

Morgantown Station
12620 Crain Highway
Newburg, MD 20664

February 23, 2022

Mr. Ed Dexter
Maryland Department of the Environment
Land Management Administration
1800 Washington Boulevard, Suite 605
Baltimore, MD 21230-1719

Re: 2021 CCB Tonnage Report for Lanyard Power Holdings, LLC
Chalk Point and Morgantown Generating Stations

Dear Mr. Dexter,

Pursuant to COMAR 26.04.10.08, enclosed please find the 2021 CCB Tonnage Report for Lanyard Power Holdings, LLC ("Lanyard or Company") which includes Chalk Point and Morgantown Generating Stations.

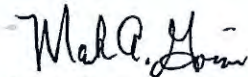
As you are aware, the Chalk Point Coal Units were retired by June 1, 2021 and the Morgantown Coal Units are scheduled to retire by June 1, 2022.

In summary, Lanyard generated a total of 161,888 tons of CCBs. 317,708 tons of CCBs from the Company's facilities were beneficially used in the State of Maryland.

- 78,175 tons of Fly Ash was generated in 2021 and 236,839 tons were beneficially used in Maryland.
- 8,829 tons of Bottom Ash was generated in 2021 and 8,470 tons were beneficially used in Maryland.
- 72,080 tons of Gypsum was generated in 2021 and 70,961 tons were beneficially used in Maryland.
- 1,678 tons of Off-Spec Gypsum was generated in 2021 and 1,438 tons were beneficially used in Maryland.

If you have any questions regarding this report, please contact Debra Knight at 301-843-4670 or email debra.knight@genon.com.

Sincerely,



Mark Gouveia
VP Operations

MARYLAND DEPARTMENT OF THE ENVIRONMENT

Land Management Administration • Solid Waste Program
1800 Washington Boulevard • Suite 605 • Baltimore Maryland 21230-1719
410-537-3315 • 800-633-6101 x3315 • www.mde.maryland.gov

Coal Combustion Byproducts (CCBs) Annual Generator Tonnage Report Instructions for Calendar Year 2021

The following is general information relating to the requirement for reporting quantities of coal combustion byproducts (CCBs) that were managed in the State of Maryland during calendar year 2021. Please answer the questions on the form provided, attaching additional information and any requested supplemental information to the back of the form. *Note that the form requires both volume and weight of the CCBs produced. If you know one of these parameters but not the others, for example, you have the tonnage produced but not the volume, you may calculate the other parameter; however, please provide the calculations and assumptions that you used in your estimate.* Questions can be directed to the Solid Waste Program at (410) 537-3315 or via email at ed.dexter@maryland.gov.

I. Background. This requirement that generators of CCBs submit an annual report was instituted in the Code of Maryland Regulations COMAR 26.04.10.08, that was promulgated effective December 1, 2008. The regulation requires that any non-residential generator of CCBs submit a report to the Department by March 1 of each year describing the manner in which CCBs generated within the State were managed during the preceding calendar year. Additional information and specific instructions follow. For more detailed information, please refer to COMAR 26.04.10.08.

II. General Information and Applicability.

A. Definitions. CCBs are defined in COMAR 26.04.10.02B as:

“(3) Coal Combustion Byproducts. (a) "Coal combustion byproducts" means the residue generated by or resulting from the burning of coal.

(b) "Coal combustion byproducts" includes fly ash, bottom ash, boiler slag, pozzolan, and other solid residuals removed by air pollution control devices from the flue gas and combustion chambers of coal burning furnaces and boilers, including flue gas desulfurization sludge and other solid residuals recovered from flue gas by wet or dry methods.”

A generator of CCBs is defined in COMAR 26.04.10.02B as:

“(9) Generator.

(a) "Generator" means a person whose operations, activities, processes, or actions create coal combustion byproducts.

(b) "Generator" does not include a person who only generates coal combustion byproducts by burning coal at a private residence.”

B. Applicability. If you or your company meets the definition of a generator of CCBs as defined above, you must provide the information as required below. For the purposes of this report, “you” shall hereinafter refer to the generator defined above. Please note that COMAR 26.04.10.08 requires generators of CCBs to submit an annual report to the Department concerning the disposition of the CCBs that they generated the previous year. **THIS INCLUDES CCBs THAT WERE NOT SEPARATELY COLLECTED BUT WERE PRODUCED BY THE BURNING OF COAL AND WERE DIRECTLY CONTRIBUTED TO A PRODUCT, such as cement.** Where the amount cannot be directly measured, estimates based on the amount of coal burned can be used. The method of determining the volume of CCBs produced must be described.

III. Required Information. The following information must be provided to the Department by March 1, 2022:

A. Contact information:

Facility Name: Lanyard Power, LLC (Chalk Point and Morgantown Generating Stations)

Name of Permit Holder: Various

Facility Address: _____

Chalk Point: 25100 Chalk Point Road, Aquasco, MD 20608 – Prince George’s Co.

Morgantown: 12620 Crain Highway, Newburg, MD 20664 – Charles Co.

Contact Information (Person filing report or Environmental Manager)

Facility Telephone No.: 301-843-4670&301-843-4110 Facility Fax No.: 301-843-4552

Contact Name: Debra Knight (Morgantown) and Michelle Desperes (Chalk Point)

Contact Title: Environmental Specialist

Contact Address: See Above

Street

Contact Address: _____

City

State

Zip

Contact Email: debra.knight@genon.com and michelle.desperes@genon.com

Contact Telephone No.: See Above Contact Fax No.: See Above

For questions on how to complete this form, please contact the Solid Waste Program at 410-537-3315

B. A description of the process that generates the CCBs, including the type of coal or other raw material that generates the CCBs. If the space provided is insufficient, please attach additional pages:

To produce electricity, Eastern Bituminous coal, with an ash content of approximately 10% and a Sulfur content of approximately 2-3%, is burned in Lanyard's coal-fired generating units. Ash produced thru coal combustion is approximately 90% flyash and 10% bottom ash. Bottom ash is typically stored at the Company's Brandywine ash storage site. Some bottom ash is beneficially used in construction at the ash storage site. Fly ash produced at Chalk Point is shipped to Morgantown, where flyash from Morgantown and Chalk Point is sold on site to SEFA. The fly ash is processed by SEFA in the STAR facility in Newburg, MD which produces a substitute for raw materials used in commercial products. In addition, ash from the now decommissioned Dickerson Generating Station is excavated from the adjacent Westland ash storage site and is also sold to vendors for beneficial use in the state of Maryland.

SO₂ formed during coal combustion is removed from the flue gas through the use of Wet Scrubbers, which inject a limestone slurry into the flue gas to absorb the SO₂. Gypsum formed as a by-product of the scrubber operation is captured and stored on-site. Chalk Point gypsum is transported by rail to the Morgantown station. The gypsum is unloaded and combined with Morgantown's gypsum in Morgantown's gypsum storage dome. Morgantown's gypsum storage dome has a conveying system that is used to load the gypsum onto barges where ownership is transferred to CertainTeed in Newburg, MD for beneficial use. CertainTeed uses the gypsum as a substitute for a raw material for making commercial products. Gypsum by-products which are not suitable for sale (off spec) are disposed out of state at Waste Management's Amelia landfill and at Republic Services Old Dominion landfill, both of which are located in Virginia, or at Cycle Chem's Yukon landfill facility in Pennsylvania. Additionally, a small portion of off-spec gypsum by-products are sold to vendors for beneficial reuse in the State of Maryland.

C. The volume and weight of CCBs generated during calendar year 2021, including an identification of the different types of CCBs generated and the volume of each type generated. If the space provided is insufficient, please attach additional pages in a similar format. If converting from volume to weight or weight to volume, please provide your calculations and assumptions.

Table I: Volume and Weight of CCBs Generated for Calendar Year 2021: Please note the change to this table from previous years, to include both the volume and weight of the types of CCBs your facility produces.

Volume and Weight of CCBs Generated for Calendar Year 2021				
<u>Flyash</u> Type of CCB	<u>Bottom Ash</u> Type of CCB	<u>Spec Gypsum</u> Type of CCB	<u>Off-Spec Gypsum</u> Type of CCB	<u>WWTP Fines</u> Type of CCB
78,175	8,829	36,899	859	576
Volume of CCB, in Cubic Yards	Volume of CCB, in Cubic Yards	Volume of CCB, in Cubic Yards	Volume of CCB, in Cubic Yards	Volume of CCB, in Cubic Yards
78,175	8,829	72,080	1,678	1,126
Weight of CCB, in Tons	Weight of CCB, in Tons	Weight of CCB, in Tons	Weight of CCB, in Tons	Weight of CCB, in Tons

Additional notes:

CCB Tonnages are reported in dry short tons. CCB volumes are reported in dry Cubic Yards.

WWTP Tons represent fines from the Flue Gas Desulfurization’s Waste Water Treatment

Volumes of Fly ash in Dry Cubic Yards are calculated from dry short tons using a density of 1.0 Tons/Dry CY.

Volumes of Bottom Ash in Dry Cubic Yards are calculated from dry short tons using a density of 1.0 Tons/Dry CY.

Volumes of On-Spec Gypsum and WWTP Fines are calculated from dry short tons using a density of 1.95 Tons/Dry CY.

D. Descriptions of any modeling or risk assessments, or both, conducted relating to the CCBs or their use that were performed by you or your company during the reporting year. Please attach this information to the report.

E. Copies of all laboratory reports of all chemical characterizations of the CCBs. Please attach this information to the report.

F. A description of how you disposed of or used your CCBs in calendar year 2021, identifying:

(a) The types and volume of CCBs disposed of or used (if different than described in Paragraph C above) including any CCBs stored during the previous calendar year, the location of disposal, mine reclamation and use sites, and the type and volume of CCBs disposed of or used at each site:

FlyAsh: Ash produced at the Chalk Point and Morgantown Generating Stations is beneficially used in Maryland at the STAR Facility, located in Newburg, Md at the Morgantown site. Ownership of the ash is transferred to SEFA at receipt and a marketable product is produced at the STAR Facility. A total of 78,175 tons of flyash were generated by Lanyard Facilities in 2021. 71 tons of this ash were stored at the Company's Brandywine ash storage site and 78,104 tons were beneficially used in the state of Maryland. In addition, a net total of 158,735 tons of previously stored flyash was reclaimed from the Company's Westland ash storage site for sale for beneficial use in the state of Maryland, to yield a total of 236,839 tons of flyash produced for beneficial use in the state of Maryland.

Bottom Ash: A total of 8,829 tons of dry bottom ash were generated at Lanyard facilities in 2021, all of which were disposed of at the Company's ash storage facility in Brandywine, Md. In addition, 8,470 tons were reclaimed from the Company's Westland ash storage site and sold to MERG/PBCo for beneficial use in the state of Maryland.

On-Spec Gypsum: 72,080 tons of On-Spec Gypsum were generated at Lanyard facilities in 2021. Gypsum generated at Chalk Point was transported to Morgantown via rail. The rail cars were unloaded into the Gypsum Storage Dome and combined with the gypsum generated at Morgantown, which is directly conveyed into the same storage dome. 2,937 tons were temporarily stored at the sites at the end of 2020. Of this total, 70,961 tons were sold to CertainTeed and ownership transferred when loaded onto the barge in Newburg, Maryland. The gypsum is beneficially used in the manufacture of wallboard. 4,056 tons were temporarily stored at the sites at the end of 2021.

Off Spec Gypsum: The combined total produced in 2021 was 1,678 tons, of which 240 tons were disposed at Republic Services Old Dominion landfill in Richmond, Va and 1,438 tons were sold to PBCo for beneficial use in the State of Maryland.

WWTP Fines: The combined total produced in 2021 was 1,126 tons, of which 202 tons were disposed at Waste Management's Amelia Landfill, located in Jetersville, Va., 804 tons were disposed at Cycle Chem's landfill facility in Yukon, Pa and 120 tons were stored on site at Chalk Point in rail cars.

and (b) The different uses by type and volume of CCBs:

Flyash: Volume: 236,839 tons sold

Use: Beneficially used to produce marketable construction products.

Bottom ash: Volume: 8,829 tons disposed, and 8,470 tons beneficially used to produce marketable construction products.

Gypsum: Volume: 72,080 tons sold

Use: Beneficially used to produce wallboard

Off-Gypsum: Volume: 1,438 tons sold

Use: Beneficially used in cement/concrete products

If the space provided is insufficient, please attach additional pages in a similar format.

G. A description of how you intend to dispose of or use CCBs in the next 5 years, identifying:

(a) The types and volume of CCBs intended to be disposed of or used, the location of intended disposal, mine reclamation and use sites, and the type and volume of CCBs intended to be disposed of or used at each site:

All Lanyard coal powered units will cease generating CCBs by June 1, 2022. Therefore, Lanyard Power is not expected to generate any CCBs after 2022.

FlyAsh: Approximately 25,000 tons to be generated in 2022 and sold on-site to SEFA to be beneficiated for use in the state of Maryland at the Morgantown STAR Facility. Approximately 150,000 tons/year to be mined from the Westland ash storage site and sold for beneficial use in the state of Maryland.

Bottom Ash: Approximately 3,000 tons/year to be generated in 2022 and stored at the Company's Brandywine, Md ash storage site.

Gypsum: Approximately 25,000 tons to be generated in 2022 and sold for beneficial use in the state of Maryland for use in wallboard.

WWTP Fines: Approximately 400 tons to be generated in 2022 and disposed of in an approved landfill.

Off-Spec Gypsum: Approximately 150 tons to be generated in 2022 and disposed of in an approved Landfill.

b) The different intended uses by type and volume of CCBs.

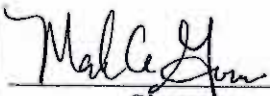
FlyAsh: Approximately 25,000 tons to be generated in 2022 and sold on-site to SEFA for beneficial use as an ingredient in construction materials. Approximately 150,000 tons/year to be reclaimed from the Westland ash storage site and sold for beneficial use in the state of Maryland.

Bottom Ash: Approximately 9,000 tons/year to be reclaimed from the Westland ash storage site and sold for beneficial use in the state of Maryland

Gypsum: Approximately 25,000 tons to be generated in 2022 and sold for use in wallboard

If the space provided is insufficient, please attach additional pages in a similar format.

IV. Signature and Certification. An authorized official of the generator must sign the annual report, and certify as to the accuracy and completeness of the information contained in the annual report:

This is to certify that, to the best of my knowledge, the information contained in this report and any attached documents are true, accurate, and complete.		
 Signature	Mark Gouveia VP Operations 301-843-4555 <hr/> Name, Title, & Telephone No. (Print or Type)	2/23/2022 <hr/> Date
	mark.gouveia@genon.com <hr/> Your Email Address	

V: Attachments (please list):

CCB Analyses

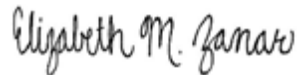
ANALYTICAL REPORT

Eurofins Lancaster Laboratories Env, LLC
2425 New Holland Pike
Lancaster, PA 17601
Tel: (717)656-2300

Laboratory Job ID: 410-26597-1
Client Project/Site: Chalk Point

For:
AECOM
430 National Business Parkway
Suite 401
Annapolis Junction, Maryland 20701

Attn: Ms. Sharon Drummond



Authorized for release by:
1/26/2021 10:42:33 AM

Elizabeth Zanar, Project Manager
(717)556-7290
Elizabeth.Zanar@eurofinset.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
 - Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
 - Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
- Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

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

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. The foregoing express warranty is exclusive and is given in lieu of all other warranties, expressed or implied, except as otherwise agreed. We disclaim any other warranties, expressed or implied, including a warranty of fitness for particular purpose and warranty of merchantability. In no event shall Eurofins Lancaster Laboratories Environmental, LLC be liable for indirect, special, consequential, or incidental damages including, but not limited to, damages for loss of profit or goodwill regardless of (A) the negligence (either sole or concurrent) of Eurofins Lancaster Laboratories Environmental and (B) whether Eurofins Lancaster Laboratories Environmental has been informed of the possibility of such damages. We accept no legal responsibility for the purposes for which the client uses the test results. Except as otherwise agreed, no purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

A handwritten signature in black ink that reads "Elizabeth M. Zanar".

Elizabeth Zanar
Project Manager
1/26/2021 10:42:33 AM



Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Detection Summary	6
Client Sample Results	9
QC Sample Results	14
QC Association Summary	19
Lab Chronicle	22
Certification Summary	25
Method Summary	26
Sample Summary	27
Chain of Custody	28
Receipt Checklists	29

Definitions/Glossary

Client: AECOM
Project/Site: Chalk Point

Job ID: 410-26597-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: AECOM
Project/Site: Chalk Point

Job ID: 410-26597-1

Job ID: 410-26597-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Narrative

**Job Narrative
410-26597-1**

Receipt

The samples were received on 1/15/2021 5:15 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.4°C

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Detection Summary

Client: AECOM
Project/Site: Chalk Point

Job ID: 410-26597-1

Client Sample ID: Fly Ash-011521

Lab Sample ID: 410-26597-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	9400		7500	2500	mg/Kg	500	✳	9056A	Soluble
Aluminum	17000		18	9.5	mg/Kg	1	✳	6010B	Total/NA
Antimony	2.4	J	4.5	1.5	mg/Kg	1	✳	6010B	Total/NA
Arsenic	87		4.5	1.1	mg/Kg	1	✳	6010B	Total/NA
Barium	230		0.45	0.13	mg/Kg	1	✳	6010B	Total/NA
Beryllium	3.6		0.45	0.089	mg/Kg	1	✳	6010B	Total/NA
Calcium	12000		45	11	mg/Kg	1	✳	6010B	Total/NA
Chromium	52		1.3	0.16	mg/Kg	1	✳	6010B	Total/NA
Cobalt	11		0.45	0.13	mg/Kg	1	✳	6010B	Total/NA
Copper	31		1.8	0.69	mg/Kg	1	✳	6010B	Total/NA
Iron	47000		89	28	mg/Kg	5	✳	6010B	Total/NA
Lead	18		1.3	0.54	mg/Kg	1	✳	6010B	Total/NA
Magnesium	1500		8.9	3.6	mg/Kg	1	✳	6010B	Total/NA
Manganese	58		0.89	0.46	mg/Kg	1	✳	6010B	Total/NA
Nickel	33		0.89	0.23	mg/Kg	1	✳	6010B	Total/NA
Potassium	2000		45	18	mg/Kg	1	✳	6010B	Total/NA
Selenium	6.7		4.5	1.3	mg/Kg	1	✳	6010B	Total/NA
Silver	1.5	B	0.89	0.36	mg/Kg	1	✳	6010B	Total/NA
Sodium	810		89	41	mg/Kg	1	✳	6010B	Total/NA
Vanadium	110		0.89	0.38	mg/Kg	1	✳	6010B	Total/NA
Zinc	38		1.8	0.89	mg/Kg	1	✳	6010B	Total/NA
Barium	0.15		0.0050	0.0010	mg/L	1		6010B	TCLP
Arsenic	0.11		0.030	0.016	mg/L	1		6010B	TCLP
Cadmium	0.012		0.0050	0.0010	mg/L	1		6010B	TCLP
Chromium	0.17		0.015	0.0016	mg/L	1		6010B	TCLP
Selenium	0.017	J	0.050	0.016	mg/L	1		6010B	TCLP
Mercury	0.62		0.059	0.025	mg/Kg	1	✳	7471A	Total/NA
Paint Filter	No			No Unit		1		9095A	Total/NA
pH	4.1		0.01	0.01	S.U.	1		9045C	Soluble
Temperature	21.0		0.01	0.01	Degrees C	1		9045C	Soluble

Client Sample ID: Bottom Ash-011521

Lab Sample ID: 410-26597-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	46	J F1	67	33	mg/Kg	5	✳	9056A	Soluble
Sulfate	450		100	33	mg/Kg	5	✳	9056A	Soluble
Aluminum	11000		23	12	mg/Kg	1	✳	6010B	Total/NA
Arsenic	11		5.7	1.4	mg/Kg	1	✳	6010B	Total/NA
Barium	82		0.57	0.17	mg/Kg	1	✳	6010B	Total/NA
Beryllium	1.3		0.57	0.11	mg/Kg	1	✳	6010B	Total/NA
Calcium	5000		57	14	mg/Kg	1	✳	6010B	Total/NA
Chromium	19		1.7	0.21	mg/Kg	1	✳	6010B	Total/NA
Cobalt	4.3		0.57	0.17	mg/Kg	1	✳	6010B	Total/NA
Copper	8.5		2.3	0.88	mg/Kg	1	✳	6010B	Total/NA
Iron	27000		23	7.1	mg/Kg	1	✳	6010B	Total/NA
Lead	1.4	J	1.7	0.69	mg/Kg	1	✳	6010B	Total/NA
Magnesium	710		11	4.6	mg/Kg	1	✳	6010B	Total/NA
Manganese	33		1.1	0.60	mg/Kg	1	✳	6010B	Total/NA
Nickel	13		1.1	0.30	mg/Kg	1	✳	6010B	Total/NA
Potassium	860		57	23	mg/Kg	1	✳	6010B	Total/NA
Silver	0.71	J B	1.1	0.46	mg/Kg	1	✳	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Env, LLC

Detection Summary

Client: AECOM
Project/Site: Chalk Point

Job ID: 410-26597-1

Client Sample ID: Bottom Ash-011521 (Continued)

Lab Sample ID: 410-26597-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	370		110	53	mg/Kg	1	☼	6010B	Total/NA
Vanadium	30		1.1	0.49	mg/Kg	1	☼	6010B	Total/NA
Zinc	9.9		2.3	1.1	mg/Kg	1	☼	6010B	Total/NA
Barium	0.21		0.0050	0.0010	mg/L	1		6010B	TCLP
Chromium	0.0095	J	0.015	0.0016	mg/L	1		6010B	TCLP
Paint Filter	No				No Unit	1		9095A	Total/NA
pH	8.0		0.01	0.01	S.U.	1		9045C	Soluble
Temperature	21.3		0.01	0.01	Degrees C	1		9045C	Soluble

Client Sample ID: WWTP Fines-011521

Lab Sample ID: 410-26597-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	110		100	50	mg/Kg	5	☼	9056A	Soluble
Sulfate	15000		15000	5000	mg/Kg	500	☼	9056A	Soluble
Aluminum	15000		33	18	mg/Kg	1	☼	6010B	Total/NA
Arsenic	39		8.3	2.0	mg/Kg	1	☼	6010B	Total/NA
Barium	670		0.83	0.25	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.91		0.83	0.17	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.65	J	0.83	0.17	mg/Kg	1	☼	6010B	Total/NA
Calcium	160000		410	100	mg/Kg	5	☼	6010B	Total/NA
Chromium	88		2.5	0.30	mg/Kg	1	☼	6010B	Total/NA
Cobalt	11		0.83	0.24	mg/Kg	1	☼	6010B	Total/NA
Copper	70		3.3	1.3	mg/Kg	1	☼	6010B	Total/NA
Iron	31000		33	10	mg/Kg	1	☼	6010B	Total/NA
Lead	20		2.5	1.0	mg/Kg	1	☼	6010B	Total/NA
Magnesium	26000		17	6.6	mg/Kg	1	☼	6010B	Total/NA
Manganese	1500		1.7	0.86	mg/Kg	1	☼	6010B	Total/NA
Nickel	120		1.7	0.43	mg/Kg	1	☼	6010B	Total/NA
Potassium	7300		83	34	mg/Kg	1	☼	6010B	Total/NA
Selenium	110		8.3	2.5	mg/Kg	1	☼	6010B	Total/NA
Silver	1.1	J B	1.7	0.66	mg/Kg	1	☼	6010B	Total/NA
Sodium	2300		170	77	mg/Kg	1	☼	6010B	Total/NA
Thallium	2.4	J	5.0	2.2	mg/Kg	1	☼	6010B	Total/NA
Vanadium	43		1.7	0.71	mg/Kg	1	☼	6010B	Total/NA
Zinc	87		3.3	1.7	mg/Kg	1	☼	6010B	Total/NA
Barium	0.14	F1	0.0050	0.0010	mg/L	1		6010B	TCLP
Cadmium	0.0069		0.0050	0.0010	mg/L	1		6010B	TCLP
Chromium	0.0058	J	0.015	0.0016	mg/L	1		6010B	TCLP
Selenium	0.056		0.050	0.016	mg/L	1		6010B	TCLP
Mercury	37		5.5	2.3	mg/Kg	50	☼	7471A	Total/NA
Paint Filter	No				No Unit	1		9095A	Total/NA
pH	8.9		0.01	0.01	S.U.	1		9045C	Soluble
Temperature	20.7		0.01	0.01	Degrees C	1		9045C	Soluble

Client Sample ID: Gypsum-011521

Lab Sample ID: 410-26597-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3300		670	330	mg/Kg	50	☼	9056A	Soluble
Sulfate	18000		10000	3300	mg/Kg	500	☼	9056A	Soluble
Aluminum	420		25	13	mg/Kg	1	☼	6010B	Total/NA
Barium	40		0.62	0.18	mg/Kg	1	☼	6010B	Total/NA
Calcium	280000		620	150	mg/Kg	10	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Env, LLC

Detection Summary

Client: AECOM
Project/Site: Chalk Point

Job ID: 410-26597-1

Client Sample ID: Gypsum-011521 (Continued)

Lab Sample ID: 410-26597-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Chromium	2.0		1.8	0.22	mg/Kg	1		*	6010B	Total/NA
Copper	6.5		2.5	0.95	mg/Kg	1		*	6010B	Total/NA
Iron	850		25	7.6	mg/Kg	1		*	6010B	Total/NA
Lead	9.5		1.8	0.74	mg/Kg	1		*	6010B	Total/NA
Magnesium	180		12	4.9	mg/Kg	1		*	6010B	Total/NA
Manganese	3.4		1.2	0.64	mg/Kg	1		*	6010B	Total/NA
Nickel	1.2		1.2	0.32	mg/Kg	1		*	6010B	Total/NA
Potassium	260		62	25	mg/Kg	1		*	6010B	Total/NA
Sodium	86	J	120	57	mg/Kg	1		*	6010B	Total/NA
Vanadium	0.69	J	1.2	0.53	mg/Kg	1		*	6010B	Total/NA
Zinc	1.2	J	2.5	1.2	mg/Kg	1		*	6010B	Total/NA
Barium	0.066		0.0050	0.0010	mg/L	1			6010B	TCLP
Chromium	0.044		0.015	0.0016	mg/L	1			6010B	TCLP
Mercury	0.35		0.079	0.033	mg/Kg	1		*	7471A	Total/NA
Paint Filter	No				No Unit	1			9095A	Total/NA
pH	7.1		0.01	0.01	S.U.	1			9045C	Soluble
Temperature	21.4		0.01	0.01	Degrees C	1			9045C	Soluble

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: AECOM
Project/Site: Chalk Point

Job ID: 410-26597-1

Client Sample ID: Fly Ash-011521

Lab Sample ID: 410-26597-1

Date Collected: 01/15/21 10:35

Matrix: Solid

Date Received: 01/15/21 17:15

Percent Solids: 100.0

Method: 9056A - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		50	25	mg/Kg	✱		01/20/21 13:50	5
Sulfate	9400		7500	2500	mg/Kg	✱		01/21/21 10:32	500

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	17000		18	9.5	mg/Kg	✱	01/19/21 05:30	01/22/21 18:25	1
Antimony	2.4	J	4.5	1.5	mg/Kg	✱	01/19/21 05:30	01/22/21 18:25	1
Arsenic	87		4.5	1.1	mg/Kg	✱	01/19/21 05:30	01/22/21 18:25	1
Barium	230		0.45	0.13	mg/Kg	✱	01/19/21 05:30	01/22/21 18:25	1
Beryllium	3.6		0.45	0.089	mg/Kg	✱	01/19/21 05:30	01/22/21 18:25	1
Cadmium	ND		0.45	0.089	mg/Kg	✱	01/19/21 05:30	01/22/21 18:25	1
Calcium	12000		45	11	mg/Kg	✱	01/19/21 05:30	01/22/21 18:25	1
Chromium	52		1.3	0.16	mg/Kg	✱	01/19/21 05:30	01/22/21 18:25	1
Cobalt	11		0.45	0.13	mg/Kg	✱	01/19/21 05:30	01/22/21 18:25	1
Copper	31		1.8	0.69	mg/Kg	✱	01/19/21 05:30	01/22/21 18:25	1
Iron	47000		89	28	mg/Kg	✱	01/19/21 05:30	01/25/21 08:56	5
Lead	18		1.3	0.54	mg/Kg	✱	01/19/21 05:30	01/22/21 18:25	1
Magnesium	1500		8.9	3.6	mg/Kg	✱	01/19/21 05:30	01/22/21 18:25	1
Manganese	58		0.89	0.46	mg/Kg	✱	01/19/21 05:30	01/22/21 18:25	1
Nickel	33		0.89	0.23	mg/Kg	✱	01/19/21 05:30	01/22/21 18:25	1
Potassium	2000		45	18	mg/Kg	✱	01/19/21 05:30	01/22/21 18:25	1
Selenium	6.7		4.5	1.3	mg/Kg	✱	01/19/21 05:30	01/22/21 18:25	1
Silver	1.5	B	0.89	0.36	mg/Kg	✱	01/19/21 05:30	01/22/21 18:25	1
Sodium	810		89	41	mg/Kg	✱	01/19/21 05:30	01/22/21 18:25	1
Thallium	ND		2.7	1.2	mg/Kg	✱	01/19/21 05:30	01/22/21 18:25	1
Vanadium	110		0.89	0.38	mg/Kg	✱	01/19/21 05:30	01/22/21 18:25	1
Zinc	38		1.8	0.89	mg/Kg	✱	01/19/21 05:30	01/22/21 18:25	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.15		0.0050	0.0010	mg/L		01/25/21 03:43	01/25/21 11:47	1
Arsenic	0.11		0.030	0.016	mg/L		01/25/21 03:43	01/25/21 11:47	1
Cadmium	0.012		0.0050	0.0010	mg/L		01/25/21 03:43	01/25/21 11:47	1
Chromium	0.17		0.015	0.0016	mg/L		01/25/21 03:43	01/25/21 11:47	1
Lead	ND		0.015	0.0071	mg/L		01/25/21 03:43	01/25/21 11:47	1
Selenium	0.017	J	0.050	0.016	mg/L		01/25/21 03:43	01/25/21 11:47	1
Silver	ND		0.010	0.0050	mg/L		01/25/21 03:43	01/25/21 11:47	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.62		0.059	0.025	mg/Kg	✱	01/20/21 09:53	01/20/21 18:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Paint Filter	No				No Unit			01/25/21 22:05	1
Percent Moisture	0.0		1.0	1.0	%			01/19/21 03:23	1
Percent Solids	100.0		1.0	1.0	%			01/19/21 03:23	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	4.1		0.01	0.01	S.U.			01/25/21 19:41	1

Client Sample Results

Client: AECOM
Project/Site: Chalk Point

Job ID: 410-26597-1

Client Sample ID: Fly Ash-011521

Lab Sample ID: 410-26597-1

Date Collected: 01/15/21 10:35

Matrix: Solid

Date Received: 01/15/21 17:15

Percent Solids: 100.0

General Chemistry - Soluble (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Temperature	21.0		0.01	0.01	Degrees C			01/25/21 19:41	1

Client Sample ID: Bottom Ash-011521

Lab Sample ID: 410-26597-2

Date Collected: 01/15/21 10:40

Matrix: Solid

Date Received: 01/15/21 17:15

Percent Solids: 74.5

Method: 9056A - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	46	J F1	67	33	mg/Kg	✱		01/20/21 14:26	5
Sulfate	450		100	33	mg/Kg	✱		01/20/21 14:26	5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	11000		23	12	mg/Kg	✱	01/19/21 05:30	01/22/21 18:00	1
Antimony	ND		5.7	2.0	mg/Kg	✱	01/19/21 05:30	01/22/21 18:00	1
Arsenic	11		5.7	1.4	mg/Kg	✱	01/19/21 05:30	01/22/21 18:00	1
Barium	82		0.57	0.17	mg/Kg	✱	01/19/21 05:30	01/22/21 18:00	1
Beryllium	1.3		0.57	0.11	mg/Kg	✱	01/19/21 05:30	01/22/21 18:00	1
Cadmium	ND		0.57	0.11	mg/Kg	✱	01/19/21 05:30	01/22/21 18:00	1
Calcium	5000		57	14	mg/Kg	✱	01/19/21 05:30	01/22/21 18:00	1
Chromium	19		1.7	0.21	mg/Kg	✱	01/19/21 05:30	01/22/21 18:00	1
Cobalt	4.3		0.57	0.17	mg/Kg	✱	01/19/21 05:30	01/22/21 18:00	1
Copper	8.5		2.3	0.88	mg/Kg	✱	01/19/21 05:30	01/22/21 18:00	1
Iron	27000		23	7.1	mg/Kg	✱	01/19/21 05:30	01/22/21 18:00	1
Lead	1.4	J	1.7	0.69	mg/Kg	✱	01/19/21 05:30	01/22/21 18:00	1
Magnesium	710		11	4.6	mg/Kg	✱	01/19/21 05:30	01/22/21 18:00	1
Manganese	33		1.1	0.60	mg/Kg	✱	01/19/21 05:30	01/22/21 18:00	1
Nickel	13		1.1	0.30	mg/Kg	✱	01/19/21 05:30	01/22/21 18:00	1
Potassium	860		57	23	mg/Kg	✱	01/19/21 05:30	01/22/21 18:00	1
Selenium	ND		5.7	1.7	mg/Kg	✱	01/19/21 05:30	01/22/21 18:00	1
Silver	0.71	J B	1.1	0.46	mg/Kg	✱	01/19/21 05:30	01/22/21 18:00	1
Sodium	370		110	53	mg/Kg	✱	01/19/21 05:30	01/22/21 18:00	1
Thallium	ND		3.4	1.5	mg/Kg	✱	01/19/21 05:30	01/22/21 18:00	1
Vanadium	30		1.1	0.49	mg/Kg	✱	01/19/21 05:30	01/22/21 18:00	1
Zinc	9.9		2.3	1.1	mg/Kg	✱	01/19/21 05:30	01/22/21 18:00	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.21		0.0050	0.0010	mg/L		01/25/21 03:43	01/25/21 11:57	1
Arsenic	ND		0.030	0.016	mg/L		01/25/21 03:43	01/25/21 11:57	1
Cadmium	ND		0.0050	0.0010	mg/L		01/25/21 03:43	01/25/21 11:57	1
Chromium	0.0095	J	0.015	0.0016	mg/L		01/25/21 03:43	01/25/21 11:57	1
Lead	ND		0.015	0.0071	mg/L		01/25/21 03:43	01/25/21 11:57	1
Selenium	ND		0.050	0.016	mg/L		01/25/21 03:43	01/25/21 11:57	1
Silver	ND	F1	0.010	0.0050	mg/L		01/25/21 03:43	01/25/21 11:57	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.076	0.031	mg/Kg	✱	01/20/21 09:53	01/20/21 18:42	1

Client Sample Results

Client: AECOM
Project/Site: Chalk Point

Job ID: 410-26597-1

Client Sample ID: Bottom Ash-011521

Lab Sample ID: 410-26597-2

Date Collected: 01/15/21 10:40

Matrix: Solid

Date Received: 01/15/21 17:15

Percent Solids: 74.5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Paint Filter	No				No Unit			01/25/21 22:05	1
Percent Moisture	25.5		1.0	1.0	%			01/19/21 03:23	1
Percent Solids	74.5		1.0	1.0	%			01/19/21 03:23	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.0		0.01	0.01	S.U.			01/25/21 19:41	1
Temperature	21.3		0.01	0.01	Degrees C			01/25/21 19:41	1

Client Sample ID: WWTP Fines-011521

Lab Sample ID: 410-26597-3

Date Collected: 01/15/21 10:43

Matrix: Solid

Date Received: 01/15/21 17:15

Percent Solids: 50.2

Method: 9056A - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110		100	50	mg/Kg	✱		01/20/21 15:20	5
Sulfate	15000		15000	5000	mg/Kg	✱		01/21/21 10:50	500

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	15000		33	18	mg/Kg	✱	01/19/21 05:30	01/22/21 18:10	1
Antimony	ND		8.3	2.8	mg/Kg	✱	01/19/21 05:30	01/22/21 18:10	1
Arsenic	39		8.3	2.0	mg/Kg	✱	01/19/21 05:30	01/22/21 18:10	1
Barium	670		0.83	0.25	mg/Kg	✱	01/19/21 05:30	01/22/21 18:10	1
Beryllium	0.91		0.83	0.17	mg/Kg	✱	01/19/21 05:30	01/22/21 18:10	1
Cadmium	0.65	J	0.83	0.17	mg/Kg	✱	01/19/21 05:30	01/22/21 18:10	1
Calcium	160000		410	100	mg/Kg	✱	01/19/21 05:30	01/25/21 08:51	5
Chromium	88		2.5	0.30	mg/Kg	✱	01/19/21 05:30	01/22/21 18:10	1
Cobalt	11		0.83	0.24	mg/Kg	✱	01/19/21 05:30	01/22/21 18:10	1
Copper	70		3.3	1.3	mg/Kg	✱	01/19/21 05:30	01/22/21 18:10	1
Iron	31000		33	10	mg/Kg	✱	01/19/21 05:30	01/22/21 18:10	1
Lead	20		2.5	1.0	mg/Kg	✱	01/19/21 05:30	01/22/21 18:10	1
Magnesium	26000		17	6.6	mg/Kg	✱	01/19/21 05:30	01/22/21 18:10	1
Manganese	1500		1.7	0.86	mg/Kg	✱	01/19/21 05:30	01/22/21 18:10	1
Nickel	120		1.7	0.43	mg/Kg	✱	01/19/21 05:30	01/22/21 18:10	1
Potassium	7300		83	34	mg/Kg	✱	01/19/21 05:30	01/22/21 18:10	1
Selenium	110		8.3	2.5	mg/Kg	✱	01/19/21 05:30	01/22/21 18:10	1
Silver	1.1	J B	1.7	0.66	mg/Kg	✱	01/19/21 05:30	01/22/21 18:10	1
Sodium	2300		170	77	mg/Kg	✱	01/19/21 05:30	01/22/21 18:10	1
Thallium	2.4	J	5.0	2.2	mg/Kg	✱	01/19/21 05:30	01/22/21 18:10	1
Vanadium	43		1.7	0.71	mg/Kg	✱	01/19/21 05:30	01/22/21 18:10	1
Zinc	87		3.3	1.7	mg/Kg	✱	01/19/21 05:30	01/22/21 18:10	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.14	F1	0.0050	0.0010	mg/L		01/25/21 03:43	01/25/21 11:50	1
Arsenic	ND		0.030	0.016	mg/L		01/25/21 03:43	01/25/21 11:50	1
Cadmium	0.0069		0.0050	0.0010	mg/L		01/25/21 03:43	01/25/21 11:50	1
Chromium	0.0058	J	0.015	0.0016	mg/L		01/25/21 03:43	01/25/21 11:50	1
Lead	ND		0.015	0.0071	mg/L		01/25/21 03:43	01/25/21 11:50	1
Selenium	0.056		0.050	0.016	mg/L		01/25/21 03:43	01/25/21 11:50	1

Eurofins Lancaster Laboratories Env, LLC

Client Sample Results

Client: AECOM
Project/Site: Chalk Point

Job ID: 410-26597-1

Client Sample ID: WWTP Fines-011521

Lab Sample ID: 410-26597-3

Date Collected: 01/15/21 10:43

Matrix: Solid

Date Received: 01/15/21 17:15

Percent Solids: 50.2

Method: 6010B - Metals (ICP) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.010	0.0050	mg/L		01/25/21 03:43	01/25/21 11:50	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	37		5.5	2.3	mg/Kg	⊛	01/20/21 09:53	01/20/21 18:26	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Paint Filter	No				No Unit			01/25/21 22:05	1
Percent Moisture	49.8		1.0	1.0	%			01/19/21 03:23	1
Percent Solids	50.2		1.0	1.0	%			01/19/21 03:23	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.9		0.01	0.01	S.U.			01/25/21 19:41	1
Temperature	20.7		0.01	0.01	Degrees C			01/25/21 19:41	1

Client Sample ID: Gypsum-011521

Lab Sample ID: 410-26597-4

Date Collected: 01/15/21 10:45

Matrix: Solid

Date Received: 01/15/21 17:15

Percent Solids: 73.9

Method: 9056A - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3300		670	330	mg/Kg	⊛		01/20/21 16:51	50
Sulfate	18000		10000	3300	mg/Kg	⊛		01/20/21 17:09	500

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	420		25	13	mg/Kg	⊛	01/19/21 05:30	01/22/21 18:13	1
Antimony	ND		6.2	2.1	mg/Kg	⊛	01/19/21 05:30	01/22/21 18:13	1
Arsenic	ND		6.2	1.5	mg/Kg	⊛	01/19/21 05:30	01/22/21 18:13	1
Barium	40		0.62	0.18	mg/Kg	⊛	01/19/21 05:30	01/22/21 18:13	1
Beryllium	ND		0.62	0.12	mg/Kg	⊛	01/19/21 05:30	01/22/21 18:13	1
Cadmium	ND		0.62	0.12	mg/Kg	⊛	01/19/21 05:30	01/22/21 18:13	1
Calcium	280000		620	150	mg/Kg	⊛	01/19/21 05:30	01/25/21 08:54	10
Chromium	2.0		1.8	0.22	mg/Kg	⊛	01/19/21 05:30	01/22/21 18:13	1
Cobalt	ND		0.62	0.18	mg/Kg	⊛	01/19/21 05:30	01/22/21 18:13	1
Copper	6.5		2.5	0.95	mg/Kg	⊛	01/19/21 05:30	01/22/21 18:13	1
Iron	850		25	7.6	mg/Kg	⊛	01/19/21 05:30	01/22/21 18:13	1
Lead	9.5		1.8	0.74	mg/Kg	⊛	01/19/21 05:30	01/22/21 18:13	1
Magnesium	180		12	4.9	mg/Kg	⊛	01/19/21 05:30	01/22/21 18:13	1
Manganese	3.4		1.2	0.64	mg/Kg	⊛	01/19/21 05:30	01/22/21 18:13	1
Nickel	1.2		1.2	0.32	mg/Kg	⊛	01/19/21 05:30	01/22/21 18:13	1
Potassium	260		62	25	mg/Kg	⊛	01/19/21 05:30	01/22/21 18:13	1
Selenium	ND		6.2	1.8	mg/Kg	⊛	01/19/21 05:30	01/22/21 18:13	1
Silver	ND		1.2	0.49	mg/Kg	⊛	01/19/21 05:30	01/22/21 18:13	1
Sodium	86 J		120	57	mg/Kg	⊛	01/19/21 05:30	01/22/21 18:13	1
Thallium	ND		3.7	1.6	mg/Kg	⊛	01/19/21 05:30	01/22/21 18:13	1
Vanadium	0.69 J		1.2	0.53	mg/Kg	⊛	01/19/21 05:30	01/22/21 18:13	1
Zinc	1.2 J		2.5	1.2	mg/Kg	⊛	01/19/21 05:30	01/22/21 18:13	1

Client Sample Results

Client: AECOM
Project/Site: Chalk Point

Job ID: 410-26597-1

Client Sample ID: Gypsum-011521

Lab Sample ID: 410-26597-4

Date Collected: 01/15/21 10:45

Matrix: Solid

Date Received: 01/15/21 17:15

Percent Solids: 73.9

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.066		0.0050	0.0010	mg/L		01/25/21 03:43	01/25/21 12:03	1
Arsenic	ND		0.030	0.016	mg/L		01/25/21 03:43	01/25/21 12:03	1
Cadmium	ND		0.0050	0.0010	mg/L		01/25/21 03:43	01/25/21 12:03	1
Chromium	0.044		0.015	0.0016	mg/L		01/25/21 03:43	01/25/21 12:03	1
Lead	ND		0.015	0.0071	mg/L		01/25/21 03:43	01/25/21 12:03	1
Selenium	ND		0.050	0.016	mg/L		01/25/21 03:43	01/25/21 12:03	1
Silver	ND		0.010	0.0050	mg/L		01/25/21 03:43	01/25/21 12:03	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.35		0.079	0.033	mg/Kg	☆	01/20/21 09:53	01/20/21 18:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Paint Filter	No				No Unit			01/25/21 22:05	1
Percent Moisture	26.1		1.0	1.0	%			01/19/21 03:23	1
Percent Solids	73.9		1.0	1.0	%			01/19/21 03:23	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.1		0.01	0.01	S.U.			01/25/21 19:41	1
Temperature	21.4		0.01	0.01	Degrees C			01/25/21 19:41	1

QC Sample Results

Client: AECOM
Project/Site: Chalk Point

Job ID: 410-26597-1

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 410-86210/2-A
Matrix: Solid
Analysis Batch: 86377

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		10	5.0	mg/Kg			01/20/21 13:32	1
Sulfate	ND		15	5.0	mg/Kg			01/20/21 13:32	1

Lab Sample ID: LCS 410-86210/1-A
Matrix: Solid
Analysis Batch: 86377

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	20.0	20.2		mg/Kg		101	90 - 110
Sulfate	50.0	51.5		mg/Kg		103	90 - 110

Lab Sample ID: 410-26597-2 MS
Matrix: Solid
Analysis Batch: 86377

Client Sample ID: Bottom Ash-011521
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	46	J F1	26.6	56.8	J F1	mg/Kg	⊛	42	90 - 110
Sulfate	450		66.6	429	4	mg/Kg	⊛	-38	90 - 110

Lab Sample ID: 410-26597-2 DU
Matrix: Solid
Analysis Batch: 86377

Client Sample ID: Bottom Ash-011521
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	46	J F1	51.3	J	mg/Kg	⊛	12	15
Sulfate	450		528		mg/Kg	⊛	15	15

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 410-85796/1-A
Matrix: Solid
Analysis Batch: 87482

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 85796

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		20	10	mg/Kg		01/19/21 05:30	01/22/21 17:45	1
Antimony	ND		5.0	1.7	mg/Kg		01/19/21 05:30	01/22/21 17:45	1
Arsenic	ND		5.0	1.2	mg/Kg		01/19/21 05:30	01/22/21 17:45	1
Barium	ND		0.50	0.15	mg/Kg		01/19/21 05:30	01/22/21 17:45	1
Beryllium	ND		0.50	0.099	mg/Kg		01/19/21 05:30	01/22/21 17:45	1
Cadmium	ND		0.50	0.099	mg/Kg		01/19/21 05:30	01/22/21 17:45	1
Calcium	ND		50	12	mg/Kg		01/19/21 05:30	01/22/21 17:45	1
Chromium	ND		1.5	0.18	mg/Kg		01/19/21 05:30	01/22/21 17:45	1
Cobalt	ND		0.50	0.14	mg/Kg		01/19/21 05:30	01/22/21 17:45	1
Copper	ND		2.0	0.76	mg/Kg		01/19/21 05:30	01/22/21 17:45	1
Iron	ND		20	6.1	mg/Kg		01/19/21 05:30	01/22/21 17:45	1
Lead	ND		1.5	0.59	mg/Kg		01/19/21 05:30	01/22/21 17:45	1
Magnesium	ND		9.9	4.0	mg/Kg		01/19/21 05:30	01/22/21 17:45	1
Manganese	ND		0.99	0.51	mg/Kg		01/19/21 05:30	01/22/21 17:45	1
Nickel	ND		0.99	0.26	mg/Kg		01/19/21 05:30	01/22/21 17:45	1
Potassium	ND		50	20	mg/Kg		01/19/21 05:30	01/22/21 17:45	1

Eurofins Lancaster Laboratories Env, LLC

QC Sample Results

Client: AECOM
Project/Site: Chalk Point

Job ID: 410-26597-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 410-85796/1-A
Matrix: Solid
Analysis Batch: 87482

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 85796

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Selenium	ND		5.0	1.5	mg/Kg		01/19/21 05:30	01/22/21 17:45	1
Silver	0.406	J	0.99	0.40	mg/Kg		01/19/21 05:30	01/22/21 17:45	1
Sodium	ND		99	46	mg/Kg		01/19/21 05:30	01/22/21 17:45	1
Thallium	ND		3.0	1.3	mg/Kg		01/19/21 05:30	01/22/21 17:45	1
Vanadium	ND		0.99	0.43	mg/Kg		01/19/21 05:30	01/22/21 17:45	1
Zinc	ND		2.0	0.99	mg/Kg		01/19/21 05:30	01/22/21 17:45	1

Lab Sample ID: MB 410-85796/1-A
Matrix: Solid
Analysis Batch: 87678

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 85796

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Calcium	ND		50	12	mg/Kg		01/19/21 05:30	01/25/21 08:45	1
Iron	ND		20	6.1	mg/Kg		01/19/21 05:30	01/25/21 08:45	1

Lab Sample ID: LCS 410-85796/2-A
Matrix: Solid
Analysis Batch: 87482

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 85796

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Aluminum	37.9	37.8		mg/Kg		100	80 - 120
Antimony	9.35	9.63		mg/Kg		103	80 - 120
Arsenic	5.61	5.08		mg/Kg		91	80 - 120
Barium	0.935	0.940		mg/Kg		101	80 - 120
Beryllium	0.935	0.900		mg/Kg		96	80 - 120
Cadmium	0.935	0.924		mg/Kg		99	80 - 120
Calcium	37.4	40.2	J	mg/Kg		107	80 - 120
Chromium	2.80	2.79		mg/Kg		99	80 - 120
Cobalt	0.935	0.905		mg/Kg		97	80 - 120
Copper	3.74	3.91		mg/Kg		105	80 - 120
Iron	37.4	38.2		mg/Kg		102	80 - 120
Lead	2.80	2.99		mg/Kg		107	80 - 120
Magnesium	18.7	19.5		mg/Kg		104	80 - 120
Manganese	1.87	1.94		mg/Kg		104	80 - 120
Nickel	187	188		mg/Kg		100	80 - 120
Potassium	561	544		mg/Kg		97	80 - 120
Selenium	9.35	9.49		mg/Kg		102	80 - 120
Silver	1.87	2.22		mg/Kg		119	80 - 120
Sodium	187	187		mg/Kg		100	80 - 120
Thallium	5.61	5.49		mg/Kg		98	80 - 120
Vanadium	1.87	1.85		mg/Kg		99	80 - 120
Zinc	37.7	37.0		mg/Kg		98	80 - 120

Lab Sample ID: LCS 410-85796/2-A
Matrix: Solid
Analysis Batch: 87678

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 85796

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Calcium	37.4	38.7	J	mg/Kg		103	80 - 120

QC Sample Results

Client: AECOM
Project/Site: Chalk Point

Job ID: 410-26597-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 410-85796/2-A
Matrix: Solid
Analysis Batch: 87678

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 85796

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	37.4	32.6		mg/Kg		87	80 - 120

Lab Sample ID: MB 410-87542/1-A
Matrix: Solid
Analysis Batch: 87740

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 87542

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.030	0.016	mg/L		01/25/21 03:43	01/25/21 10:58	1
Barium	ND		0.0050	0.0010	mg/L		01/25/21 03:43	01/25/21 10:58	1
Cadmium	ND		0.0050	0.0010	mg/L		01/25/21 03:43	01/25/21 10:58	1
Chromium	ND		0.015	0.0016	mg/L		01/25/21 03:43	01/25/21 10:58	1
Lead	ND		0.015	0.0071	mg/L		01/25/21 03:43	01/25/21 10:58	1
Selenium	ND		0.050	0.016	mg/L		01/25/21 03:43	01/25/21 10:58	1
Silver	ND		0.010	0.0050	mg/L		01/25/21 03:43	01/25/21 10:58	1

Lab Sample ID: LCS 410-87542/2-A
Matrix: Solid
Analysis Batch: 87740

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 87542

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0600	0.0714		mg/L		119	80 - 120
Barium	0.0100	0.0109		mg/L		109	80 - 120
Cadmium	0.0100	0.0102		mg/L		102	80 - 120
Chromium	0.0300	0.0329		mg/L		110	80 - 120
Lead	0.0300	0.0283		mg/L		94	80 - 120
Selenium	0.100	0.110		mg/L		110	80 - 120
Silver	0.0200	0.0219		mg/L		109	80 - 120

Lab Sample ID: 410-26597-2 MS
Matrix: Solid
Analysis Batch: 87740

Client Sample ID: Bottom Ash-011521
Prep Type: TCLP
Prep Batch: 87542

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	ND		5.00	4.61		mg/L		92	75 - 125
Barium	0.21		100	81.5		mg/L		81	75 - 125
Cadmium	ND		0.999	0.932		mg/L		93	75 - 125
Chromium	0.0095	J	5.00	4.64		mg/L		93	75 - 125
Lead	ND		5.00	4.62		mg/L		92	75 - 125
Selenium	ND		1.00	0.899	J	mg/L		90	75 - 125
Silver	ND	F1	5.00	1.25	F1	mg/L		25	75 - 125

Lab Sample ID: 410-26597-3 MS
Matrix: Solid
Analysis Batch: 87740

Client Sample ID: WWTP Fines-011521
Prep Type: TCLP
Prep Batch: 87542

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	ND		5.00	4.89		mg/L		98	75 - 125
Barium	0.14	F1	100	23.0	F1	mg/L		23	75 - 125
Cadmium	0.0069		0.999	0.945		mg/L		94	75 - 125
Chromium	0.0058	J	5.00	4.67		mg/L		93	75 - 125

Eurofins Lancaster Laboratories Env, LLC

QC Sample Results

Client: AECOM
Project/Site: Chalk Point

Job ID: 410-26597-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 410-26597-3 MS
Matrix: Solid
Analysis Batch: 87740

Client Sample ID: WWTP Fines-011521
Prep Type: TCLP
Prep Batch: 87542

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	ND		5.00	4.44		mg/L		89	75 - 125
Selenium	0.056		1.00	1.09	J	mg/L		103	75 - 125
Silver	ND		5.00	4.19		mg/L		84	75 - 125

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 410-86323/1-A
Matrix: Solid
Analysis Batch: 86599

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 86323

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.060	0.025	mg/Kg		01/20/21 09:53	01/20/21 18:04	1

Lab Sample ID: LCS 410-86323/2-A
Matrix: Solid
Analysis Batch: 86599

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 86323

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.161	0.191		mg/Kg		119	80 - 120

Lab Sample ID: LCSD 410-86323/3-A
Matrix: Solid
Analysis Batch: 86599

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 86323

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.164	0.191		mg/Kg		116	80 - 120	0	20

Method: 9045C - pH

Lab Sample ID: LCS 410-87850/1-A
Matrix: Solid
Analysis Batch: 87874

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	7.0		S.U.		100	95 - 105

Lab Sample ID: 410-26597-3 DU
Matrix: Solid
Analysis Batch: 87874

Client Sample ID: WWTP Fines-011521
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	8.9		8.9		S.U.		0.3	3
Temperature	20.7		20.6		Degrees C		0.5	3

QC Sample Results

Client: AECOM
Project/Site: Chalk Point

Job ID: 410-26597-1

Method: 9095A - Paint Filter

Lab Sample ID: MB 410-87908/1
Matrix: Solid
Analysis Batch: 87908

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Paint Filter	No				No Unit			01/25/21 22:05	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

QC Association Summary

Client: AECOM
Project/Site: Chalk Point

Job ID: 410-26597-1

HPLC/IC

Leach Batch: 86210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26597-1	Fly Ash-011521	Soluble	Solid	DI Leach	
410-26597-2	Bottom Ash-011521	Soluble	Solid	DI Leach	
410-26597-3	WWTP Fines-011521	Soluble	Solid	DI Leach	
410-26597-4	Gypsum-011521	Soluble	Solid	DI Leach	
MB 410-86210/2-A	Method Blank	Soluble	Solid	DI Leach	
LCS 410-86210/1-A	Lab Control Sample	Soluble	Solid	DI Leach	
410-26597-2 MS	Bottom Ash-011521	Soluble	Solid	DI Leach	
410-26597-2 DU	Bottom Ash-011521	Soluble	Solid	DI Leach	

Analysis Batch: 86377

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26597-1	Fly Ash-011521	Soluble	Solid	9056A	86210
410-26597-2	Bottom Ash-011521	Soluble	Solid	9056A	86210
410-26597-3	WWTP Fines-011521	Soluble	Solid	9056A	86210
410-26597-4	Gypsum-011521	Soluble	Solid	9056A	86210
410-26597-4	Gypsum-011521	Soluble	Solid	9056A	86210
MB 410-86210/2-A	Method Blank	Soluble	Solid	9056A	86210
LCS 410-86210/1-A	Lab Control Sample	Soluble	Solid	9056A	86210
410-26597-2 MS	Bottom Ash-011521	Soluble	Solid	9056A	86210
410-26597-2 DU	Bottom Ash-011521	Soluble	Solid	9056A	86210

Analysis Batch: 86657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26597-1	Fly Ash-011521	Soluble	Solid	9056A	86210
410-26597-3	WWTP Fines-011521	Soluble	Solid	9056A	86210

Metals

Prep Batch: 85796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26597-1	Fly Ash-011521	Total/NA	Solid	3050B	
410-26597-2	Bottom Ash-011521	Total/NA	Solid	3050B	
410-26597-3	WWTP Fines-011521	Total/NA	Solid	3050B	
410-26597-4	Gypsum-011521	Total/NA	Solid	3050B	
MB 410-85796/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 410-85796/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Leach Batch: 85950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26597-1	Fly Ash-011521	TCLP	Solid	1311	
410-26597-2	Bottom Ash-011521	TCLP	Solid	1311	
410-26597-4	Gypsum-011521	TCLP	Solid	1311	
410-26597-2 MS	Bottom Ash-011521	TCLP	Solid	1311	

Leach Batch: 86303

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26597-3	WWTP Fines-011521	TCLP	Solid	1311	
410-26597-3 MS	WWTP Fines-011521	TCLP	Solid	1311	

QC Association Summary

Client: AECOM
Project/Site: Chalk Point

Job ID: 410-26597-1

Metals

Prep Batch: 86323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26597-1	Fly Ash-011521	Total/NA	Solid	7471A	
410-26597-2	Bottom Ash-011521	Total/NA	Solid	7471A	
410-26597-3	WWTP Fines-011521	Total/NA	Solid	7471A	
410-26597-4	Gypsum-011521	Total/NA	Solid	7471A	
MB 410-86323/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 410-86323/2-A	Lab Control Sample	Total/NA	Solid	7471A	
LCSD 410-86323/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	

Analysis Batch: 86599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26597-1	Fly Ash-011521	Total/NA	Solid	7471A	86323
410-26597-2	Bottom Ash-011521	Total/NA	Solid	7471A	86323
410-26597-3	WWTP Fines-011521	Total/NA	Solid	7471A	86323
410-26597-4	Gypsum-011521	Total/NA	Solid	7471A	86323
MB 410-86323/1-A	Method Blank	Total/NA	Solid	7471A	86323
LCS 410-86323/2-A	Lab Control Sample	Total/NA	Solid	7471A	86323
LCSD 410-86323/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	86323

Analysis Batch: 87482

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26597-1	Fly Ash-011521	Total/NA	Solid	6010B	85796
410-26597-2	Bottom Ash-011521	Total/NA	Solid	6010B	85796
410-26597-3	WWTP Fines-011521	Total/NA	Solid	6010B	85796
410-26597-4	Gypsum-011521	Total/NA	Solid	6010B	85796
MB 410-85796/1-A	Method Blank	Total/NA	Solid	6010B	85796
LCS 410-85796/2-A	Lab Control Sample	Total/NA	Solid	6010B	85796

Prep Batch: 87542

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26597-1	Fly Ash-011521	TCLP	Solid	3010A	85950
410-26597-2	Bottom Ash-011521	TCLP	Solid	3010A	85950
410-26597-3	WWTP Fines-011521	TCLP	Solid	3010A	86303
410-26597-4	Gypsum-011521	TCLP	Solid	3010A	85950
MB 410-87542/1-A	Method Blank	Total/NA	Solid	3010A	
LCS 410-87542/2-A	Lab Control Sample	Total/NA	Solid	3010A	
410-26597-2 MS	Bottom Ash-011521	TCLP	Solid	3010A	85950
410-26597-3 MS	WWTP Fines-011521	TCLP	Solid	3010A	86303

Analysis Batch: 87678

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26597-1	Fly Ash-011521	Total/NA	Solid	6010B	85796
410-26597-3	WWTP Fines-011521	Total/NA	Solid	6010B	85796
410-26597-4	Gypsum-011521	Total/NA	Solid	6010B	85796
MB 410-85796/1-A	Method Blank	Total/NA	Solid	6010B	85796
LCS 410-85796/2-A	Lab Control Sample	Total/NA	Solid	6010B	85796

Analysis Batch: 87740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26597-1	Fly Ash-011521	TCLP	Solid	6010B	87542
410-26597-2	Bottom Ash-011521	TCLP	Solid	6010B	87542
410-26597-3	WWTP Fines-011521	TCLP	Solid	6010B	87542

QC Association Summary

Client: AECOM
Project/Site: Chalk Point

Job ID: 410-26597-1

Metals (Continued)

Analysis Batch: 87740 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26597-4	Gypsum-011521	TCLP	Solid	6010B	87542
MB 410-87542/1-A	Method Blank	Total/NA	Solid	6010B	87542
LCS 410-87542/2-A	Lab Control Sample	Total/NA	Solid	6010B	87542
410-26597-2 MS	Bottom Ash-011521	TCLP	Solid	6010B	87542
410-26597-3 MS	WWTP Fines-011521	TCLP	Solid	6010B	87542

General Chemistry

Analysis Batch: 85778

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26597-1	Fly Ash-011521	Total/NA	Solid	Moisture	
410-26597-2	Bottom Ash-011521	Total/NA	Solid	Moisture	
410-26597-3	WWTP Fines-011521	Total/NA	Solid	Moisture	
410-26597-4	Gypsum-011521	Total/NA	Solid	Moisture	

Leach Batch: 87850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26597-1	Fly Ash-011521	Soluble	Solid	DI Leach	
410-26597-2	Bottom Ash-011521	Soluble	Solid	DI Leach	
410-26597-3	WWTP Fines-011521	Soluble	Solid	DI Leach	
410-26597-4	Gypsum-011521	Soluble	Solid	DI Leach	
LCS 410-87850/1-A	Lab Control Sample	Soluble	Solid	DI Leach	
410-26597-3 DU	WWTP Fines-011521	Soluble	Solid	DI Leach	

Analysis Batch: 87874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26597-1	Fly Ash-011521	Soluble	Solid	9045C	87850
410-26597-2	Bottom Ash-011521	Soluble	Solid	9045C	87850
410-26597-3	WWTP Fines-011521	Soluble	Solid	9045C	87850
410-26597-4	Gypsum-011521	Soluble	Solid	9045C	87850
LCS 410-87850/1-A	Lab Control Sample	Soluble	Solid	9045C	87850
410-26597-3 DU	WWTP Fines-011521	Soluble	Solid	9045C	87850

Analysis Batch: 87908

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26597-1	Fly Ash-011521	Total/NA	Solid	9095A	
410-26597-2	Bottom Ash-011521	Total/NA	Solid	9095A	
410-26597-3	WWTP Fines-011521	Total/NA	Solid	9095A	
410-26597-4	Gypsum-011521	Total/NA	Solid	9095A	
MB 410-87908/1	Method Blank	Total/NA	Solid	9095A	

Lab Chronicle

Client: AECOM
Project/Site: Chalk Point

Job ID: 410-26597-1

Client Sample ID: Fly Ash-011521

Lab Sample ID: 410-26597-1

Date Collected: 01/15/21 10:35

Matrix: Solid

Date Received: 01/15/21 17:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			85950	01/19/21 10:38	UNWS	ELLE
TCLP	Prep	3010A			87542	01/25/21 03:43	UJL8	ELLE
TCLP	Analysis	6010B		1	87740	01/25/21 11:47	ULJC	ELLE
Soluble	Leach	DI Leach			87850	01/25/21 18:34	JB	ELLE
Soluble	Analysis	9045C		1	87874	01/25/21 19:41	JB	ELLE
Total/NA	Analysis	9095A		1	87908	01/25/21 22:05	JB	ELLE
Total/NA	Analysis	Moisture		1	85778	01/19/21 03:23	PTG7	ELLE

Client Sample ID: Fly Ash-011521

Lab Sample ID: 410-26597-1

Date Collected: 01/15/21 10:35

Matrix: Solid

Date Received: 01/15/21 17:15

Percent Solids: 100.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			86210	01/20/21 06:30	UNJS	ELLE
Soluble	Analysis	9056A		5	86377	01/20/21 13:50	GJ35	ELLE
Soluble	Leach	DI Leach			86210	01/20/21 06:30	UNJS	ELLE
Soluble	Analysis	9056A		500	86657	01/21/21 10:32	GJ35	ELLE
Total/NA	Prep	3050B			85796	01/19/21 05:30	UAMX	ELLE
Total/NA	Analysis	6010B		5	87678	01/25/21 08:56	SB	ELLE
Total/NA	Prep	3050B			85796	01/19/21 05:30	UAMX	ELLE
Total/NA	Analysis	6010B		1	87482	01/22/21 18:25	UPJE	ELLE
Total/NA	Prep	7471A			86323	01/20/21 09:53	UJLA	ELLE
Total/NA	Analysis	7471A		1	86599	01/20/21 18:44	UEFS	ELLE

Client Sample ID: Bottom Ash-011521

Lab Sample ID: 410-26597-2

Date Collected: 01/15/21 10:40

Matrix: Solid

Date Received: 01/15/21 17:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			85950	01/19/21 10:38	UNWS	ELLE
TCLP	Prep	3010A			87542	01/25/21 03:43	UJL8	ELLE
TCLP	Analysis	6010B		1	87740	01/25/21 11:57	ULJC	ELLE
Soluble	Leach	DI Leach			87850	01/25/21 18:34	JB	ELLE
Soluble	Analysis	9045C		1	87874	01/25/21 19:41	JB	ELLE
Total/NA	Analysis	9095A		1	87908	01/25/21 22:05	JB	ELLE
Total/NA	Analysis	Moisture		1	85778	01/19/21 03:23	PTG7	ELLE

Client Sample ID: Bottom Ash-011521

Lab Sample ID: 410-26597-2

Date Collected: 01/15/21 10:40

Matrix: Solid

Date Received: 01/15/21 17:15

Percent Solids: 74.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			86210	01/20/21 06:30	UNJS	ELLE
Soluble	Analysis	9056A		5	86377	01/20/21 14:26	GJ35	ELLE

Lab Chronicle

Client: AECOM
Project/Site: Chalk Point

Job ID: 410-26597-1

Client Sample ID: Bottom Ash-011521

Lab Sample ID: 410-26597-2

Date Collected: 01/15/21 10:40

Matrix: Solid

Date Received: 01/15/21 17:15

Percent Solids: 74.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			85796	01/19/21 05:30	UAMX	ELLE
Total/NA	Analysis	6010B		1	87482	01/22/21 18:00	UPJE	ELLE
Total/NA	Prep	7471A			86323	01/20/21 09:53	UJLA	ELLE
Total/NA	Analysis	7471A		1	86599	01/20/21 18:42	UEFS	ELLE

Client Sample ID: WWTP Fines-011521

Lab Sample ID: 410-26597-3

Date Collected: 01/15/21 10:43

Matrix: Solid

Date Received: 01/15/21 17:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			86303	01/20/21 09:10	CZ7N	ELLE
TCLP	Prep	3010A			87542	01/25/21 03:43	UJL8	ELLE
TCLP	Analysis	6010B		1	87740	01/25/21 11:50	ULJC	ELLE
Soluble	Leach	DI Leach			87850	01/25/21 18:34	JB	ELLE
Soluble	Analysis	9045C		1	87874	01/25/21 19:41	JB	ELLE
Total/NA	Analysis	9095A		1	87908	01/25/21 22:05	JB	ELLE
Total/NA	Analysis	Moisture		1	85778	01/19/21 03:23	PTG7	ELLE

Client Sample ID: WWTP Fines-011521

Lab Sample ID: 410-26597-3

Date Collected: 01/15/21 10:43

Matrix: Solid

Date Received: 01/15/21 17:15

Percent Solids: 50.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			86210	01/20/21 06:30	UNJS	ELLE
Soluble	Analysis	9056A		5	86377	01/20/21 15:20	GJ35	ELLE
Soluble	Leach	DI Leach			86210	01/20/21 06:30	UNJS	ELLE
Soluble	Analysis	9056A		500	86657	01/21/21 10:50	GJ35	ELLE
Total/NA	Prep	3050B			85796	01/19/21 05:30	UAMX	ELLE
Total/NA	Analysis	6010B		5	87678	01/25/21 08:51	SB	ELLE
Total/NA	Prep	3050B			85796	01/19/21 05:30	UAMX	ELLE
Total/NA	Analysis	6010B		1	87482	01/22/21 18:10	UPJE	ELLE
Total/NA	Prep	7471A			86323	01/20/21 09:53	UJLA	ELLE
Total/NA	Analysis	7471A		50	86599	01/20/21 18:26	UEFS	ELLE

Client Sample ID: Gypsum-011521

Lab Sample ID: 410-26597-4

Date Collected: 01/15/21 10:45

Matrix: Solid

Date Received: 01/15/21 17:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			85950	01/19/21 10:38	UNWS	ELLE
TCLP	Prep	3010A			87542	01/25/21 03:43	UJL8	ELLE
TCLP	Analysis	6010B		1	87740	01/25/21 12:03	ULJC	ELLE
Soluble	Leach	DI Leach			87850	01/25/21 18:34	JB	ELLE
Soluble	Analysis	9045C		1	87874	01/25/21 19:41	JB	ELLE
Total/NA	Analysis	9095A		1	87908	01/25/21 22:05	JB	ELLE

Lab Chronicle

Client: AECOM
Project/Site: Chalk Point

Job ID: 410-26597-1

Client Sample ID: Gypsum-011521

Lab Sample ID: 410-26597-4

Date Collected: 01/15/21 10:45

Matrix: Solid

Date Received: 01/15/21 17:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	85778	01/19/21 03:23	PTG7	ELLE

Client Sample ID: Gypsum-011521

Lab Sample ID: 410-26597-4

Date Collected: 01/15/21 10:45

Matrix: Solid

Date Received: 01/15/21 17:15

Percent Solids: 73.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			86210	01/20/21 06:30	UNJS	ELLE
Soluble	Analysis	9056A		50	86377	01/20/21 16:51	GJ35	ELLE
Soluble	Leach	DI Leach			86210	01/20/21 06:30	UNJS	ELLE
Soluble	Analysis	9056A		500	86377	01/20/21 17:09	GJ35	ELLE
Total/NA	Prep	3050B			85796	01/19/21 05:30	UAMX	ELLE
Total/NA	Analysis	6010B		10	87678	01/25/21 08:54	SB	ELLE
Total/NA	Prep	3050B			85796	01/19/21 05:30	UAMX	ELLE
Total/NA	Analysis	6010B		1	87482	01/22/21 18:13	UPJE	ELLE
Total/NA	Prep	7471A			86323	01/20/21 09:53	UJLA	ELLE
Total/NA	Analysis	7471A		1	86599	01/20/21 18:40	UEFS	ELLE

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: AECOM
Project/Site: Chalk Point

Job ID: 410-26597-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Maryland	State	100	06-30-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6010B	3010A	Solid	Arsenic
6010B	3010A	Solid	Barium
6010B	3010A	Solid	Cadmium
6010B	3010A	Solid	Chromium
6010B	3010A	Solid	Lead
6010B	3010A	Solid	Selenium
6010B	3010A	Solid	Silver
6010B	3050B	Solid	Aluminum
6010B	3050B	Solid	Antimony
6010B	3050B	Solid	Arsenic
6010B	3050B	Solid	Barium
6010B	3050B	Solid	Beryllium
6010B	3050B	Solid	Cadmium
6010B	3050B	Solid	Calcium
6010B	3050B	Solid	Chromium
6010B	3050B	Solid	Cobalt
6010B	3050B	Solid	Copper
6010B	3050B	Solid	Iron
6010B	3050B	Solid	Lead
6010B	3050B	Solid	Magnesium
6010B	3050B	Solid	Manganese
6010B	3050B	Solid	Nickel
6010B	3050B	Solid	Potassium
6010B	3050B	Solid	Selenium
6010B	3050B	Solid	Silver
6010B	3050B	Solid	Sodium
6010B	3050B	Solid	Thallium
6010B	3050B	Solid	Vanadium
6010B	3050B	Solid	Zinc
7471A	7471A	Solid	Mercury
9045C		Solid	pH
9045C		Solid	Temperature
9056A		Solid	Chloride
9056A		Solid	Sulfate
9095A		Solid	Paint Filter
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: AECOM
Project/Site: Chalk Point

Job ID: 410-26597-1

Method	Method Description	Protocol	Laboratory
9056A	Anions, Ion Chromatography	SW846	ELLE
6010B	Metals (ICP)	SW846	ELLE
7471A	Mercury (CVAA)	SW846	ELLE
9045C	pH	SW846	ELLE
9095A	Paint Filter	SW846	ELLE
Moisture	Percent Moisture	EPA	ELLE
1311	TCLP Extraction	SW846	ELLE
3010A	Preparation, Total Metals	SW846	ELLE
3050B	Preparation, Metals	SW846	ELLE
7471A	Preparation, Mercury	SW846	ELLE
DI Leach	Deionized Water Leaching Procedure	ASTM	ELLE

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: AECOM
Project/Site: Chalk Point

Job ID: 410-26597-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
410-26597-1	Fly Ash-011521	Solid	01/15/21 10:35	01/15/21 17:15	
410-26597-2	Bottom Ash-011521	Solid	01/15/21 10:40	01/15/21 17:15	
410-26597-3	WWTP Fines-011521	Solid	01/15/21 10:43	01/15/21 17:15	
410-26597-4	Gypsum-011521	Solid	01/15/21 10:45	01/15/21 17:15	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

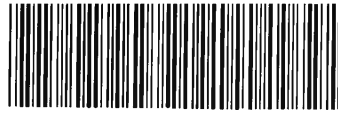


Lancaster Laboratories

Analysis Request

Acct: 10303

For Lab Group



410-26597 Chain of Custody

Services Chain of Custody

For Lab Use Only

Client: <u>AECOM Environment</u>		Acct: <u>10303</u>		Matrix		Analyses Requested										SF#:		
Project Name: <u>Chalk Point</u>		PWSID #: _____				Preservation Codes										SCR#:		
Project Manager: <u>Sharon Drummond</u>		P.O.# <u>110136</u>		<input type="checkbox"/> Potable <input type="checkbox"/> NPDES	Total # of Containers	Total Metals as mg/kg dry: EPA 6000/7000 Series	Total Mercury as mg/kg dry: EPA 7471A	Paint Filter	TCLP Metals (6000/7000 Series)	Chloride and Sulfate (as SO4) as mg/kg dry	Dry density, % moisture and % solids	pH	Preservation Codes		Temperature of samples upon receipt (if requested)			
Sampler: <u>Emily Lillis</u>		Quote #: _____											H=HCl T=Thiosulfate N=HNO ₃ B=NaOH S=H ₂ SO ₄ O=Other					
Name of State where samples were collected: <u>MD</u>		Date Collected	Time Collected	Grab	Composite	Soil	Water	Other	Total # of Containers	Total Metals as mg/kg dry: EPA 6000/7000 Series	Total Mercury as mg/kg dry: EPA 7471A	Paint Filter	TCLP Metals (6000/7000 Series)	Chloride and Sulfate (as SO4) as mg/kg dry	Dry density, % moisture and % solids	pH	Total Metals: Aluminum, Antimony, Arsenic, Berium, Beryllium, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc TCLP Metals: Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver	
Sample Identification																		
<u>FINASH-011521</u>		<u>1/15/21</u>	<u>1035</u>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	<u>3</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<u>Bottom ASH-011521</u>		<u>1/15/21</u>	<u>1040</u>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	<u>3</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<u>WWTP Fines-011521</u>		<u>1/15/21</u>	<u>1043</u>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	<u>3</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<u>Gypsum-011521</u>		<u>1/15/21</u>	<u>1045</u>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	<u>3</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Turnaround Time Requested (TAT) (please circle): <u>Normal</u> Rush (Rush TAT is subject to Lancaster Laboratories approval and surcharge.) Date Results are needed: _____ Rush results requested by (please circle): Phone Fax Email Phone #: _____ Fax#: _____ Email address: _____				Relinquished by: <u>[Signature]</u>		Date	Time	Received by:	Date	Time	Relinquished by: <u>[Signature]</u>		Date	Time	Received by:	Date	Time	
Data Package Options (please circle if required) Type I (validation/NJ Reg) Type VI (Raw Data) SDG Complete? Yes No Type II (Tier II) Type III (Reduced NJ) Type IV (CLP SOW)				Relinquished by: <u>[Signature]</u>		Date	Time	Received by:	Date	Time	Relinquished by: <u>[Signature]</u>		Date	Time	Received by:	Date	Time	
TX TRRP-13 Site-specific QC Required (MS/MSD/DUP)? Yes No MA MCP (If yes, indicate QC sample and submit triplicate volume.) CT RCP Internal Chain of Custody Required? Yes No				Relinquished by: <u>[Signature]</u>		Date	Time	Received by:	Date	Time	Relinquished by: <u>[Signature]</u>		Date	Time	Received by:	Date	Time	
				Relinquished by: <u>[Signature]</u>		Date	Time	Received by:	Date	Time	Relinquished by: <u>[Signature]</u>		Date	Time	Received by:	Date	Time	

KAM

1/26/2021

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Login Sample Receipt Checklist

Client: AECOM

Job Number: 410-26597-1

Login Number: 26597

List Source: Eurofins Lancaster Laboratories Env

List Number: 1

Creator: Jeremiah, Cory T

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable ($\leq 6^{\circ}\text{C}$, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable ($\leq 6^{\circ}\text{C}$, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified.	N/A	
Residual Chlorine Checked.	N/A	
Sample custody seals are intact.	N/A	





Microbac Laboratories, Inc. - Baltimore

CERTIFICATE OF ANALYSIS

21C0414

Genon - Morgantown

Project Name: Morgantown-2020

Philip Goddard
Morgantown Generating Station, 12620 Crain Hwy
Newburg, MD 20664

Project / PO Number: 4503529728
Received: 03/02/2021
Reported: 03/31/2021

Analytical Testing Parameters

Table with client sample information: Client Sample ID: Flyash, Sample Matrix: Solid, Lab Sample ID: 21C0414-01, Collected By: Client, Collection Date: 02/24/2021 9:00

Analyses Performed by: Microbac Laboratories Inc., - Marietta, OH

Inorganics Total

Table with 10 columns: Result, Limit(s), RL, Units, Note, Prepared, Analyzed, Analyst. Includes rows for Sulfur (0.275) and pH (4.3).

General Parameters

Table with 10 columns: Result, Limit(s), RL, Units, Note, Prepared, Analyzed, Analyst. Includes row for Percent Solids (99.8).

Metals Total by AA

Table with 10 columns: Result, Limit(s), RL, Units, Note, Prepared, Analyzed, Analyst. Includes row for Mercury (<0.238).

Metals Total by ICP

Table with 10 columns: Result, Limit(s), RL, Units, Note, Prepared, Analyzed, Analyst. Lists various metals like Aluminum, Antimony, Arsenic, etc.

Microbac Laboratories, Inc.



Microbac Laboratories, Inc. - Baltimore

CERTIFICATE OF ANALYSIS

21C0414

Client Sample ID: Flyash	Collected By: Client
Sample Matrix: Solid	Collection Date: 02/24/2021 9:00
Lab Sample ID: 21C0414-01	

Metals Total by ICP	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Silver	<0.377		0.377	mg/kg dry		03/10/21 0603	03/10/21 1301	JYH
Sodium	494		18.8	mg/kg dry		03/10/21 0603	03/10/21 1301	JYH
Thallium	<3.77		3.77	mg/kg dry		03/10/21 0603	03/10/21 1301	JYH
Vanadium	80.6		0.377	mg/kg dry		03/10/21 0603	03/10/21 1301	JYH
Zinc	30.4		0.753	mg/kg dry		03/10/21 0603	03/10/21 1301	JYH

Metals TCLP by AA	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 7470A								
Mercury	<0.00200		0.00200	mg/L		03/11/21 0608	03/11/21 1247	TMM

Metals TCLP by ICP	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 6010B								
Arsenic	0.240	5.00	0.200	mg/L		03/11/21 0502	03/12/21 1113	KHL
Barium	0.452	100	0.100	mg/L	AC	03/11/21 0502	03/12/21 1113	KHL
Cadmium	<0.0200	1.00	0.0200	mg/L		03/11/21 0502	03/12/21 1113	KHL
Chromium	0.203	5.00	0.0500	mg/L		03/11/21 0502	03/12/21 1113	KHL
Lead	<0.200	5.00	0.200	mg/L		03/11/21 0502	03/12/21 1113	KHL
Selenium	<0.350	1.00	0.350	mg/L		03/11/21 0502	03/12/21 1113	KHL
Silver	<0.100	5.00	0.100	mg/L		03/11/21 0502	03/12/21 1113	KHL

Anions by IC	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 9056A								
Chloride	<99.7		99.7	mg/kg dry	D4	03/10/21 1801	03/11/21 1935	ART
Sulfate as SO4	13000		498	mg/kg dry	D3	03/10/21 1801	03/11/21 1935	ART



Microbac Laboratories, Inc. - Baltimore

CERTIFICATE OF ANALYSIS

21C0414

Client Sample ID: Bottom Ash	Collected By: Client
Sample Matrix: Solid	Collection Date: 02/22/2021 11:00
Lab Sample ID: 21C0414-02	

Analyses Performed by: Microbac Laboratories Inc., - Marietta, OH

Inorganics Total	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: ASTM D129 Modified								
Sulfur	0.187		0.0320	%	Y	03/17/21 1731	03/18/21 1755	APH
Method: EPA 9045D								
pH	8.1			S.U.	M8		03/15/21 1650	ADG
Method Notes: H4								
General Parameters	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: ASTM D2216-10								
Percent Solids	69.5		1.00	% (by wt.)		03/10/21 0627	03/11/21 0547	JMH
Metals Total by AA	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 7471A								
Mercury	<0.343		0.343	mg/kg dry		03/11/21 0616	03/11/21 1617	TMM
Metals Total by ICP	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 6010B								
Aluminum	5320		20.3	mg/kg dry		03/10/21 0603	03/10/21 1305	JYH
Antimony	<5.08		5.08	mg/kg dry		03/10/21 0603	03/10/21 1305	JYH
Arsenic	4.33		1.02	mg/kg dry		03/10/21 0603	03/10/21 1305	JYH
Barium	44.4		0.508	mg/kg dry		03/10/21 0603	03/10/21 1305	JYH
Beryllium	0.684		0.102	mg/kg dry		03/10/21 0603	03/10/21 1305	JYH
Cadmium	0.666		0.102	mg/kg dry		03/10/21 0603	03/10/21 1305	JYH
Calcium	2800		50.8	mg/kg dry		03/10/21 0603	03/10/21 1305	JYH
Chromium	13.0		0.254	mg/kg dry		03/10/21 0603	03/10/21 1305	JYH
Cobalt	4.14		0.254	mg/kg dry		03/10/21 0603	03/10/21 1305	JYH
Copper	2.75		1.02	mg/kg dry		03/10/21 0603	03/10/21 1305	JYH
Iron	26800		1020	mg/kg dry	D3	03/10/21 0603	03/10/21 1424	JYH
Lead	1.73		1.02	mg/kg dry		03/10/21 0603	03/10/21 1305	JYH
Lithium	6.06		5.08	mg/kg dry		03/10/21 0603	03/10/21 1305	JYH
Magnesium	395		25.4	mg/kg dry		03/10/21 0603	03/10/21 1305	JYH
Manganese	44.3		0.508	mg/kg dry		03/10/21 0603	03/10/21 1305	JYH
Nickel	11.4		2.03	mg/kg dry		03/10/21 0603	03/10/21 1305	JYH
Potassium	555		50.8	mg/kg dry		03/10/21 0603	03/10/21 1305	JYH
Selenium	3.27		1.02	mg/kg dry		03/10/21 0603	03/10/21 1305	JYH
Silver	0.574		0.508	mg/kg dry		03/10/21 0603	03/10/21 1305	JYH
Sodium	237		25.4	mg/kg dry		03/10/21 0603	03/10/21 1305	JYH
Thallium	<5.08		5.08	mg/kg dry		03/10/21 0603	03/10/21 1305	JYH
Vanadium	16.6		0.508	mg/kg dry		03/10/21 0603	03/10/21 1305	JYH
Zinc	4.13		1.02	mg/kg dry		03/10/21 0603	03/10/21 1305	JYH



Microbac Laboratories, Inc. - Baltimore

CERTIFICATE OF ANALYSIS

21C0414

Client Sample ID: Bottom Ash	Collected By: Client
Sample Matrix: Solid	Collection Date: 02/22/2021 11:00
Lab Sample ID: 21C0414-02	

Metals TCLP by AA	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 7470A								
Mercury	<0.00200		0.00200	mg/L		03/11/21 0608	03/11/21 1308	TMM

Metals TCLP by ICP	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 6010B								
Arsenic	<0.200	5.00	0.200	mg/L		03/11/21 0502	03/12/21 1131	KHL
Barium	0.373	100	0.100	mg/L	AC	03/11/21 0502	03/12/21 1131	KHL
Cadmium	<0.0200	1.00	0.0200	mg/L		03/11/21 0502	03/12/21 1131	KHL
Chromium	<0.0500	5.00	0.0500	mg/L		03/11/21 0502	03/12/21 1131	KHL
Lead	<0.200	5.00	0.200	mg/L		03/11/21 0502	03/12/21 1131	KHL
Selenium	<0.350	1.00	0.350	mg/L		03/11/21 0502	03/12/21 1131	KHL
Silver	<0.100	5.00	0.100	mg/L		03/11/21 0502	03/12/21 1131	KHL

Anions by IC	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 9056A								
Chloride	10.4		2.9	mg/kg dry		03/10/21 1801	03/11/21 1953	ART
Sulfate as SO4	393		14.4	mg/kg dry		03/10/21 1801	03/11/21 1953	ART



Microbac Laboratories, Inc. - Baltimore

CERTIFICATE OF ANALYSIS

21C0414

Client Sample ID: Gypsum	Collected By: Client
Sample Matrix: Solid	Collection Date: 02/24/2021 6:00
Lab Sample ID: 21C0414-03	

Analyses Performed by: Microbac Laboratories Inc., - Marietta, OH

Inorganics Total	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: ASTM D129 Modified								
Sulfur	1.87		0.330	%	Y	03/17/21 1731	03/18/21 1756	APH
Method: EPA 9045D								
pH	7.6			S.U.	M8		03/15/21 1650	ADG
Method Notes: H4								
General Parameters	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: ASTM D2216-10								
Percent Solids	66.8		1.00	% (by wt.)		03/10/21 0627	03/11/21 0547	JMH
Metals Total by AA	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 7471A								
Mercury	0.441		0.363	mg/kg dry		03/11/21 0616	03/11/21 1622	TMM
Metals Total by ICP	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 6010B								
Aluminum	279		20.2	mg/kg dry		03/10/21 0603	03/10/21 1308	JYH
Antimony	<5.05		5.05	mg/kg dry		03/10/21 0603	03/10/21 1308	JYH
Arsenic	1.06		1.01	mg/kg dry		03/10/21 0603	03/10/21 1308	JYH
Barium	21.0		0.505	mg/kg dry		03/10/21 0603	03/10/21 1308	JYH
Beryllium	<0.101		0.101	mg/kg dry		03/10/21 0603	03/10/21 1308	JYH
Cadmium	<0.101		0.101	mg/kg dry		03/10/21 0603	03/10/21 1308	JYH
Calcium	141000		5050	mg/kg dry	D3	03/10/21 0603	03/11/21 1227	JYH
Chromium	1.74		0.253	mg/kg dry		03/10/21 0603	03/10/21 1308	JYH
Cobalt	<0.253		0.253	mg/kg dry		03/10/21 0603	03/10/21 1308	JYH
Copper	1.18		1.01	mg/kg dry		03/10/21 0603	03/10/21 1308	JYH
Iron	836		10.1	mg/kg dry		03/10/21 0603	03/10/21 1308	JYH
Lead	<1.01		1.01	mg/kg dry		03/10/21 0603	03/10/21 1308	JYH
Lithium	<5.05		5.05	mg/kg dry		03/10/21 0603	03/10/21 1308	JYH
Magnesium	325		25.3	mg/kg dry		03/10/21 0603	03/10/21 1308	JYH
Manganese	2.49		0.505	mg/kg dry		03/10/21 0603	03/10/21 1308	JYH
Nickel	<2.02		2.02	mg/kg dry		03/10/21 0603	03/10/21 1308	JYH
Potassium	123		50.5	mg/kg dry		03/10/21 0603	03/10/21 1308	JYH
Selenium	2.13		1.01	mg/kg dry		03/10/21 0603	03/10/21 1308	JYH
Silver	<0.505		0.505	mg/kg dry		03/10/21 0603	03/10/21 1308	JYH
Sodium	45.5		25.3	mg/kg dry		03/10/21 0603	03/10/21 1308	JYH
Thallium	<5.05		5.05	mg/kg dry		03/10/21 0603	03/10/21 1308	JYH
Vanadium	1.32		0.505	mg/kg dry		03/10/21 0603	03/10/21 1308	JYH
Zinc	1.36		1.01	mg/kg dry		03/10/21 0603	03/10/21 1308	JYH



Microbac Laboratories, Inc. - Baltimore

CERTIFICATE OF ANALYSIS

21C0414

Client Sample ID: Gypsum	Collected By: Client
Sample Matrix: Solid	Collection Date: 02/24/2021 6:00
Lab Sample ID: 21C0414-03	

Metals TCLP by AA	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 7470A								
Mercury	<0.00200		0.00200	mg/L		03/11/21 0608	03/11/21 1310	TMM

Metals TCLP by ICP	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 6010B								
Arsenic	<0.200	5.00	0.200	mg/L		03/11/21 0502	03/12/21 1135	KHL
Barium	0.205	100	0.100	mg/L	AC	03/11/21 0502	03/12/21 1135	KHL
Cadmium	<0.0200	1.00	0.0200	mg/L		03/11/21 0502	03/12/21 1135	KHL
Chromium	<0.0500	5.00	0.0500	mg/L		03/11/21 0502	03/12/21 1135	KHL
Lead	<0.200	5.00	0.200	mg/L		03/11/21 0502	03/12/21 1135	KHL
Selenium	<0.350	1.00	0.350	mg/L		03/11/21 0502	03/12/21 1135	KHL
Silver	<0.100	5.00	0.100	mg/L		03/11/21 0502	03/12/21 1135	KHL

Anions by IC	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 9056A								
Chloride	<149		149	mg/kg dry	D4	03/10/21 1801	03/11/21 2147	ART
Sulfate as SO4	21400		746	mg/kg dry	D3	03/10/21 1801	03/11/21 2147	ART



Microbac Laboratories, Inc. - Baltimore

CERTIFICATE OF ANALYSIS

21C0414

Client Sample ID: WWTP Filter Cake	Collected By: Client
Sample Matrix: Solid	Collection Date: 02/19/2021 9:00
Lab Sample ID: 21C0414-04	

Analyses Performed by: Microbac Laboratories Inc., - Marietta, OH

Inorganics Total	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: ASTM D129 Modified								
Sulfur	0.539		0.137	%	Y	03/17/21 1731	03/18/21 1757	APH
Method: EPA 7.3.3.2								
Reactive Cyanide	<10.0		10.0	mg/kg	H1	03/30/21 0909	03/30/21 1636	APH
Method: EPA 7.3.4.2								
Reactive Sulfide	<100		100	mg/kg	H1	03/30/21 0910	03/30/21 1620	APH
Method: EPA 9045D								
pH	8.5			S.U.	M8		03/15/21 1650	ADG
Method: EPA 9095B								
Free Liquid (Paint Filter Test)	No Free Liquids			NA	H	03/24/21 1647	03/24/21 1650	ADG
Method Notes: H4								
General Parameters								
General Parameters	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: ASTM D2216-10								
Percent Solids	49.6		1.00	% (by wt.)		03/10/21 0627	03/11/21 0547	JMH
Metals Total by AA								
Metals Total by AA	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 7471A								
Mercury	20.1		9.47	mg/kg dry	D3	03/11/21 0616	03/12/21 1319	TMM
Metals Total by ICP								
Metals Total by ICP	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 6010B								
Aluminum	17500		26.9	mg/kg dry		03/10/21 0603	03/10/21 1311	JYH
Antimony	<6.73		6.73	mg/kg dry		03/10/21 0603	03/10/21 1311	JYH
Arsenic	134		1.35	mg/kg dry		03/10/21 0603	03/10/21 1311	JYH
Barium	199		0.673	mg/kg dry		03/10/21 0603	03/10/21 1311	JYH
Beryllium	3.77		0.135	mg/kg dry		03/10/21 0603	03/10/21 1311	JYH
Cadmium	5.60		0.135	mg/kg dry		03/10/21 0603	03/10/21 1311	JYH
Calcium	187000		6730	mg/kg dry	D3	03/10/21 0603	03/10/21 1431	JYH
Chromium	70.7		0.336	mg/kg dry		03/10/21 0603	03/10/21 1311	JYH
Cobalt	15.9		0.336	mg/kg dry		03/10/21 0603	03/10/21 1311	JYH
Copper	36.3		1.35	mg/kg dry		03/10/21 0603	03/10/21 1311	JYH
Iron	24500		13.5	mg/kg dry		03/10/21 0603	03/10/21 1311	JYH
Lead	30.0		1.35	mg/kg dry		03/10/21 0603	03/10/21 1311	JYH
Lithium	14.1		6.73	mg/kg dry		03/10/21 0603	03/10/21 1311	JYH
Magnesium	16400		33.6	mg/kg dry		03/10/21 0603	03/10/21 1311	JYH
Manganese	764		0.673	mg/kg dry		03/10/21 0603	03/10/21 1311	JYH

Microbac Laboratories, Inc.

2101 Van Deman Street | Baltimore, MD 21224 | 410.633.1800 p | www.microbac.com



Microbac Laboratories, Inc. - Baltimore

CERTIFICATE OF ANALYSIS

21C0414

Client Sample ID: WWTP Filter Cake	Collected By: Client
Sample Matrix: Solid	Collection Date: 02/19/2021 9:00
Lab Sample ID: 21C0414-04	

Metals Total by ICP	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Nickel	89.2		2.69	mg/kg dry		03/10/21 0603	03/10/21 1311	JYH
Potassium	2030		67.3	mg/kg dry		03/10/21 0603	03/10/21 1311	JYH
Selenium	50.6		1.35	mg/kg dry		03/10/21 0603	03/10/21 1311	JYH
Silver	0.769		0.673	mg/kg dry		03/10/21 0603	03/10/21 1311	JYH
Sodium	1350		33.6	mg/kg dry		03/10/21 0603	03/10/21 1311	JYH
Thallium	<6.73		6.73	mg/kg dry		03/10/21 0603	03/10/21 1311	JYH
Vanadium	115		0.673	mg/kg dry		03/10/21 0603	03/10/21 1311	JYH
Zinc	169		1.35	mg/kg dry		03/10/21 0603	03/10/21 1311	JYH

Metals TCLP by AA	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 7470A								
Mercury	<0.00200		0.00200	mg/L		03/11/21 0608	03/11/21 1313	TMM

Metals TCLP by ICP	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 6010B								
Arsenic	<0.200	5.00	0.200	mg/L		03/11/21 0502	03/12/21 1139	KHL
Barium	0.286	100	0.100	mg/L	AC	03/11/21 0502	03/12/21 1139	KHL
Cadmium	0.0207	1.00	0.0200	mg/L		03/11/21 0502	03/12/21 1139	KHL
Chromium	<0.0500	5.00	0.0500	mg/L		03/11/21 0502	03/12/21 1139	KHL
Lead	<0.200	5.00	0.200	mg/L		03/11/21 0502	03/12/21 1139	KHL
Selenium	<0.350	1.00	0.350	mg/L		03/11/21 0502	03/12/21 1139	KHL
Silver	<0.100	5.00	0.100	mg/L		03/11/21 0502	03/12/21 1139	KHL

Anions by IC	Result	Limit(s)	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 9056A								
Chloride	6110		200	mg/kg dry	D3	03/10/21 1801	03/11/21 2205	ART
Sulfate as SO4	32100		1000	mg/kg dry	D3	03/10/21 1801	03/11/21 2205	ART

Results in **bold** have exceeded a limit defined for this project. Limits are provided for reference but as regulatory limits change frequently, Microbac Laboratories, Inc. advises the recipient of this report to confirm such limits and units of concentration with the appropriate Federal, state or local authorities before acting on the data.



Microbac Laboratories, Inc. - Baltimore

CERTIFICATE OF ANALYSIS

21C0414

Definitions

- ?: Percent
- %(by wt.): Percent by Weight
- AC: Target analyte is detected in the Method Blank at or above the reporting limit. Sample values are estimated.
- D3: Dilution was performed due to high target analyte concentration.
- D4: Dilution was performed due to high non-target analyte concentration.
- H: Sample was analyzed past holding time.
- H1: Sample was received past holding time.
- H4: The test was performed outside of the EPA recommended holding time of 15 minutes.
- M8: Due to the sample matrix, the method defined ratio could not be achieved and the reported results may be biased.
- mg/kg: Milligrams per Kilogram
- mg/L: Milligrams per Liter
- RL: Reporting Limit
- S.U.: Standard Units
- Y: This analyte is not on the laboratory's current scope of accreditation.

Project Requested Certification(s)

Microbac Laboratories Inc., - Marietta, OH	
E87551	Florida Department of Health
Microbac Laboratories, Inc. - Baltimore	
E871126	Florida - NELAC
109	State of Maryland (Drinking Water)

Report Comments

Samples were received in proper condition and the reported results conform to applicable accreditation standard unless otherwise noted.

The data and information on this, and other accompanying documents, represents only the sample(s) analyzed. This report is incomplete unless all pages indicated in the footnote are present and an authorized signature is included. **The services were provided under and subject to Microbac's standard terms and conditions which can be located and reviewed at <<https://www.microbac.com/standard-terms-conditions>>.**

Reviewed and Approved By:

Evelyn Shinas
 Customer Relationship Coordinator
 Reported: 03/31/2021 18:45

CHAIN OF CUSTODY RECORD

Number **21C0414**

Instructions on back

Lab Report Address		Invoice Address	Turnaround Time	TO BE COMPLETED BY MICROBAC
Client Name:	GenOn Morgantown Gen. Station	Client Name:	Same	Temperature Upon Receipt (°C)
Address:	12620 Crain Highway	Address:		Therm ID
City, State, Zip:	Newburg, MD 20664	City, State, Zip:	(needed by)	Holding Time
Contact:	Andrew McCulloch	Contact:		Samples Received on Ice? Yes No N/A
Telephone No.:	240-474-2833	Telephone No.:		Custody Seals Intact? Yes No N/A
Send Report via:	<input type="checkbox"/> Mail <input type="checkbox"/> Fax <input type="checkbox"/> e-mail (address)	Send Invoice via:	<input type="checkbox"/> Mail <input type="checkbox"/> Fax <input type="checkbox"/> e-mail (address)	Report Type
Project:		Location:		Compliance Monitoring? <input type="checkbox"/> Yes <input type="checkbox"/> No
Sampled by (PRINT):		Sampler Signature:		() Agency/Program
		Sampler Phone No.:		

* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)

** Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

REQUESTED ANALYSIS

Lab ID	Client Sample ID	Date Collected	Time Collected	No. of Containers	Matrix	Grab / Comp	Preservative Types	pH	TCLP metals	Chlorides	Sulfate as SO4	Barium	Lithium	Sulfur	Total Metals	Additional
	Flyash	2-24-21	0900	1	G	G		X	X	X	X	X	X	X	X	
	Bottom Ash	2-22-21	1100	1	G	G		X	X	X	X	X	X	X	X	
	Gypsum	2-24-21	0600	1	G	G		X	X	X	X	X	X	X	X	
	WWTP Filter Cake	2-19-21	0900	1	G	G		X	X	X	X	X	X	X	X	



Possible Hazard Identification Hazardous Non-Hazardous Radioactive

Sample Disposition Dispose as appropriate Return Archive

Comments	Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
	<i>[Signature]</i>	3/1/21	<i>[Signature]</i>	3/2/21 10:30
	<i>[Signature]</i>	3/1/21	<i>[Signature]</i>	3/2/21 1600
	<i>[Signature]</i>		<i>[Signature]</i>	

Cooler Receipt Form / Sample Acceptance & Noncompliance Form

Microbac Laboratories, Inc., Baltimore Division
 Control # 606-03
 Effective Date: 11/30/2016
 Page 1 of 1

Number of Coolers Received: 1
 Client: Genon
 Form Completed By: _____

Receipt Date / Time: 3/2/21 10:00
 Work Order # 2100414

Shipper: _____
 Custody Tape Intact: _____
 Containers Intact: _____
 Sample Received on Ice or refrigerated: _____

Microbac Client UPS FedEx
 YES / NO / NA
 YES / NO
 YES / NO / NA
 Infrared (IR) Temperature: _____ °C

Chain of Custody Present with shipment: _____
 Sample Bottle IDs agree with COC: _____
 Preservation requirements met: _____
 Correct Number of Containers / Sample Volume: _____
 Headspace in container: _____
 Type of Sample: _____

YES / NO
 YES / NO / Not Checked
 YES / NO (If No, contact client immediately)
 YES / NO / NA
 Water Soil Wipes Oil Filter Solid
 Sludge Food Swab Other

Container Type / Quantity:

A -	___	Unpreserved	___	H2SO4	___	HNO3	___	HCl	___	NaOH	___	NaOH/Ascorbic Acid:	If preserved pH <2 ___ , pH >10 ___
B -	___	Unpreserved	___	H2SO4	___	HNO3	___	HCl	___	NaOH	___	NaOH/Ascorbic Acid	If preserved pH <2 ___ , pH >10 ___
C -	___	Unpreserved	___	H2SO4	___	HNO3	___	HCl	___	NaOH	___	NaOH/Ascorbic Acid	If preserved pH <2 ___ , pH >10 ___
D -	___	Unpreserved	___	H2SO4	___	HNO3	___	HCl	___	NaOH	___	NaOH/Ascorbic Acid	If preserved pH <2 ___ , pH >10 ___
E -	___	Unpreserved	___	H2SO4	___	HNO3	___	HCl	___	NaOH	___	NaOH/Ascorbic Acid	If preserved pH <2 ___ , pH >10 ___
H -	___	Unpreserved	___	H2SO4	___	HNO3	___	HCl	___	NaOH	___	NaOH/Ascorbic Acid	If preserved pH <2 ___ , pH >10 ___
K -	___	Unpreserved	___	H2SO4	___	HNO3	___	HCl	___	NaOH	___	NaOH/Ascorbic Acid	If preserved pH <2 ___ , pH >10 ___
L -	___	Unpreserved	___	H2SO4	___	HNO3	___	HCl	___	NaOH	___	NaOH/Ascorbic Acid	If preserved pH <2 ___ , pH >10 ___
M -	___	Unpreserved	___	H2SO4	___	HNO3	___	HCl	___	NaOH	___	NaOH/Ascorbic Acid	If preserved pH <2 ___ , pH >10 ___
P -	___	Unpreserved	___	H2SO4	___	HNO3	___	HCl	___	NaOH	___	NaOH/Ascorbic Acid	If preserved pH <2 ___ , pH >10 ___
W -	<u>4</u>	Unpreserved	___	H2SO4	___	HNO3	___	HCl	___	NaOH	___	NaOH/Ascorbic Acid	If preserved pH <2 ___ , pH >10 ___
V -	___	Unpreserved	___	HCl	___	HCl / Ascorbic Acid	___	HCl / NaTHIO	(Checked at time of Analysis)				
F -	___	Unpreserved	___	NaTHIO	(Checked at time of Analysis)								
S -	___	Unpreserved	___	NaTHIO	(Checked at time of Analysis)								
SN -	___	Unpreserved	___	NaTHIO	___	NaTHIO/EDTA	(Checked at time of Analysis)						
___	___	Unpreserved	___	H2SO4	___	HNO3	___	HCl	___	NaOH	___	NaOH/Ascorbic Acid	If preserved pH <2 ___ , pH >10 ___
___	___	Unpreserved	___	H2SO4	___	HNO3	___	HCl	___	NaOH	___	NaOH/Ascorbic Acid	If preserved pH <2 ___ , pH >10 ___
___	___	Unpreserved	___	H2SO4	___	HNO3	___	HCl	___	NaOH	___	NaOH/Ascorbic Acid	If preserved pH <2 ___ , pH >10 ___

Describe preservation requirements not met:

All Acid preserved <2 pH NaOH preserved >12 pH All others >2 and <10 (usually 4-8)

Sample ID: _____ H₂SO₄ HNO₃ NaOH _____ mls added
 Sample ID: _____ H₂SO₄ HNO₃ NaOH _____ mls added
 Sample ID: _____ H₂SO₄ HNO₃ NaOH _____ mls added
 Sample ID: _____ H₂SO₄ HNO₃ NaOH _____ mls added

H₂SO₄ – Sulfuric Acid, HNO₃ – Nitric Acid, NaOH – Sodium Hydroxide, ASC – Ascorbic Acid, NaTHIO – Sodium Thiosulfate

Describe Anomalies: _____

Contact information / Summary of Actions:

Date / Time: _____ Contact: _____ Contact By: _____
 Comments: _____



**SUBCONTRACT ORDER
21C0414**

SENDING LABORATORY:

Microbac Laboratories, Inc. - Baltimore
2101 Van Deman Street
Baltimore, MD 21224
Phone: 410.633.1800
Lab Manager: Evelyn Shinas
Email: evelyn.shinas@microbac.com

RECEIVING LABORATORY:

Microbac - OVD
158 Starlite Dr
Marietta, OH 45750
Phone: (800) 373-4071

Project Info:

Project Name: Morgantown-2020
Project No: Morgantown-2020

Client: Genon - Morgantown
Project Type: ENV-DrinkingWater
Project Location: Maryland (South)

Report TAT: 7
Due: 03/12/2021 17:00

Sample ID: 21C0414-01

Sampled: 02/24/2021 09:00

Matrix: Solid

Sampler: Client

Analysis	Method	Analysis Due	Expires	Network \$
% Solid % Solids	SM 2540 G-2011 0.05 % (by wt.)	03/11/2021 16:00	03/24/2021 09:00	\$ 4.00
Cl IC Chloride	SW-846 9056A 0.1 mg/kg	03/11/2021 16:00	03/24/2021 09:00	\$ 17.50
Hg Total Mercury	EPA 7471A 0.0002 mg/kg	03/11/2021 16:00	03/24/2021 09:00	\$ 19.78
M_Ag_ICP Silver	EPA 6010B 0.01 mg/kg	03/11/2021 16:00	08/23/2021 09:00	\$ 7.12
M_Al_ICP Aluminum	EPA 6010B 0.5 mg/kg	03/11/2021 16:00	08/23/2021 09:00	\$ 7.12
M_As_ICP Arsenic	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/23/2021 09:00	\$ 7.12
M_Ba_ICP Barium	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/23/2021 09:00	\$ 7.12
M_Be_ICP Beryllium	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/23/2021 09:00	\$ 7.12
M_Ca_ICP Calcium	EPA 6010B 0.2 mg/kg	03/11/2021 16:00	08/23/2021 09:00	\$ 7.12
M_Cd_ICP Cadmium	EPA 6010B 0.01 mg/kg	03/11/2021 16:00	08/23/2021 09:00	\$ 7.12
M_Co_ICP Cobalt	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/23/2021 09:00	\$ 7.12
M_Cr_ICP Chromium	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/23/2021 09:00	\$ 7.12
M_Cu_ICP Copper	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/23/2021 09:00	\$ 7.12
M_Fe_ICP Iron	EPA 6010B 0.06 mg/kg	03/11/2021 16:00	08/23/2021 09:00	\$ 7.12
M_K_ICP	EPA 6010B	03/11/2021 16:00	08/23/2021 09:00	\$ 7.12



SUBCONTRACT ORDER
21C0414

Sample ID: 21C0414-01

Sampled: 02/24/2021 09:00

Matrix: Solid

Sampler: Client

Analysis	Method	Analysis Due	Expires	Network \$
M K ICP Potassium	EPA 6010B 0.2 mg/kg	03/11/2021 16:00	08/23/2021 09:00	\$ 7.12
M Li ICP Lithium	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/23/2021 09:00	\$ 11.76
M_Mg_ICP Magnesium	EPA 6010B 0.4 mg/kg	03/11/2021 16:00	08/23/2021 09:00	\$ 7.12
M_Mn_ICP Manganese	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/23/2021 09:00	\$ 7.12
M Na ICP Sodium	EPA 6010B 0.2 mg/kg	03/11/2021 16:00	08/23/2021 09:00	\$ 7.12
M Ni ICP Nickel	EPA 6010B 0.04 mg/kg	03/11/2021 16:00	08/23/2021 09:00	\$ 7.12
M_Pb_ICP Lead	EPA 6010B 0.04 mg/kg	03/11/2021 16:00	08/23/2021 09:00	\$ 7.12
M_Sb_ICP Antimony	EPA 6010B 0.04 mg/kg	03/11/2021 16:00	08/23/2021 09:00	\$ 7.12
M Se ICP Selenium	EPA 6010B 0.04 mg/kg	03/11/2021 16:00	08/23/2021 09:00	\$ 7.12
M TI ICP Thallium	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/23/2021 09:00	\$ 7.12
M_V_ICP Vanadium	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/23/2021 09:00	\$ 7.12
M_Zn_ICP Zinc	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/23/2021 09:00	\$ 7.12
pH Lab pH	EPA 9045D 0.1 S.U.	03/11/2021 16:00	03/24/2021 09:00	\$ 4.00
SO4 IC Sulfate as SO4	SW-846 9056A 0.1 mg/kg	03/11/2021 16:00	03/24/2021 09:00	\$ 16.80
SUB_Sulfur Sulfur	ASTM D129-91 0.05 % (by wt.)	03/11/2021 16:00	03/24/2021 09:00	\$ 43.68
TCLP_Ag_ICP Silver	EPA 6010B 0.004 mg/L	03/11/2021 16:00	08/23/2021 09:00	\$ 8.00
TCLP As ICP Arsenic	EPA 6010B 0.02 mg/L	03/11/2021 16:00	08/23/2021 09:00	\$ 8.00
TCLP Ba ICP Barium	EPA 6010B 0.02 mg/L	03/11/2021 16:00	08/23/2021 09:00	\$ 8.00
TCLP_Cd_ICP Cadmium	EPA 6010B 0.01 mg/L	03/11/2021 16:00	08/23/2021 09:00	\$ 8.00



SUBCONTRACT ORDER
21C0414

Sample ID: 21C0414-01

Sampled: 02/24/2021 09:00

Matrix: Solid

Sampler: Client

Analysis	Method	Analysis Due	Expires	Network \$
TCLP Cr ICP Chromium	EPA 6010B 0.02 mg/L	03/11/2021 16:00	08/23/2021 09:00	\$ 8.00
TCLP Extraction TCLP Extraction	EPA 1311 NA	03/05/2021 18:00	03/10/2021 09:00	\$ 24.00
TCLP_Hg Mercury	EPA 7470A 0.0002 mg/L	03/11/2021 16:00	03/24/2021 09:00	\$ 20.00
TCLP_Pb_ICP Lead	EPA 6010B 0.02 mg/L	03/11/2021 16:00	08/23/2021 09:00	\$ 8.00
TCLP Se ICP Selenium	EPA 6010B 0.04 mg/L	03/11/2021 16:00	08/23/2021 09:00	\$ 8.00



SUBCONTRACT ORDER
21C0414

Sample ID: 21C0414-02

Sampled: 02/22/2021 11:00

Matrix: Solid

Sampler: Client

Analysis	Method	Analysis Due	Expires	Network \$
% Solid % Solids	SM 2540 G-2011 0.05 % (by wt.)	03/11/2021 16:00	03/22/2021 11:00	\$ 4.00
Cl IC Chloride	SW-846 9056A 0.1 mg/kg	03/11/2021 16:00	03/22/2021 11:00	\$ 17.50
Hg_Total Mercury	EPA 7471A 0.0002 mg/kg	03/11/2021 16:00	03/22/2021 11:00	\$ 19.78
M_Ag_ICP Silver	EPA 6010B 0.01 mg/kg	03/11/2021 16:00	08/21/2021 11:00	\$ 7.12
M_Al_ICP Aluminum	EPA 6010B 0.5 mg/kg	03/11/2021 16:00	08/21/2021 11:00	\$ 7.12
M_As_ICP Arsenic	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/21/2021 11:00	\$ 7.12
M_Ba_ICP Barium	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/21/2021 11:00	\$ 7.12
M_Be_ICP Beryllium	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/21/2021 11:00	\$ 7.12
M_Ca_ICP Calcium	EPA 6010B 0.2 mg/kg	03/11/2021 16:00	08/21/2021 11:00	\$ 7.12
M_Cd_ICP Cadmium	EPA 6010B 0.01 mg/kg	03/11/2021 16:00	08/21/2021 11:00	\$ 7.12
M_Co_ICP Cobalt	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/21/2021 11:00	\$ 7.12
M_Cr_ICP Chromium	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/21/2021 11:00	\$ 7.12
M_Cu_ICP Copper	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/21/2021 11:00	\$ 7.12
M_Fe_ICP Iron	EPA 6010B 0.06 mg/kg	03/11/2021 16:00	08/21/2021 11:00	\$ 7.12
M_K_ICP Potassium	EPA 6010B 0.2 mg/kg	03/11/2021 16:00	08/21/2021 11:00	\$ 7.12
M_Li_ICP Lithium	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/21/2021 11:00	\$ 11.76
M_Mg_ICP Magnesium	EPA 6010B 0.4 mg/kg	03/11/2021 16:00	08/21/2021 11:00	\$ 7.12
M_Mn_ICP Manganese	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/21/2021 11:00	\$ 7.12
M_Na_ICP Sodium	EPA 6010B 0.2 mg/kg	03/11/2021 16:00	08/21/2021 11:00	\$ 7.12



SUBCONTRACT ORDER
21C0414

Sample ID: 21C0414-02

Sampled: 02/22/2021 11:00

Matrix: Solid

Sampler: Client

Analysis	Method	Analysis Due	Expires	Network \$
M Ni ICP Nickel	EPA 6010B 0.04 mg/kg	03/11/2021 16:00	08/21/2021 11:00	\$ 7.12
M Pb ICP Lead	EPA 6010B 0.04 mg/kg	03/11/2021 16:00	08/21/2021 11:00	\$ 7.12
M_Sb_ICP Antimony	EPA 6010B 0.04 mg/kg	03/11/2021 16:00	08/21/2021 11:00	\$ 7.12
M_Se_ICP Selenium	EPA 6010B 0.04 mg/kg	03/11/2021 16:00	08/21/2021 11:00	\$ 7.12
M TI ICP Thallium	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/21/2021 11:00	\$ 7.12
M V ICP Vanadium	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/21/2021 11:00	\$ 7.12
M_Zn_ICP Zinc	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/21/2021 11:00	\$ 7.12
pH_Lab pH	EPA 9045D 0.1 S.U.	03/11/2021 16:00	03/22/2021 11:00	\$ 4.00
SO4 IC Sulfate as SO4	SW-846 9056A 0.1 mg/kg	03/11/2021 16:00	03/22/2021 11:00	\$ 16.80
SUB Sulfur Sulfur	ASTM D129-91 0.05 % (by wt.)	03/11/2021 16:00	03/22/2021 11:00	\$ 43.68
TCLP_Ag_ICP Silver	EPA 6010B 0.004 mg/L	03/11/2021 16:00	08/21/2021 11:00	\$ 8.00
TCLP_As_ICP Arsenic	EPA 6010B 0.02 mg/L	03/11/2021 16:00	08/21/2021 11:00	\$ 8.00
TCLP Ba ICP Barium	EPA 6010B 0.02 mg/L	03/11/2021 16:00	08/21/2021 11:00	\$ 8.00
TCLP Cd ICP Cadmium	EPA 6010B 0.01 mg/L	03/11/2021 16:00	08/21/2021 11:00	\$ 8.00
TCLP_Cr_ICP Chromium	EPA 6010B 0.02 mg/L	03/11/2021 16:00	08/21/2021 11:00	\$ 8.00
TCLP_Extraction TCLP Extraction	EPA 1311 NA	03/05/2021 18:00	03/08/2021 11:00	\$ 24.00
TCLP Hg Mercury	EPA 7470A 0.0002 mg/L	03/11/2021 16:00	03/22/2021 11:00	\$ 20.00
TCLP Pb ICP Lead	EPA 6010B 0.02 mg/L	03/11/2021 16:00	08/21/2021 11:00	\$ 8.00
TCLP_Se_ICP Selenium	EPA 6010B 0.04 mg/L	03/11/2021 16:00	08/21/2021 11:00	\$ 8.00



SUBCONTRACT ORDER
21C0414

Sample ID: 21C0414-03

Sampled: 02/24/2021 06:00

Matrix: Solid

Sampler: Client

Analysis	Method	Analysis Due	Expires	Network \$
% Solid % Solids	SM 2540 G-2011 0.05 % (by wt.)	03/11/2021 16:00	03/24/2021 06:00	\$ 4.00
Cl IC Chloride	SW-846 9056A 0.1 mg/kg	03/11/2021 16:00	03/24/2021 06:00	\$ 17.50
Hg_Total Mercury	EPA 7471A 0.0002 mg/kg	03/11/2021 16:00	03/24/2021 06:00	\$ 19.78
M_Ag_ICP Silver	EPA 6010B 0.01 mg/kg	03/11/2021 16:00	08/23/2021 06:00	\$ 7.12
M_Al_ICP Aluminum	EPA 6010B 0.5 mg/kg	03/11/2021 16:00	08/23/2021 06:00	\$ 7.12
M_As_ICP Arsenic	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/23/2021 06:00	\$ 7.12
M_Ba_ICP Barium	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/23/2021 06:00	\$ 7.12
M_Be_ICP Beryllium	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/23/2021 06:00	\$ 7.12
M_Ca_ICP Calcium	EPA 6010B 0.2 mg/kg	03/11/2021 16:00	08/23/2021 06:00	\$ 7.12
M_Cd_ICP Cadmium	EPA 6010B 0.01 mg/kg	03/11/2021 16:00	08/23/2021 06:00	\$ 7.12
M_Co_ICP Cobalt	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/23/2021 06:00	\$ 7.12
M_Cr_ICP Chromium	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/23/2021 06:00	\$ 7.12
M_Cu_ICP Copper	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/23/2021 06:00	\$ 7.12
M_Fe_ICP Iron	EPA 6010B 0.06 mg/kg	03/11/2021 16:00	08/23/2021 06:00	\$ 7.12
M_K_ICP Potassium	EPA 6010B 0.2 mg/kg	03/11/2021 16:00	08/23/2021 06:00	\$ 7.12
M_Li_ICP Lithium	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/23/2021 06:00	\$ 11.76
M_Mg_ICP Magnesium	EPA 6010B 0.4 mg/kg	03/11/2021 16:00	08/23/2021 06:00	\$ 7.12
M_Mn_ICP Manganese	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/23/2021 06:00	\$ 7.12
M_Na_ICP Sodium	EPA 6010B 0.2 mg/kg	03/11/2021 16:00	08/23/2021 06:00	\$ 7.12



SUBCONTRACT ORDER
21C0414

Sample ID: 21C0414-03

Sampled: 02/24/2021 06:00

Matrix: Solid

Sampler: Client

Analysis	Method	Analysis Due	Expires	Network \$
M Ni ICP Nickel	EPA 6010B 0.04 mg/kg	03/11/2021 16:00	08/23/2021 06:00	\$ 7.12
M Pb ICP Lead	EPA 6010B 0.04 mg/kg	03/11/2021 16:00	08/23/2021 06:00	\$ 7.12
M Sb ICP Antimony	EPA 6010B 0.04 mg/kg	03/11/2021 16:00	08/23/2021 06:00	\$ 7.12
M Se ICP Selenium	EPA 6010B 0.04 mg/kg	03/11/2021 16:00	08/23/2021 06:00	\$ 7.12
M Tl ICP Thallium	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/23/2021 06:00	\$ 7.12
M V ICP Vanadium	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/23/2021 06:00	\$ 7.12
M Zn ICP Zinc	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/23/2021 06:00	\$ 7.12
pH_Lab pH	EPA 9045D 0.1 S.U.	03/11/2021 16:00	03/24/2021 06:00	\$ 4.00
SO4 IC Sulfate as SO4	SW-846 9056A 0.1 mg/kg	03/11/2021 16:00	03/24/2021 06:00	\$ 16.80
SUB Sulfur Sulfur	ASTM D129-91 0.05 % (by wt.)	03/11/2021 16:00	03/24/2021 06:00	\$ 43.68
TCLP_Ag_ICP Silver	EPA 6010B 0.004 mg/L	03/11/2021 16:00	08/23/2021 06:00	\$ 8.00
TCLP_As_ICP Arsenic	EPA 6010B 0.02 mg/L	03/11/2021 16:00	08/23/2021 06:00	\$ 8.00
TCLP_Ba_ICP Barium	EPA 6010B 0.02 mg/L	03/11/2021 16:00	08/23/2021 06:00	\$ 8.00
TCLP_Cd_ICP Cadmium	EPA 6010B 0.01 mg/L	03/11/2021 16:00	08/23/2021 06:00	\$ 8.00
TCLP_Cr_ICP Chromium	EPA 6010B 0.02 mg/L	03/11/2021 16:00	08/23/2021 06:00	\$ 8.00
TCLP_Extraction TCLP Extraction	EPA 1311 NA	03/05/2021 18:00	03/10/2021 06:00	\$ 24.00
TCLP_Hg Mercury	EPA 7470A 0.0002 mg/L	03/11/2021 16:00	03/24/2021 06:00	\$ 20.00
TCLP_Pb_ICP Lead	EPA 6010B 0.02 mg/L	03/11/2021 16:00	08/23/2021 06:00	\$ 8.00
TCLP_Se_ICP Selenium	EPA 6010B 0.04 mg/L	03/11/2021 16:00	08/23/2021 06:00	\$ 8.00



SUBCONTRACT ORDER
21C0414

Sample ID: 21C0414-04

Sampled: 02/19/2021 09:00

Matrix: Solid

Sampler: Client

Analysis	Method	Analysis Due	Expires	Network \$
% Solid % Solids	SM 2540 G-2011 0.05 % (by wt.)	03/11/2021 16:00	03/19/2021 09:00	\$ 4.00
Cl IC Chloride	SW-846 9056A 0.1 mg/kg	03/11/2021 16:00	03/19/2021 09:00	\$ 17.50
Hg_Total Mercury	EPA 7471A 0.0002 mg/kg	03/11/2021 16:00	03/19/2021 09:00	\$ 19.78
M_Ag_ICP Silver	EPA 6010B 0.01 mg/kg	03/11/2021 16:00	08/18/2021 09:00	\$ 7.12
M_Al_ICP Aluminum	EPA 6010B 0.5 mg/kg	03/11/2021 16:00	08/18/2021 09:00	\$ 7.12
M_As_ICP Arsenic	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/18/2021 09:00	\$ 7.12
M_Ba_ICP Barium	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/18/2021 09:00	\$ 7.12
M_Be_ICP Beryllium	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/18/2021 09:00	\$ 7.12
M_Ca_ICP Calcium	EPA 6010B 0.2 mg/kg	03/11/2021 16:00	08/18/2021 09:00	\$ 7.12
M_Cd_ICP Cadmium	EPA 6010B 0.01 mg/kg	03/11/2021 16:00	08/18/2021 09:00	\$ 7.12
M_Co_ICP Cobalt	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/18/2021 09:00	\$ 7.12
M_Cr_ICP Chromium	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/18/2021 09:00	\$ 7.12
M_Cu_ICP Copper	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/18/2021 09:00	\$ 7.12
M_Fe_ICP Iron	EPA 6010B 0.06 mg/kg	03/11/2021 16:00	08/18/2021 09:00	\$ 7.12
M_K_ICP Potassium	EPA 6010B 0.2 mg/kg	03/11/2021 16:00	08/18/2021 09:00	\$ 7.12
M_Li_ICP Lithium	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/18/2021 09:00	\$ 11.76
M_Mg_ICP Magnesium	EPA 6010B 0.4 mg/kg	03/11/2021 16:00	08/18/2021 09:00	\$ 7.12
M_Mn_ICP Manganese	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/18/2021 09:00	\$ 7.12
M_Na_ICP Sodium	EPA 6010B 0.2 mg/kg	03/11/2021 16:00	08/18/2021 09:00	\$ 7.12



SUBCONTRACT ORDER
21C0414

Sample ID: 21C0414-04

Sampled: 02/19/2021 09:00

Matrix: Solid

Sampler: Client

Analysis	Method	Analysis Due	Expires	Network \$
M Ni ICP Nickel	EPA 6010B 0.04 mg/kg	03/11/2021 16:00	08/18/2021 09:00	\$ 7.12
M Pb ICP Lead	EPA 6010B 0.04 mg/kg	03/11/2021 16:00	08/18/2021 09:00	\$ 7.12
M_Sb_ICP Antimony	EPA 6010B 0.04 mg/kg	03/11/2021 16:00	08/18/2021 09:00	\$ 7.12
M_Se_ICP Selenium	EPA 6010B 0.04 mg/kg	03/11/2021 16:00	08/18/2021 09:00	\$ 7.12
M TI ICP Thallium	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/18/2021 09:00	\$ 7.12
M V ICP Vanadium	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/18/2021 09:00	\$ 7.12
M_Zn_ICP Zinc	EPA 6010B 0.02 mg/kg	03/11/2021 16:00	08/18/2021 09:00	\$ 7.12
pH_Lab pH	EPA 9045D 0.1 S.U.	03/11/2021 16:00	03/19/2021 09:00	\$ 4.00
SO4 IC Sulfate as SO4	SW-846 9056A 0.1 mg/kg	03/11/2021 16:00	03/19/2021 09:00	\$ 16.80
SUB Sulfur Sulfur	ASTM D129-91 0.05 % (by wt.)	03/11/2021 16:00	03/19/2021 09:00	\$ 43.68
TCLP_Ag_ICP Silver	EPA 6010B 0.004 mg/L	03/11/2021 16:00	08/18/2021 09:00	\$ 8.00
TCLP_As_ICP Arsenic	EPA 6010B 0.02 mg/L	03/11/2021 16:00	08/18/2021 09:00	\$ 8.00
TCLP Ba ICP Barium	EPA 6010B 0.02 mg/L	03/11/2021 16:00	08/18/2021 09:00	\$ 8.00
TCLP Cd ICP Cadmium	EPA 6010B 0.01 mg/L	03/11/2021 16:00	08/18/2021 09:00	\$ 8.00
TCLP_Cr_ICP Chromium	EPA 6010B 0.02 mg/L	03/11/2021 16:00	08/18/2021 09:00	\$ 8.00
TCLP_Extraction TCLP Extraction	EPA 1311 NA	03/05/2021 18:00	03/05/2021 09:00	\$ 24.00
TCLP Hg Mercury	EPA 7470A 0.0002 mg/L	03/11/2021 16:00	03/19/2021 09:00	\$ 20.00
TCLP Pb ICP Lead	EPA 6010B 0.02 mg/L	03/11/2021 16:00	08/18/2021 09:00	\$ 8.00
TCLP_Se_ICP Selenium	EPA 6010B 0.04 mg/L	03/11/2021 16:00	08/18/2021 09:00	\$ 8.00

Microbac Laboratories,
Inc. - Baltimore



SUBCONTRACT ORDER
21C0414



Released By

Date

Received By

Date

Released By

Date

Received By

Date

Melissa Bell

3/8/21

F.E