
1,2,4-Trichlorobenzene	ND		ug/kg	4250	255	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
2,4,5-Trichlorophenol	ND		ug/kg	8500	510	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
2,4,6-Trichlorophenol	ND		ug/kg	8500	510	SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A

Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*

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ANALYTICAL RESULTS

Workorder: 2172219 Bio/Quarterly

Lab ID: **2172219001** Date Collected: 8/31/2016 10:30 Matrix: Solid

Sample ID: **Digest BFP BOC 3rd Qtr 2016** Date Received: 9/2/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
2,4,6-Tribromophenol (S)	89.8		%	19 - 132		SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
2-Fluorobiphenyl (S)	85.3		%	40 - 110		SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
2-Fluorophenol (S)	78.5		%	26 - 116		SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
Nitrobenzene-d5 (S)	78.5		%	38 - 112		SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
Phenol-d5 (S)	86.3		%	35 - 111		SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
Terphenyl-d14 (S)	98.6		%	45 - 126		SW846 8270D	9/6/16 04:30	CMA	9/6/16 13:39	CGS	A
PESTICIDES											
Aldrin	ND		ug/kg	72.3	23.4	SW846 8081B	9/6/16 01:10	CMA	9/7/16 18:06	RWS	A
alpha-BHC	ND		ug/kg	72.3	6.4	SW846 8081B	9/6/16 01:10	CMA	9/7/16 18:06	RWS	A
beta-BHC	ND		ug/kg	72.3	7.7	SW846 8081B	9/6/16 01:10	CMA	9/7/16 18:06	RWS	A
delta-BHC	ND		ug/kg	72.3	5.5	SW846 8081B	9/6/16 01:10	CMA	9/7/16 18:06	RWS	A
gamma-BHC	ND		ug/kg	72.3	6.0	SW846 8081B	9/6/16 01:10	CMA	9/7/16 18:06	RWS	A
alpha-Chlordane	ND		ug/kg	72.3	7.7	SW846 8081B	9/6/16 01:10	CMA	9/7/16 18:06	RWS	A
gamma-Chlordane	ND		ug/kg	72.3	12.3	SW846 8081B	9/6/16 01:10	CMA	9/7/16 18:06	RWS	A
4,4'-DDD	ND		ug/kg	140	11.5	SW846 8081B	9/6/16 01:10	CMA	9/7/16 18:06	RWS	A
4,4'-DDE	ND		ug/kg	140	19.1	SW846 8081B	9/6/16 01:10	CMA	9/7/16 18:06	RWS	A
4,4'-DDT	ND		ug/kg	140	16.2	SW846 8081B	9/6/16 01:10	CMA	9/7/16 18:06	RWS	A
Dieldrin	ND		ug/kg	140	16.2	SW846 8081B	9/6/16 01:10	CMA	9/7/16 18:06	RWS	A
Endosulfan I	ND		ug/kg	72.3	8.9	SW846 8081B	9/6/16 01:10	CMA	9/7/16 18:06	RWS	A
Endosulfan II	ND		ug/kg	140	29.3	SW846 8081B	9/6/16 01:10	CMA	9/7/16 18:06	RWS	A
Endosulfan Sulfate	ND		ug/kg	140	9.4	SW846 8081B	9/6/16 01:10	CMA	9/7/16 18:06	RWS	A
Endrin	ND		ug/kg	140	10.2	SW846 8081B	9/6/16 01:10	CMA	9/7/16 18:06	RWS	A
Endrin Aldehyde	ND		ug/kg	140	15.3	SW846 8081B	9/6/16 01:10	CMA	9/7/16 18:06	RWS	A
Endrin Ketone	ND		ug/kg	140	19.6	SW846 8081B	9/6/16 01:10	CMA	9/7/16 18:06	RWS	A
Heptachlor	ND		ug/kg	72.3	7.2	SW846 8081B	9/6/16 01:10	CMA	9/7/16 18:06	RWS	A
Heptachlor Epoxide	ND		ug/kg	72.3	7.2	SW846 8081B	9/6/16 01:10	CMA	9/7/16 18:06	RWS	A
Methoxychlor	ND		ug/kg	140	18.7	SW846 8081B	9/6/16 01:10	CMA	9/7/16 18:06	RWS	A
Toxaphene	ND		ug/kg	1490	247	SW846 8081B	9/6/16 01:10	CMA	9/7/16 18:06	RWS	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
Decachlorobiphenyls (S)	74.5		%	30 - 135		SW846 8081B	9/6/16 01:10	CMA	9/7/16 18:06	RWS	A
Tetrachloro-m-xylene (S)	72.9		%	30 - 111		SW846 8081B	9/6/16 01:10	CMA	9/7/16 18:06	RWS	A
WET CHEMISTRY											
Cyanide, Total	1.2		mg/kg	0.84	0.30	SW846 9012B	9/6/16 12:15	CTD	9/7/16 13:16	CTD	A
Hexane Extractable Material	98200		mg/kg	680	200	SW846 9071B			9/9/16 07:20	MPP	A
Moisture	70.6		%	0.1	0.01	S2540G-11			9/6/16 13:59	VKB	
Silica Gel Treated HEM	14300		mg/kg	680	100	SW846 9071B			9/9/16 07:20	MPP	A
Total Solids	29.4		%	0.1	0.01	S2540G-11			9/6/16 13:59	VKB	

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ANALYTICAL RESULTS

Workorder: 2172219 Bio/Quarterly

Lab ID:	**2172219001**	Date Collected:	8/31/2016 10:30	Matrix:	Solid
Sample ID:	**Digest BFP BOC 3rd Qtr 2016**	Date Received:	9/2/2016 21:00		

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

Amy K Borden

Ms. Amy K Borden
Project Coordinator

PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
2172219001	1	Digest BFP BOC 3rd Qtr 2016	SW846 8260B	Acetone

The QC sample type LCSD for method SW846 8260B was outside the control limits for the analyte Acetone. The % Recovery was reported as 147 and the control limits were 58 to 146.

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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

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

A

COC # zxzx of yxy
ALSI
2172219

Monday, September 12, 2016 9:26:00 AM
Page 10 of 10

		Container Type	CG	CG	CG	AG	AG
Client Name: Distric of Columbia Water and Sewer Authority		Container Size	8 OZ	8 OZ	8 oz	8oz	8oz
Address: 5000 Overlook Ave, SW, Washington, D.C. 20032		Preservative	None	None	None	None	None

Contact: Mark Ramirez
Phone#: 202-787-4002
Project Name/#: Bio/Quarterly
Bill To: Accounts Payable Office- 4th Floor
TAT: ☐ Normal-Standard TAT is 10-12 business days. ☐ Rush-Subject to ALSI approval and surcharges.
Date Required: ______ Approved By: ______
Email? ☐ -Y
Fax? ☐ -Y No.:

ANALYSES/METHOD REQUESTED

Enter Number of Containers Per Sample or Field Results Below.

Sample Description/Location (as it will appear on the lab report)	Sample Date	Time	*G or C	**Matrix	Cyanide, % solids	Total O&G plus TPH - SW9071	VOC (SW 8260)	semi-volatiles (SW846-8270) - including TCDD dioxin (see comments)	Pesticides (SW846-8081)	Sample/COC Comments
Digest BFP BOC 3rd Qtr 2016	8/31/16	1030		SL	1	1	1	1*	1	*plus hexachlorobenzene, hexachlorobutadiene and toxaphene

Sample Information (Completed by Receiving Lab)
Cooler Temp: 1 Therm ID: 352
No. of Coolers: ______

	Y	N	Initial
Custody Seals Present?		/	BES
(If present) Seals Intact?		/	
Received on Ice?	✓		
COC/Labels Complete/Accurate?	✓		
Cont. in Good Cond.?	✓		
Correct Containers?	✓		
Correct Sample Volumes?	✓		
Correct Preservation?	✓		
Headspace/Volatiles?		/	

Courier/Tracking #:

ALSI Field Services: oPickup oLabor oComposite Sampling oRental Equipment oOther: ______

Project Comments: *Run % solids and report data as mg/kg dry weight

LOGGED BY(signature): RML Date 9/3 Time 1107
REVIEWED BY(signature):

	Relinquished By / Company Name	Date	Time		Received By / Company Name	Date	Time
1	[signature] SAMPLED	9-16	0900	2	[signature]	9/2	1224
3	[signature]	9/2	1730	4	[signature]		1730
5	[signature]		2100	6	[signature]	9/2	2100
7				8			
9				10			

Data Deliverables: ☐ Standard ☐ CLP-like ☐ USACE ☐
Special Processing: USACE ☐ Navy ☐ ☐
State Samples Collected In: ☐ NY ☐ NJ ☐ PA ☐ NC ☐
Reportable to PADEP? Yes ☐
PWSID # ______
Sample Disposal: Lab ☐ Special ☐
EDDS: Format Type- ______

* G=Grab; C=Composite **Matrix - AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

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

November 17, 2016

Ms. Elaine Wilson
DC WASA
5000 Overlook Avenue, S.W.
Washington, DC 20032

Certificate of Analysis

Project Name:	**Bio/Quarterly**	**Workorder:**	**2188562**
Purchase Order:	**170211**	**Workorder ID:**	**Bio/Quarterly**

Dear Ms. Wilson:

Enclosed are the analytical results for samples received by the laboratory on Thursday, November 10, 2016.

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 Ms. Amy K Borden (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.

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

CC: Mr. Ryan Maisano , Mr. Mark Ramirez , Accounts Payable-4th Floor

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

Amy K Borden

Ms. Amy K Borden
Project Coordinator

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SAMPLE SUMMARY

Workorder: 2188562 Bio/Quarterly

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
2188562001	16-4th Qtr-Digest BFP BOC	Solid	11/8/2016 11:40	11/10/2016 22:30	Collected by Client

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"
-- For microbiological analyses, the "Prepared" value is the date/time into the incurbator 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: 2188562 Bio/Quarterly

Sample Comments

Lab ID: 2188562001 **Sample ID:** 16-4th Qtr-Digest BFP BOC **Sample Type:** SAMPLE

This sample was collected in a soil jar for the volatile analysis. The sample was received and prepared by Method 5035 after the 48-hour holding time.
This sample was analyzed at a dilution in the 8081 Pesticide analysis due to sample matrix interference. Reporting limits were adjusted accordingly.

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ANALYTICAL RESULTS

Workorder: 2188562 Bio/Quarterly

Lab ID: **2188562001** Date Collected: 11/8/2016 11:40 Matrix: Solid

Sample ID: **16-4th Qtr-Digest BFP BOC** Date Received: 11/10/2016 22:30

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	1400		ug/kg	77.5	35.7	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
Benzene	12.7J	J	ug/kg	15.5	3.9	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
Bromochloromethane	ND		ug/kg	15.5	3.9	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
Bromodichloromethane	ND		ug/kg	15.5	5.5	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
Bromoform	ND		ug/kg	15.5	4.0	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
Bromomethane	ND		ug/kg	15.5	4.0	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
2-Butanone	454		ug/kg	77.5	24.8	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
Carbon Disulfide	40.0		ug/kg	15.5	4.9	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
Carbon Tetrachloride	ND		ug/kg	15.5	4.0	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
Chlorobenzene	ND		ug/kg	15.5	4.0	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
Chlorodibromomethane	ND		ug/kg	15.5	5.3	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
Chloroethane	ND		ug/kg	38.8	6.6	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
Chloroform	ND		ug/kg	15.5	4.1	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
Chloromethane	ND		ug/kg	15.5	4.3	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
1,2-Dibromo-3-chloropropane	ND		ug/kg	38.8	22.5	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
1,2-Dibromoethane	ND		ug/kg	15.5	4.2	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
1,1-Dichloroethane	ND		ug/kg	15.5	3.9	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
1,2-Dichloroethane	ND		ug/kg	15.5	3.9	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
1,1-Dichloroethene	ND		ug/kg	15.5	4.0	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
cis-1,2-Dichloroethene	ND		ug/kg	15.5	3.9	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
trans-1,2-Dichloroethene	ND		ug/kg	15.5	4.0	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
1,2-Dichloropropane	ND		ug/kg	15.5	4.7	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
cis-1,3-Dichloropropene	ND		ug/kg	15.5	4.3	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
trans-1,3-Dichloropropene	ND		ug/kg	15.5	4.5	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
Ethylbenzene	7.5J	J	ug/kg	15.5	5.3	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
2-Hexanone	ND		ug/kg	77.5	21.7	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
4-Methyl-2-Pentanone(MIBK)	ND		ug/kg	77.5	29.5	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
Methylene Chloride	67.0	1,2,3	ug/kg	15.5	6.0	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
Styrene	ND		ug/kg	15.5	3.9	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
1,1,2,2-Tetrachloroethane	ND		ug/kg	15.5	4.3	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
Tetrachloroethene	ND		ug/kg	15.5	4.7	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
Toluene	168		ug/kg	15.5	5.2	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
Total Xylenes	115		ug/kg	46.5	10.9	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
1,1,1-Trichloroethane	ND		ug/kg	15.5	4.8	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
1,1,2-Trichloroethane	ND		ug/kg	15.5	4.3	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2

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ANALYTICAL RESULTS

Workorder: 2188562 Bio/Quarterly

Lab ID: **2188562001** Date Collected: 11/8/2016 11:40 Matrix: Solid

Sample ID: **16-4th Qtr-Digest BFP BOC** Date Received: 11/10/2016 22:30

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Trichloroethene	ND		ug/kg	15.5	3.9	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
Vinyl Chloride	ND		ug/kg	15.5	3.9	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
o-Xylene	ND		ug/kg	15.5	4.5	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
mp-Xylene	115		ug/kg	31.0	6.4	SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	76.5		%	56 - 124		SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
4-Bromofluorobenzene (S)	85.7		%	51 - 128		SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
Dibromofluoromethane (S)	82.1		%	62 - 123		SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
Toluene-d8 (S)	83		%	59 - 131		SW846 8260B	11/11/16 13:10	SYB	11/12/16 09:37	SYB	A2
SEMIVOLATILES											
Acenaphthene	128J	J	ug/kg	863	104	SW846 8270D	11/14/16 05:50	CMA	11/14/16 21:00	CGS	A
Acenaphthylene	ND		ug/kg	863	121	SW846 8270D	11/14/16 05:50	CMA	11/14/16 21:00	CGS	A
Anthracene	ND		ug/kg	863	138	SW846 8270D	11/14/16 05:50	CMA	11/14/16 21:00	CGS	A
Benzo(a)anthracene	317J	J	ug/kg	863	86.3	SW846 8270D	11/14/16 05:50	CMA	11/14/16 21:00	CGS	A
Benzo(a)pyrene	243J	J	ug/kg	863	69.1	SW846 8270D	11/14/16 05:50	CMA	11/14/16 21:00	CGS	A
Benzo(b)fluoranthene	ND		ug/kg	863	86.3	SW846 8270D	11/14/16 05:50	CMA	11/14/16 21:00	CGS	A
Benzo(g,h,i)perylene	ND		ug/kg	863	86.3	SW846 8270D	11/14/16 05:50	CMA	11/14/16 21:00	CGS	A
Benzo(k)fluoranthene	ND		ug/kg	863	86.3	SW846 8270D	11/14/16 05:50	CMA	11/14/16 21:00	CGS	A
4-Bromophenyl-phenylether	ND		ug/kg	1730	155	SW846 8270D	11/14/16 05:50	CMA	11/14/16 21:00	CGS	A
Butylbenzylphthalate	1360J	J	ug/kg	1730	121	SW846 8270D	11/14/16 05:50	CMA	11/14/16 21:00	CGS	A
Carbazole	ND		ug/kg	1730	121	SW846 8270D	11/14/16 05:50	CMA	11/14/16 21:00	CGS	A
4-Chloro-3-methylphenol	ND		ug/kg	3450	173	SW846 8270D	11/14/16 05:50	CMA	11/14/16 21:00	CGS	A
4-Chloroaniline	817J	J	ug/kg	3450	207	SW846 8270D	11/14/16 05:50	CMA	11/14/16 21:00	CGS	A
bis(2-Chloroethoxy)methane	ND		ug/kg	1730	155	SW846 8270D	11/14/16 05:50	CMA	11/14/16 21:00	CGS	A
bis(2-Chloroethyl)ether	ND		ug/kg	1730	224	SW846 8270D	11/14/16 05:50	CMA	11/14/16 21:00	CGS	A
bis(2-Chloroisopropyl)ether	ND		ug/kg	1730	259	SW846 8270D	11/14/16 05:50	CMA	11/14/16 21:00	CGS	A
2-Chloronaphthalene	ND		ug/kg	1730	104	SW846 8270D	11/14/16 05:50	CMA	11/14/16 21:00	CGS	A
2-Chlorophenol	ND		ug/kg	3450	138	SW846 8270D	11/14/16 05:50	CMA	11/14/16 21:00	CGS	A
4-Chlorophenyl-phenylether	ND		ug/kg	1730	138	SW846 8270D	11/14/16 05:50	CMA	11/14/16 21:00	CGS	A
Chrysene	243J	J	ug/kg	863	86.3	SW846 8270D	11/14/16 05:50	CMA	11/14/16 21:00	CGS	A
mp-Cresol	1080J	J	ug/kg	3450	138	SW846 8270D	11/14/16 05:50	CMA	11/14/16 21:00	CGS	A
o-Cresol	ND		ug/kg	3450	190	SW846 8270D	11/14/16 05:50	CMA	11/14/16 21:00	CGS	A
Di-n-Butylphthalate	ND		ug/kg	1730	138	SW846 8270D	11/14/16 05:50	CMA	11/14/16 21:00	CGS	A
Di-n-Octylphthalate	ND		ug/kg	1730	121	SW846 8270D	11/14/16 05:50	CMA	11/14/16 21:00	CGS	A
Dibenzo(a,h)anthracene	ND		ug/kg	863	104	SW846 8270D	11/14/16 05:50	CMA	11/14/16 21:00	CGS	A
Dibenzofuran	ND		ug/kg	1730	138	SW846 8270D	11/14/16 05:50	CMA	11/14/16 21:00	CGS	A
1,2-Dichlorobenzene	ND		ug/kg	1730	155	SW846 8270D	11/14/16 05:50	CMA	11/14/16 21:00	CGS	A

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ANALYTICAL RESULTS

Workorder: 2188562 Bio/Quarterly

Lab ID: **2188562001** Date Collected: 11/8/2016 11:40 Matrix: Solid

Sample ID: **16-4th Qtr-Digest BFP BOC** Date Received: 11/10/2016 22:30

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	Cntr
1,3-Dichlorobenzene	ND		ug/kg	1730	121	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A
1,4-Dichlorobenzene	ND		ug/kg	1730	121	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A
3,3-Dichlorobenzidine	ND		ug/kg	3450	656	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A
2,4-Dichlorophenol	449J	J	ug/kg	3450	138	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A
Diethylphthalate	ND		ug/kg	1730	138	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A
2,4-Dimethylphenol	ND		ug/kg	3450	259	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A
Dimethylphthalate	ND		ug/kg	1730	121	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A
2,4-Dinitrophenol	ND		ug/kg	3450	691	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A
2,4-Dinitrotoluene	ND		ug/kg	1730	155	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A
2,6-Dinitrotoluene	ND		ug/kg	1730	207	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A
bis(2-Ethylhexyl)phthalate	45900		ug/kg	1730	121	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A
Fluoranthene	413J	J	ug/kg	863	86.3	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A
Fluorene	ND		ug/kg	863	104	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A
Hexachlorobenzene	ND		ug/kg	1730	190	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A
Hexachlorobutadiene	ND		ug/kg	1730	173	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A
Hexachlorocyclopentadiene	ND		ug/kg	3450	190	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A
Hexachloroethane	ND		ug/kg	1730	155	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A
Indeno(1,2,3-cd)pyrene	ND		ug/kg	863	121	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A
Isophorone	ND		ug/kg	1730	104	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A
2-Methyl-4,6-dinitrophenol	ND		ug/kg	3450	449	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A
2-Methylnaphthalene	577J	J	ug/kg	1730	86.3	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A
Naphthalene	251J	J	ug/kg	863	104	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A
2-Nitroaniline	ND		ug/kg	3450	207	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A
3-Nitroaniline	ND		ug/kg	3450	345	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A
4-Nitroaniline	ND		ug/kg	3450	138	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A
Nitrobenzene	ND		ug/kg	1730	207	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A
2-Nitrophenol	ND		ug/kg	3450	190	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A
4-Nitrophenol	ND		ug/kg	3450	242	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A
N-Nitrosodimethylamine	ND		ug/kg	1730	259	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A
N-Nitroso-di-n-propylamine	ND		ug/kg	1730	138	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A
N-Nitrosodiphenylamine	ND		ug/kg	1730	138	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A
Pentachlorophenol	ND		ug/kg	3450	449	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A
Phenanthrene	602J	J	ug/kg	863	86.3	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A
Phenol	24900		ug/kg	3450	173	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A
Pyrene	434J	J	ug/kg	863	86.3	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A
1,2,4-Trichlorobenzene	ND		ug/kg	1730	104	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A
2,4,5-Trichlorophenol	ND		ug/kg	3450	207	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A
2,4,6-Trichlorophenol	ND		ug/kg	3450	207	SW846 8270D	11/14/16 05:50 CMA	11/14/16 21:00	CGS	A

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

ANALYTICAL RESULTS

Workorder: 2188562 Bio/Quarterly

Lab ID: **2188562001** Date Collected: 11/8/2016 11:40 Matrix: Solid

Sample ID: **16-4th Qtr-Digest BFP BOC** Date Received: 11/10/2016 22:30

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	78.8		%	19 - 132		SW846 8270D	11/14/16 05:50	CMA	11/14/16 21:00	CGS	A
2-Fluorobiphenyl (S)	84		%	40 - 110		SW846 8270D	11/14/16 05:50	CMA	11/14/16 21:00	CGS	A
2-Fluorophenol (S)	65.9		%	26 - 116		SW846 8270D	11/14/16 05:50	CMA	11/14/16 21:00	CGS	A
Nitrobenzene-d5 (S)	83.6		%	38 - 112		SW846 8270D	11/14/16 05:50	CMA	11/14/16 21:00	CGS	A
Phenol-d5 (S)	71		%	35 - 111		SW846 8270D	11/14/16 05:50	CMA	11/14/16 21:00	CGS	A
Terphenyl-d14 (S)	88.4		%	45 - 126		SW846 8270D	11/14/16 05:50	CMA	11/14/16 21:00	CGS	A
PESTICIDES											
Aldrin	ND		ug/kg	43.3	14.0	SW846 8081B	11/11/16 15:50	ACD	11/16/16 15:27	RWS	A
alpha-BHC	ND		ug/kg	43.3	3.8	SW846 8081B	11/11/16 15:50	ACD	11/16/16 15:27	RWS	A
beta-BHC	ND		ug/kg	43.3	4.6	SW846 8081B	11/11/16 15:50	ACD	11/16/16 15:27	RWS	A
delta-BHC	ND		ug/kg	43.3	3.3	SW846 8081B	11/11/16 15:50	ACD	11/16/16 15:27	RWS	A
gamma-BHC	ND		ug/kg	43.3	3.6	SW846 8081B	11/11/16 15:50	ACD	11/16/16 15:27	RWS	A
alpha-Chlordane	ND		ug/kg	43.3	4.6	SW846 8081B	11/11/16 15:50	ACD	11/16/16 15:27	RWS	A
gamma-Chlordane	ND		ug/kg	43.3	7.4	SW846 8081B	11/11/16 15:50	ACD	11/16/16 15:27	RWS	A
4,4'-DDD	ND		ug/kg	84.0	6.9	SW846 8081B	11/11/16 15:50	ACD	11/16/16 15:27	RWS	A
4,4'-DDE	ND		ug/kg	84.0	11.5	SW846 8081B	11/11/16 15:50	ACD	11/16/16 15:27	RWS	A
4,4'-DDT	ND		ug/kg	84.0	9.7	SW846 8081B	11/11/16 15:50	ACD	11/16/16 15:27	RWS	A
Dieldrin	ND		ug/kg	84.0	9.7	SW846 8081B	11/11/16 15:50	ACD	11/16/16 15:27	RWS	A
Endosulfan I	ND		ug/kg	43.3	5.3	SW846 8081B	11/11/16 15:50	ACD	11/16/16 15:27	RWS	A
Endosulfan II	ND		ug/kg	84.0	17.6	SW846 8081B	11/11/16 15:50	ACD	11/16/16 15:27	RWS	A
Endosulfan Sulfate	ND		ug/kg	84.0	5.6	SW846 8081B	11/11/16 15:50	ACD	11/16/16 15:27	RWS	A
Endrin	ND		ug/kg	84.0	6.1	SW846 8081B	11/11/16 15:50	ACD	11/16/16 15:27	RWS	A
Endrin Aldehyde	ND		ug/kg	84.0	9.2	SW846 8081B	11/11/16 15:50	ACD	11/16/16 15:27	RWS	A
Endrin Ketone	ND		ug/kg	84.0	11.7	SW846 8081B	11/11/16 15:50	ACD	11/16/16 15:27	RWS	A
Heptachlor	ND		ug/kg	43.3	4.3	SW846 8081B	11/11/16 15:50	ACD	11/16/16 15:27	RWS	A
Heptachlor Epoxide	ND		ug/kg	43.3	4.3	SW846 8081B	11/11/16 15:50	ACD	11/16/16 15:27	RWS	A
Methoxychlor	ND		ug/kg	84.0	11.2	SW846 8081B	11/11/16 15:50	ACD	11/16/16 15:27	RWS	A
Toxaphene	ND		ug/kg	891	148	SW846 8081B	11/11/16 15:50	ACD	11/16/16 15:27	RWS	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
Decachlorobiphenyls (S)	40		%	30 - 135		SW846 8081B	11/11/16 15:50	ACD	11/16/16 15:27	RWS	A
Tetrachloro-m-xylene (S)	45.5		%	30 - 111		SW846 8081B	11/11/16 15:50	ACD	11/16/16 15:27	RWS	A
WET CHEMISTRY											
Cyanide, Total	0.82		mg/kg	0.82	0.30	SW846 9012B	11/14/16 12:14	CTD	11/14/16 13:23	KXK	A
Hexane Extractable Material	76300		mg/kg	672	200	SW846 9071B			11/14/16 07:20	MPP	A
Moisture	70.5		%	0.1	0.01	S2540G-11			11/15/16 13:00	AXC	A

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ANALYTICAL RESULTS

Workorder: 2188562 Bio/Quarterly

Lab ID: **2188562001** Date Collected: 11/8/2016 11:40 Matrix: Solid

Sample ID: **16-4th Qtr-Digest BFP BOC** Date Received: 11/10/2016 22:30

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	Cntr
Silica Gel Treated HEM	13200		mg/kg	672	100	SW846 9071B		11/14/16 07:20	MPP	A
Total Solids	29.5		%	0.1	0.01	S2540G-11		11/15/16 13:00	AXC	A

Amy K Borden

Ms. Amy K Borden
Project Coordinator

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PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
2188562001	1	16-4th Qtr-Digest BFP BOC	SW846 8260B	Methylene Chloride

The Method Blank for method SW846 8260B reported a value greater than the reporting level for the analyte Methylene Chloride.

2188562001	2	16-4th Qtr-Digest BFP BOC	SW846 8260B	Methylene Chloride

The QC sample type LCS for method SW846 8260B was outside the control limits for the analyte Methylene Chloride. The % Recovery was reported as 139 and the control limits were 68 to 133.

2188562001	3	16-4th Qtr-Digest BFP BOC	SW846 8260B	Methylene Chloride

The QC sample type LCSD for method SW846 8260B was outside the control limits for the analyte Methylene Chloride. The % Recovery was reported as 153 and the control limits were 68 to 133.

Analytical Laboratory Services, Inc.
Environmental w Industrial Hygiene w Field Services
34 Dogwood Lane w Middletown, PA 17057 w 717.944.5541 w Fax: 717.944.1430

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

Generated by ALSI

COC # *2188562*

ALSI Q

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

Client Name: DCWASA - OTHERS

Address: 5000 Overlook Ave, SW
Washington, D.C. 20032

Contact: Elaine Wilson

Phone#: 202-787-4177

Project Name/#: Bio/Quarterly

Bill To: Accounts Payable Office- 4th Floor

TAT [x] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALSI approval and surcharges.

Date Required: _____ Approved By: _____

Email? [x] -Y

Fax? [ ] -Y No.: _____

Sample Description/Location (as it will appear on the lab report)	Sample Date	Time	*G or C	**Matrix	Cyanide, % solids	Total O&G plus TPH - SW9071	VOC (SW 8260)	semi-volatiles (SW846-8270) - including TCDD dioxin (see comments)	Pesticides (SW846-8081)	Sample/COC Comments
					Container Type	AG	AG	CG	AG	AG
					Container Size	4 OZ	4 OZ	4 OZ	8oz	8oz
					Preservative	None	None	None	None	None
					ANALYSES/METHOD REQUESTED					
					Enter Number of Containers Per Sample or Field Results Below.					
			G	SL						*plus hexachlorobenzene, hexachlorobutadiene
16-4th Qtr-Digest BFP BOC	11/8/2016	1140	G	SL	1	1	1	1*	1	and toxaphene

Cooler Temp: 1 Therm ID: 352

No. of Coolers: _____

	Y	N	Initial
Custody Seals Present?			YES
(If present) Seals Intact?			
Received on Ice?			
COC/Labels Complete/Accurate?			
Cont. in Good Cond.?			
Correct Containers?			
Correct Sample Volumes?			
Correct Preservation?			
Headspace/Volatiles?			

Courier/Tracking #:

ALSI Field Services: oPickup oLabor oComposite Sampling oRental Equipment oOther: _____

Project Comments: *Run % solids and report data as mg/kg dry weight

LOGGED BY(signature): _____ DATE 11/11/16 TIME 0858

REVIEWED BY(signature): _____ DATE _____ TIME _____

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1	11-10-16	850	2	11/10	1125
3	11/10		4		1880
5		222	6	11/10	2220
7			8		
9			10		

Data Deliverables: [ ] Standard [ ] CLP-like [ ] USACE [ ]

Special Processing: USACE [ ] Navy [ ]

State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] NC [ ]

Reportable to PADEP? Yes [ ]

PWSID # _____

Sample Disposal: Lab [ ] Special [ ]

EDDS: Format Type- _____

* G=Grab; C=Composite ** Matrix - AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

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