Request for Proposal

Village of Rhinebeck

Dutchess County, NY

76 East Market Street, Rhinebeck, NY 12572

Disposal of Biosolids

Prepared by:

DELAWARE ENGINEERING, D.P.C.
28 Madison Avenue Extension
Albany, New York 12203

October 2023

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1.01 **Project Site Location**

Water Treatment Facility
76 Slate Dock Rd,
Rhinebeck, NY 12572
41°55'37.8"N 73°56'46.4"W

1.02 **Owner Information**

Village of Rhinebeck, NY
76 East Market Street
Rhinebeck, NY 12572

1.03 **Point of Contact**

A. The point of contact for this RFP is:

Martina McClinton, Village Clerk
845-876-7015 option 3
mmcclinton@villageofrhinebeckny.gov

1.04 **Bidder's Representations**

A. It is the responsibility of each Bidder before submitting a Bid to:
   1. examine and carefully study the Bidding Documents, and any data and reference items identified in the Bidding Documents;
   2. visit the Site, conduct a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfy itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work;
   3. become familiar with and satisfy itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work;
   4. carefully study all: reports, laboratory data, and other information made available through this RFP
   5. become aware of the general nature of the work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents;
   6. determine that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work; and
   7. agree that the submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

1.05 **Site information and Background**

A. The Village of Rhinebeck drinking water treatment plant (WTP) is seeking a request for proposals (RFP) from firms for biosolids removal and disposal. The WTP is currently storing the biosolids on site in three geotextile bags measuring approximately 4 feet tall, 36 feet wide, and 96 feet long each.

B. In 2020, the biosolids were sampled, tested, and found to contain PFAS. The analytical report from the laboratory testing is included as an attachment to this RFP.
C. The total volume of biosolids to be disposed of is estimated to be approximately 1,477 cubic yards. The pricing of the work shall include disposal of the geotextile bags. The estimated total weight of material to be disposed of is 1,700 Tons based on the below calculations.

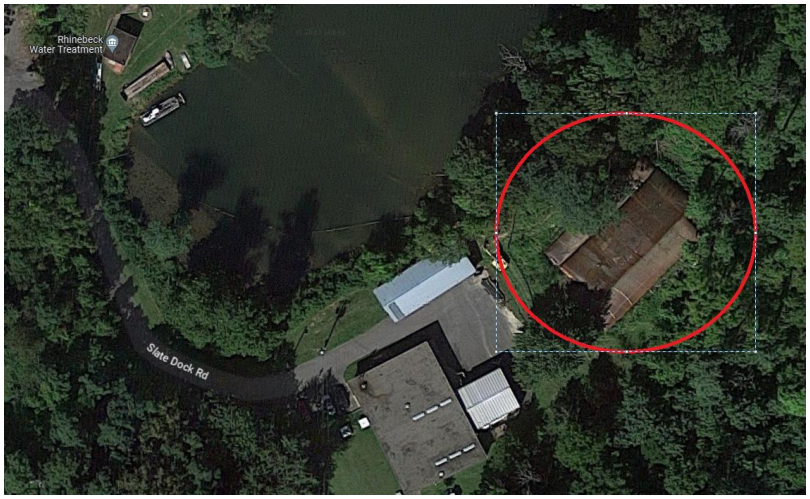

Figure 1 - Aerial view of bagged biosolids

Description	**Dimension**	**Units**
Length	96	LF
Width	36	LF
Height	4	LF
Quantity	3	
Overall Volume	1,536	CY

Subtracted Area (See figure 2)	6	SF
Subtracted Area Volume	59	CY

Undisturbed Volume of Biosolids	1,477	CY
Swell Factor	25%	%
Volume of Biosolids loaded	1,846.67	CY

A typical bulk unit weight for many soils is 15 kN/m^3 but it can vary between 11 kN/m3 for a loose dry soil to 18 kN/m^3 for dense wet soils.

Average weight of undisturbed settled soil	15	kN/m^3	1.15	Tons/CY

Total Tons	1,699.73	Tons

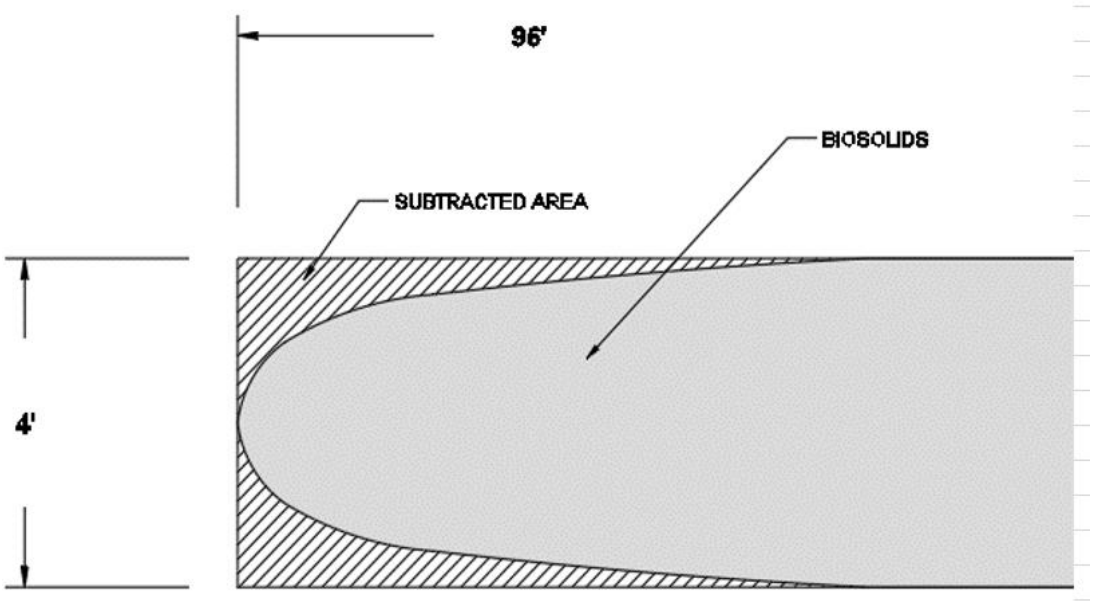

Figure 2 - Section view of bagged biosolids

1.06 **Scope of Work**

A. For the purpose of this Bid Request, it is assumed that 1,700 tons of biosolids will be transported from the site to the disposal facility. The Contractor shall invoice and be compensated only the actual amount as determined by certified measurements at the disposal facility and documented on trip receipts and manifests.
B. The bid unit pricing will be honored for actual quantities ±50% of the corresponding original bid quantity. Changes in quantity outside of this range may be subject to contract change order.
C. All work described in these Specifications will be coordinated through and performed under the supervision of the Village of Rhinebeck.
D. The unit price shall include all costs, labor, materials, equipment, overhead & profit, permits, sampling, testing, and supplies required to complete the work, including but not limited to:
    1. Provide a unit price (cubic yard) to remove and dispose of the biosolids and the geotextile bags in accordance with all federal and state laws.
    2. Site preparation
    3. Secure all permits and providing all notices as required by local, state and federal rules and laws.
    4. Mobilization and use of all necessary equipment to fully complete the removal process.
    5. Provide, the secondary containment for the staging area to prevent biosolids from releasing into the environment.
    6. Load and transport biosolids to an USEPA/EGLE-approved and licensed disposal facility. The Contractor shall be responsible for transporting the waste in accordance with all local, state, and federal requirements. The Contractor shall provide written documentation from the disposal facility that the biosolids material is acceptable and the disposal facility is properly licensed and permitted to accept the material.

7. Select the disposal facility and obtaining disposal approval including collecting and analysis of representative biosolid samples. The Contractor will be responsible for collecting and analyzing intermittent samples that the disposal facility may require during the work.
8. Transport offsite by truck or by rail as necessary to the disposal facility accepting the material. The method of transportation to haul the biosolids off site for disposal shall be identified in the contractors bid.
9. Provide owner or owner's representative with all forms, manifests, etc. for owner's signature and provide copies of all trip tickets and manifests to owner for billing documentation at the beginning of each workday for the previous workday's loads.
10. Determine when each individual truck/transport vessel is full. The Contractor shall insure that each load is secure, within weight limits, and does not contain any free liquids that would spill during transport or result in rejection at the disposal facility. Any fines, fees, and/or penalties related to the above shall be paid by the Contractor at their expense.
11. Decontaminate site personnel and equipment and dispose of personal protective equipment where necessary.
12. Restoration of disturbed areas resulting from project work to pre-work condition.
13. Removal upon project completion of all contractor project appurtenances including but not limited to: equipment, materials, debris, and garbage.

1.07 **Health and Safety**

A. All work shall conform to applicable laws including, but not limited to the Occupational Safety and Health Administration (OSHA) standards 29 CFR Parts 1910 and 1926. Constructor onsite personnel shall be properly trained in the handling of contaminated and hazardous waste (HAZWOPER). The Contractor shall provide Owner a complete health and safety plan (HASP), which covers all work conducted by the contractor and its subcontractors. The HASP shall be provided to the Owner or its representative prior to initiation of any site activity.

B. The Contractor shall provide for the health and safety of all its employees as well as its subcontractor employees. The Contractor shall provide all safety measures necessary to protect any person who may approach site activities throughout the course of the work in accordance with applicable OSHA standards.

C. Any other potentially hazardous or contaminated materials which are discovered during site work shall immediately be brought to the attention of the Owner.

D. The Contractor shall obtain all licenses, permits, certifications, receipts, etc., and conduct all transportation and disposal work associated with the project in accordance with all local, State and Federal laws, regulations, codes and ordinances. Health and safety regulations relating to the transportation and disposal of wastes shall be complied with at all times.

1.08 **Bid Submittal, Receipt, and Acceptance of Proposal**

A. Bids must be in accordance with this RFP document and bid specifications including, all attachments. Bidder is responsible for reviewing these documents, investigating applicable regulatory requirements pertinent to the proposed work, and inspecting the

site. Bids shall include all costs incurred in complying with the requirements of this RFP and Bid Specification document, applicable regulatory requirements, and in addressing all site conditions and constraints. Items and specifications that are necessary to complete the requested services, but may have been omitted from this project manual, should be included by the bidder.

B. Bidder must respond to all the data requested. Failure to provide all the data required may result in rejection of their Bid.

Bid Due Date: 4:00 PM Friday February 23, 2024

Submission: Submit three complete sets of documents in a sealed envelope, which identifies the proponent and states "Village of Rhinebeck – Disposal of Biosolids".

C. All Bids will remain subject to acceptance for forty-five (45) days after the day of the Bid opening, but Owner may, in its sole discretion, release any Bid and return the Bid security prior to the end of this period.

D. Items and specifications that are necessary to complete the requested services but may have been omitted from this RFP should not be included by the bidder on the bid form.

E. The Village of Rhinebeck reserves the right to reject any and all proposals and to waive informalities therein to determine which is the most acceptable bid and to negotiate contract terms with the apparent Contractor. Bids will be evaluated on the basis of quoted cost, number of days necessary to complete the work, as well as other financial and performance criteria of the Bidder.

F. It is recommended that the bidder provide contact information and be responsive to any questions regarding their bid that may arise between the Bid Submittal and the Bid Award dates.

G. This completed bid package along with all attachments and addendums will represent the entire agreement and contract between the Owner and the selected contractor. Final award of a contract will be predicated on finalization of a complete contract with the Village of Rhinebeck.

1.09 **Work Schedule**

A. The Contractor shall commence the work as soon as practical once the contract is awarded. All work shall be completed within ninety (90) days following award.

B. If the Contractor is delayed at any time in progress of the work by changes ordered in the work, fire, abnormal or adverse weather conditions not reasonably anticipatable, or by other causes which the Village of Rhinebeck determines may justify the delay, then the contract time shall be extended for such reasonable time as the Owner may determine.

C. It is desired that work commence as soon as possible and continue without interruption until the project is complete.

D. All work must be completed within 90 calendar days of Contract Award.

1.10 **Insurance**

A. Bidders must provide certificates of insurance from a licensed carrier for a Commercial General Liability Policy in which the Owner will be named as an additional insured, a Worker's Compensation and Employers Liability Policy, and NYS Disability.

1.11 **RFP Attachments**

A. The following attachments are incorporated into this RFP:
   1. Lab Testing Results of Biosolids
   2. Non-Collusion Affidavit
   3. EEO Policy Statement
   4. Statement on Sexual Harassment

1.12 **Bid Required Submittals**

A. The following attachments are incorporated into this RFP:
   1. Proof of Insurance
   2. Completed and Signed copy of RFP
   3. Completed Non-Collusion Affidavit
   4. Completed EEO Policy Statement
   5. Completed Statement on Sexual Harassment

1.13 **Payments to Contractor**

A. Invoices may be submitted monthly. Retainage shall be 10 % until project completion. Owner may reduce retainage if completed work and schedule is satisfactory. Invoices should follow proposal format.

1.14 **Basis of Bid**

A. Bidder's Representations and Acceptance of Contract Conditions
   1. The undersigned bidder, having read and examined this entire Bid Specification Package and any and all other documents related to the project including the following attachments and/or addendums:

Attachment/Addendum No.	Date
_____	_____
_____	_____
_____	_____

hereby proposes to complete everything required to be performed in strict conformity with the requirements of this Bid Specification Document, including but not limited to all local, state, and federal rules and laws and to provide and furnish all equipment, labor, and materials necessary to complete in a professional manner all required services as set forth herein for the cost as stated below. The bidder is familiar with and is satisfied as to all laws and regulations that may affect cost, progress, and performance of the Work.

B. The bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bid Specification Package.

C. The Bid Specification Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work for which this Bid is submitted.

	Item	Unit Price ($/Ton)	Quantity (Tons)	Cost ($)
Base Bid	Disposal of Biosolids		1,700	
Bid Alternate	Loading of Biosolids		1,700	
Bid Total				

1.15 **Bid Submittal**

BIDDER: *[Indicate correct name of bidding entity]*

_____

By:
[Signature] _____

[Printed name] _____
(If Bidder is a corporation, a limited liability company, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest:
[Signature] _____

[Printed name] _____

Title: _____

Submittal Date: _____

Address for giving notices:

_____

_____

_____

Telephone Number: _____

Fax Number: _____

Contact Name and e-mail address: _____

_____

Federal Tax ID.: _____

Lab Testing Results of Biosolids

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ANALYTICAL REPORT

Lab Number:	L2029217
Client:	Envirotest Laboratories Inc. 315 Fullerton Avenue Newburgh, NY 12550
ATTN:	Debra Bayer
Phone:	(845) 562-0890
Project Name:	DELAWARE ENGINEERING, DPC
Project Number:	42002608
Report Date:	08/06/20

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: DELAWARE ENGINEERING, DPC
Project Number: 42002608

Lab Number: L2029217
Report Date: 08/06/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2029217-01	COMPOSITE OF 3 SOIL SAMPLES (420-175895-1)	SOIL	Not Specified	07/09/20 10:30	07/10/20

Project Name:	DELAWARE ENGINEERING, DPC	**Lab Number:**	L2029217
Project Number:	42002608	**Report Date:**	08/06/20

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	DELAWARE ENGINEERING, DPC	**Lab Number:**	L2029217
Project Number:	42002608	**Report Date:**	08/06/20

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Perfluorinated Alkyl Acids by Isotope Dilution

L2029217-01: Extracted Internal Standard recoveries were outside the acceptance criteria for individual analytes. Please refer to the surrogate section of the report for details.

WG1392335-2/-3: The LCS/LCSD recoveries, associated with L2029217-01, are above the acceptance criteria for perfluorodecanesulfonic acid (pfds) (135%/137%); however, the associated samples are non-detect to the RL for this target analyte. The results of the original analysis are reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Alycia Mogayzel

Title: Technical Director/Representative Date: 08/06/20

ORGANICS

SEMIVOLATILES

Project Name: DELAWARE ENGINEERING, DPC
Lab Number: L2029217
Project Number: 42002608
Report Date: 08/06/20

SAMPLE RESULTS

Lab ID: L2029217-01
Client ID: COMPOSITE OF 3 SOIL SAMPLES (420-175895-1)
Sample Location: Not Specified

Date Collected: 07/09/20 10:30
Date Received: 07/10/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 134,LCMSMS-ID
Analytical Date: 07/18/20 07:56
Analyst: JW
Percent Solids: 21%

Extraction Method: ALPHA 23528
Extraction Date: 07/15/20 08:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	2.03	0.092	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	2.03	0.187	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	2.03	0.158	1
Perfluorohexanoic Acid (PFHxA)	0.221	J	ug/kg	2.03	0.213	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	2.03	0.183	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	2.03	0.246	1
Perfluorooctanoic Acid (PFOA)	0.203	JF	ug/kg	2.03	0.170	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	2.03	0.729	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	2.03	0.555	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	2.03	0.305	1
Perfluorooctanesulfonic Acid (PFOS)	0.648	J	ug/kg	2.03	0.528	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	2.03	0.272	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	2.03	1.17	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	2.03	0.819	1
Perfluoroundecanoic Acid (PFUnA)	0.262	J	ug/kg	2.03	0.190	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	2.03	0.622	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	2.03	0.398	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	1.45	JF	ug/kg	2.03	0.343	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	2.03	0.284	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	2.03	0.831	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	2.03	0.219	1
PFOA/PFOS, Total	0.851	J	ug/kg	2.03	0.170	1

Project Name: DELAWARE ENGINEERING, DPC **Lab Number:** L2029217

Project Number: 42002608 **Report Date:** 08/06/20

SAMPLE RESULTS

Lab ID: L2029217-01 Date Collected: 07/09/20 10:30

Client ID: COMPOSITE OF 3 SOIL SAMPLES (420-175895-1) Date Received: 07/10/20

Sample Location: Not Specified Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	65		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	**59**	Q	65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	**67**	Q	70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	**59**	Q	61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	62		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	70		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	64		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	62		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	**59**	Q	61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	67		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	67		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	65		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	**25**	Q	45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	75		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	23		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	**22**	Q	42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	57		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	**11**	Q	26-160

Project Name: DELAWARE ENGINEERING, DPC **Lab Number:** L2029217

Project Number: 42002608 **Report Date:** 08/06/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 134,LCMSMS-ID
Analytical Date: 07/18/20 04:54
Analyst: JW

Extraction Method: ALPHA 23528
Extraction Date: 07/15/20 08:35

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01 Batch: WG1392335-1					
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	0.500	0.023
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	0.500	0.046
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	0.500	0.039
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	0.500	0.053
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	0.500	0.045
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	0.500	0.061
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	0.500	0.042
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	0.500	0.180
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	0.500	0.136
Perfluorononanoic Acid (PFNA)	ND		ug/kg	0.500	0.075
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	0.500	0.130
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	0.500	0.067
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	0.500	0.287
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	0.500	0.202
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	0.500	0.047
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	0.500	0.153
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	0.500	0.098
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	0.500	0.085
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	0.500	0.070
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	0.500	0.204
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	0.500	0.054
PFOA/PFOS, Total	ND		ug/kg	0.500	0.042

Project Name: DELAWARE ENGINEERING, DPC
Project Number: 42002608
Lab Number: L2029217
Report Date: 08/06/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 134,LCMSMS-ID
Analytical Date: 07/18/20 04:54
Analyst: JW

Extraction Method: ALPHA 23528
Extraction Date: 07/15/20 08:35

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01 Batch: WG1392335-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	81		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	75		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	91		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	75		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	82		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	94		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	83		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	85		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	80		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	89		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	90		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	95		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	70		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	106		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	5		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	70		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	92		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	66		26-160

Lab Control Sample Analysis

Batch Quality Control

Project Name: DELAWARE ENGINEERING, DPC

Project Number: 42002608

Lab Number: L2029217

Report Date: 08/06/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01 Batch: WG1392335-2 WG1392335-3								
Perfluoropentanoic Acid (PFPeA)	114		112		69-132	2		30
Perfluorobutanesulfonic Acid (PFBS)	108		110		72-128	2		30
Perfluorohexanoic Acid (PFHxA)	116		113		70-132	3		30
Perfluoroheptanoic Acid (PFHpA)	109		110		71-131	1		30
Perfluorohexanesulfonic Acid (PFHxS)	107		109		67-130	2		30
Perfluorooctanoic Acid (PFOA)	114		114		69-133	0		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	127		124		64-140	2		30
Perfluoroheptanesulfonic Acid (PFHpS)	109		114		70-132	4		30
Perfluorononanoic Acid (PFNA)	119		117		72-129	2		30
Perfluorooctanesulfonic Acid (PFOS)	111		113		68-136	2		30
Perfluorodecanoic Acid (PFDA)	112		111		69-133	1		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	113		112		65-137	1		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	112		106		63-144	6		30
Perfluoroundecanoic Acid (PFUnA)	111		114		64-136	3		30
Perfluorodecanesulfonic Acid (PFDS)	**135**	Q	**137**	Q	59-134	1		30
Perfluorooctanesulfonamide (FOSA)	111		117		67-137	5		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	109		106		61-139	3		30
Perfluorododecanoic Acid (PFDoA)	118		116		69-135	2		30
Perfluorotridecanoic Acid (PFTrDA)	111		110		66-139	1		30
Perfluorotetradecanoic Acid (PFTA)	110		111		69-133	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: DELAWARE ENGINEERING, DPC

Project Number: 42002608

Lab Number: L2029217

Report Date: 08/06/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01 Batch: WG1392335-2 WG1392335-3								

Surrogate (Extracted Internal Standard)	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	82		85		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	75		78		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	93		91		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	76		78		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	84		83		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	98		94		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	84		85		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	88		86		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	78		81		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	92		89		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	87		88		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	93		89		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	75		76		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	97		98		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	5		7		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	71		73		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	90		91		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	65		65		26-160

INORGANICS
&
MISCELLANEOUS

Project Name: DELAWARE ENGINEERING, DPC
Project Number: 42002608
Lab Number: L2029217
Report Date: 08/06/20

SAMPLE RESULTS

Lab ID: L2029217-01
Client ID: COMPOSITE OF 3 SOIL SAMPLES (420-175895-1)
Sample Location: Not Specified
Sample Depth:
Matrix: Soil
Date Collected: 07/09/20 10:30
Date Received: 07/10/20
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab										
Solids, Total	21.4		%	0.100	0.100	1	-	07/14/20 10:15	121,2540G	AL

Lab Duplicate Analysis

Batch Quality Control

Project Name: DELAWARE ENGINEERING, DPC

Project Number: 42002608

Lab Number: L2029217

Report Date: 08/06/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1391906-1 QC Sample: L2029217-01 Client ID: COMPOSITE OF 3 SOIL SAMPLES (420-175895-1)						
Solids, Total	21.4	21.4	%	0		10

Project Name: DELAWARE ENGINEERING, DPC
Project Number: 42002608

Lab Number: L2029217
Report Date: 08/06/20

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2029217-01A	Plastic 2oz unpreserved for TS	A	NA		3.9	Y	Absent		A2-TS(7)
L2029217-01B	Plastic 8oz unpreserved	A	NA		3.9	Y	Absent		A2-NY-537-ISOTOPE(14)

*Values in parentheses indicate holding time in days

Project Name: DELAWARE ENGINEERING, DPC
Project Number: 42002608
Lab Number: L2029217
Report Date: 08/06/20

PFAS PARAMETER SUMMARY

Parameter	Acronym	CAS Number
PERFLUOROALKYL CARBOXYLIC ACIDS (PFCAs)		
Perfluorooctadecanoic Acid	PFODA	16517-11-6
Perfluorohexadecanoic Acid	PFHxDA	67905-19-5
Perfluorotetradecanoic Acid	PFTA	376-06-7
Perfluorotridecanoic Acid	PFTrDA	72629-94-8
Perfluorododecanoic Acid	PFDoA	307-55-1
Perfluoroundecanoic Acid	PFUnA	2058-94-8
Perfluorodecanoic Acid	PFDA	335-76-2
Perfluorononanoic Acid	PFNA	375-95-1
Perfluorooctanoic Acid	PFOA	335-67-1
Perfluoroheptanoic Acid	PFHpA	375-85-9
Perfluorohexanoic Acid	PFHxA	307-24-4
Perfluoropentanoic Acid	PFPeA	2706-90-3
Perfluorobutanoic Acid	PFBA	375-22-4
PERFLUOROALKYL SULFONIC ACIDS (PFSAs)		
Perfluorododecanesulfonic Acid	PFDoDS	79780-39-5
Perfluorodecanesulfonic Acid	PFDS	335-77-3
Perfluorononanesulfonic Acid	PFNS	68259-12-1
Perfluorooctanesulfonic Acid	PFOS	1763-23-1
Perfluoroheptanesulfonic Acid	PFHpS	375-92-8
Perfluorohexanesulfonic Acid	PFHxS	355-46-4
Perfluoropentanesulfonic Acid	PFPeS	2706-91-4
Perfluorobutanesulfonic Acid	PFBS	375-73-5
FLUOROTELOMERS		
1H,1H,2H,2H-Perfluorododecanesulfonic Acid	10:2FTS	120226-60-0
1H,1H,2H,2H-Perfluorodecanesulfonic Acid	8:2FTS	39108-34-4
1H,1H,2H,2H-Perfluorooctanesulfonic Acid	6:2FTS	27619-97-2
1H,1H,2H,2H-Perfluorohexanesulfonic Acid	4:2FTS	757124-72-4
PERFLUOROALKANE SULFONAMIDES (FASAs)		
Perfluorooctanesulfonamide	FOSA	754-91-6
N-Ethyl Perfluorooctane Sulfonamide	NEtFOSA	4151-50-2
N-Methyl Perfluorooctane Sulfonamide	NMeFOSA	31506-32-8
PERFLUOROALKANE SULFONYL SUBSTANCES		
N-Ethyl Perfluorooctanesulfonamido Ethanol	NEtFOSE	1691-99-2
N-Methyl Perfluorooctanesulfonamido Ethanol	NMeFOSE	24448-09-7
N-Ethyl Perfluorooctanesulfonamidoacetic Acid	NEtFOSAA	2991-50-6
N-Methyl Perfluorooctanesulfonamidoacetic Acid	NMeFOSAA	2355-31-9
PER- and POLYFLUOROALKYL ETHER CARBOXYLIC ACIDS		
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid	HFPO-DA	13252-13-6
4,8-Dioxa-3h-Perfluorononanoic Acid	ADONA	919005-14-4
CHLORO-PERFLUOROALKYL SULFONIC ACIDS		
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid	11Cl-PF3OUdS	763051-92-9
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid	9Cl-PF3ONS	756426-58-1

Project Name:	DELAWARE ENGINEERING, DPC	**Lab Number:**	L2029217
Project Number:	42002608	**Report Date:**	08/06/20

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

Report Format: DU Report with 'J' Qualifiers

Project Name:	DELAWARE ENGINEERING, DPC	**Lab Number:**	L2029217
Project Number:	42002608	**Report Date:**	08/06/20

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration. (DoD and NYSDEC Part 375 PFAS only.)

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

Report Format: DU Report with 'J' Qualifiers

Project Name:	DELAWARE ENGINEERING, DPC	**Lab Number:**	L2029217
Project Number:	42002608	**Report Date:**	08/06/20

Data Qualifiers

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

REFERENCES

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

134 Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS) using Isotope Dilution. Alpha SOP 23528.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
EPA TO-12 Non-methane organics
EPA 3C Fixed gases
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

L29217

EnviroTest Laboratories
315 Fullerton Avenue
Newburgh, NY 12550
Phone (845) 562-0890 Fax (845) 562-0841

Chain of Custody Record

EnviroTest Laboratories Inc.

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bayer, Debra	Carrier Tracking No(s):	COC No: 420-12024.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: dbayer@envirotestlaboratories.com		Page: Page 1 of 1
Company: Alpha Analytical				STL Job #: 420-175895-1
Address: 8 Walkup Drive,	Due Date Requested: ~~7/15/2020~~ Standard			
City: Westborough	TAT Requested (days):			
State, Zip: MA, 01581				
Phone:	PO #:			
Email:	WO #:			
Project Name: Delaware Engineering, DPC	Project #: 42002608			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUBCONTRACT PFAS NY 20 compounds 1154	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
Composite of 3 soil samples (420-175895-1)	7/9/20	10:30		Solid			X	1	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
			Don DAAL	7/10/20 1340	AAL
Relinquished by: Don DAAL	Date/Time: 7/10/20 1910	Company	Received by: AAL	Date/Time: 7/10/20 20:00	Company
Relinquished by: AAL	Date/Time: 7/10/20 23:30	Company	Received by:	Date/Time: 7/10/20 23:30	Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

EnviroTest Laboratories Inc.

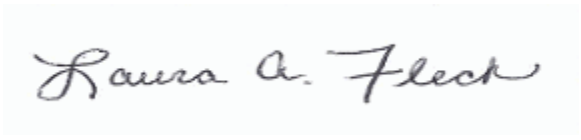
ANALYTICAL REPORT

Job Number: 420-175930-1

Job Description: Village of Rhinebeck WTP

For:
Village of Rhinebeck
76 E. Market Street
Rhinebeck, NY 12572

Attention: Water Department



Designee for
Debra Bayer
Customer Service Manager
dbayer@envirotestlaboratories.com
07/31/2020

EnviroTest Laboratories, LLC. Certifications and Approvals: NYSDOH 10142, NJDEP NY015, CTDOPH PH-0554

METHOD SUMMARY

Client: Village of Rhinebeck

Job Number: 420-175930-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Inductively Coupled Plasma - Atomic Emission Spectrometry	EnvTest	SW846 6010C	
Toxicity Characteristic Leaching Procedure	EnvTest		SW846 1311
Microwave Digestion of Water	EnvTest		EPA 3015A_L
Microwave Assisted Acid Digestion of Sediments,	EnvTest		SW846 3051A
Mercury in Liquid Waste (Manual Cold Vapor Technique)	EnvTest	SW846 7470A	
Toxicity Characteristic Leaching Procedure (Hg Only)	EnvTest		SW846 1311
Mercury in Liquid Waste (Manual Cold Vapor	EnvTest		SW846 7470A
Hg in Solids & Semi-solids	EnvTest	SW846 7471B	
Mercury in Solid or Semi-Solid Waste (Manual Cold	EnvTest		SW846 7471B
Polychlorinated Biphenyls (PCBs) by Gas Chromatography	EnvTest	SW846 8082A	
Microwave Extraction	EnvTest		SW846 3546
Soil and Waste pH	EnvTest	SW846 9045D	
Nitrogen, Total Kjeldahl (Colorimetric, Semi-Automated Block Digester, AAII)	EnvTest	EPA EPA 351.2 Rev.2	
Nitrogen, Total Kjeldahl (Colorimetric, Semi-Automated	EnvTest		MCAWW 351.2
Phosphorus, All Forms, Colorimetric, Two Reagent	EnvTest	EPA EPA 365.3 1978	
Sample Digestion for Total Phosphorous	EnvTest		MCAWW 365.2/365.3/365
Fixed and Volatile Solids	EnvTest	SM22 SM 2540E 2011	
Ammonia (Automated Phenate)	EnvTest	SM22 SM 4500 NH3 G	
Ammonia Distillation	EnvTest		SM22 SM4500 NH3B
General Sub Contract Method		Subcontract	

Lab References:

=

EnvTest = EnviroTest

Method References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM22 = "Standard Methods for the Examination of Water and Wastewater", 22nd Edition

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

METHOD / ANALYST SUMMARY

Client: Village of Rhinebeck

Job Number: 420-175930-1

Method	Analyst	Analyst ID
SW846 8082A	Palentino, Gus J	GJP
SW846 6010C	Luis, Carlos	CL
SW846 7470A	Jaroszko, Eric	EJ
SW846 7471B	Jaroszko, Eric	EJ
SW846 9045D	Lacy, Megan	ML
EPA EPA 351.2 Rev.2	Wiedner, Camille	CW
EPA EPA 365.3 1978	Lacy, Megan	ML
SM22 SM 2540E 2011	Motley, Erika	em
SM22 SM 4500 NH3 G	Molchon, Renee	RM
SM SM2540B PSOL	Motley, Erika	em

SAMPLE SUMMARY

Client: Village of Rhinebeck

Job Number: 420-175930-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
420-175930-1	Sludge	Solid	07/09/2020 1045	07/09/2020 1259

Water Department
Village of Rhinebeck
76 E. Market Street
Rhinebeck, NY 12572

Job Number: 420-175930-1

Client Sample ID: **Sludge**
Lab Sample ID: **420-175930-1**

Date Sampled: 07/09/2020 1045
Date Received: 07/09/2020 1259
Client Matrix: Solid
Percent Solids: 20

Analyte	Result/Qualifier	Unit	RL	RL	Dilution
Method: 8082A		Date Analyzed:		07/26/2020 1339	
Prep Method: 3546		Date Prepared:		07/23/2020 1145	
PCB-1016	<710	ug/Kg Dry	710	710	1.0
PCB-1221	<710	ug/Kg Dry	710	710	1.0
PCB-1232	<710	ug/Kg Dry	710	710	1.0
PCB-1242	<710	ug/Kg Dry	710	710	1.0
PCB-1248	<710	ug/Kg Dry	710	710	1.0
PCB-1254	<710	ug/Kg Dry	710	710	1.0
PCB-1260	<710	ug/Kg Dry	710	710	1.0
PCB-1262	<710	ug/Kg Dry	710	710	1.0
PCB-1268	<710	ug/Kg Dry	710	710	1.0
Surrogate				Acceptance Limits	
2,4,5,6-Tetrachloro-m-xylene	64	%		30 - 150	
DCB Decachlorobiphenyl(surr)	39	%		30 - 150	
Method: TCLP-6010C		Date Analyzed:		07/20/2020 1850	
Prep Method: 3015A_L		Date Prepared:		07/15/2020 1225	
As	<180	ug/L	180	180	2.0
Cd	<18	ug/L	18	18	2.0
Cr	<18	ug/L	18	18	2.0
Ba	620	ug/L	360	360	2.0
Cu	<90	ug/L	90	90	2.0
Ni	<140	ug/L	140	140	2.0
Pb	<90	ug/L	90	90	2.0
Se	<45	ug/L	45	45	2.0
Sb	<110	ug/L	110	110	2.0
Zn	130	ug/L	90	90	2.0
Mo	<90	ug/L	90	90	2.0
Method: 6010C		Date Analyzed:		07/15/2020 1959	
Prep Method: 3051A		Date Prepared:		07/13/2020 1455	
Al	63000	mg/Kg Dry	200	200	2.0
As	<10	mg/Kg Dry	10	10	2.0
Cd	<5.1	mg/Kg Dry	5.1	5.1	2.0
Cr	45	mg/Kg Dry	10	10	2.0
Cu	44	mg/Kg Dry	25	25	2.0
K	7500	mg/Kg Dry	5100	5100	2.0
Ni	<41	mg/Kg Dry	41	41	2.0
Pb	35	mg/Kg Dry	25	25	2.0
Se	<10	mg/Kg Dry	10	10	2.0
Zn	150	mg/Kg Dry	20	20	2.0

Water Department
Village of Rhinebeck
76 E. Market Street
Rhinebeck, NY 12572

Job Number: 420-175930-1

Client Sample ID: **Sludge**
Lab Sample ID: **420-175930-1**

Date Sampled: 07/09/2020 1045
Date Received: 07/09/2020 1259
Client Matrix: Solid

Analyte	Result/Qualifier	Unit	RL	RL	Dilution
Method: TCLP-7470A		Date Analyzed:		07/17/2020 1442	
Prep Method: 7470A		Date Prepared:		07/16/2020 1215	
Hg	<0.50	ug/L	0.50	0.50	1.0
Method: 7471B		Date Analyzed:		07/16/2020 1400	
Prep Method: 7471B		Date Prepared:		07/13/2020 1530	
Hg	11	mg/Kg Dry	1.9	1.9	10
Method: 9045D		Date Analyzed:		07/10/2020 1056	
pH	7.0	SU	0.20	0.20	1.0
Temp @ pH Measurement	20	Degrees C	5.0	5.0	1.0
Method: EPA 351.2 Rev.2		Date Analyzed:		07/17/2020 1639	
Prep Method: 351.2		Date Prepared:		07/16/2020 0918	
TKN as N	3500	mg/Kg Dry	640	640	5.0
Method: EPA 365.3 1978		Date Analyzed:		07/13/2020 1050	
Prep Method: 365.2/365.3/365		Date Prepared:		07/13/2020 0850	
Phosphorus, Total	5100	mg/Kg Dry	5000	5000	50
Method: SM 2540E 2011		Date Analyzed:		07/14/2020 1624	
Percent Volatile Solids	17	%	0.10	0.10	1.0
Method: SM 4500 NH3 G		Date Analyzed:		07/14/2020 1414	
Prep Method: SM4500 NH3B		Date Prepared:		07/14/2020 0900	
Ammonia as N	15	mg/Kg Dry	1.3	1.3	1.0

DATA REPORTING QUALIFIERS

Lab Section	Qualifier	Description

The following analytes are Not Part of the ELAP scope of accreditation:

Sulfur, Tungsten, Bicarbonate Alkalinity, 7 Day BOD 5210C, 28 Day BOD, Soluble BOD, Carbon Dioxide, Carbonate Alkalinity, CBOD Soluble, Chlorine, Cyanide (WAD), Ferrous Iron, Ferric Iron, Total Nitrogen, Total Organic Nitrogen, Dissolved Oxygen, pH, Solids (Fixed), Solids (Percent), Solids (Percent Moisture), Solids (Percent Volatile), Solids (Volatile Suspended), Temperature, TKN (Soluble), COD (Soluble), Total Inorganic Carbon, 2-Aminopyridine, 3-Picoline, 1-Methyl-2-pyrrilidinone, Aziridine, Dimethyl sulfoxide, 1-Chlorohexane, 1,2,4,5-Tetramethylbenzene, 4-Ethyl toluene, p-Diethylbenzene, Iron Bacteria, Salmonella, Sulfur Reducing Bacteria, & UOD (Ultimate Oxygen Demand).

The following analytes are Not Part of ELAP Potable Water scope of accreditation:

Ammonia (SM 4500NH3G), Biochemical Oxygen Demand (SM 5210B), Chemical Oxygen Demand (EPA 410.4), Dissolved Oxygen (SM 4500 O C), TKN (351.2), Phosphorus (365.3), Nitrate-Nitrite (353.2), Settable Solids (SM 2540F), Total Suspended Solids (SM 2540 C), m-Xylene & p-Xylene (502.2, 524), o-Xylene (502.2, 524), Sulfide (SM4500SD), Acenaphthene (525.2), Acenaphthylene (525.2), Fluoranthene (525.2), Fluorene (525.2), Phenanthrene (525.2), Anthracene (525.2), Pyrene (525.2), Benzo[a]anthracene (525.2), Benzo[b]fluoranthene (525.2), Benzo[g,h,i]perylene (525.2), Benzo[k]fluoranthene (525.2), Indeno[1,2,3-cd]pyrene (525.2), & Dibenz(a,h)anthracene (525.2). Pyridine

The following analytes are Not Part of ELAP Solid and Hazardous Waste scope of accreditation:

Ammonia (SM 4500NH3G), TKN (351.2), Phosphorus (365.3), 1,2-Dichloro-1,1,2-trifluoroethane (8260), & Chlorodifluoromethane (8260).

The following analytes are Not Part of ELAP Non Potable Water scope of accreditation:

Dissolved Organic Carbon (5310C), Mecoprop (8151A), MCPA (8151A).

Definitions and Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
%R	Percent Recovery
DL, RA, RE	Indicates a Dilution, Reanalysis or Reextraction.
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit - an estimate of the minimum amount of a substance that an analytical process can reliably detect. A MDL is analyte- and matrix-specific and may be laboratory-dependent.
ND	Not detected at the reporting limit (or MDL if shown).
QC	Quality Control
RL	Reporting Limit - the minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence.
RPD	Relative Percent Difference - a measure of the relative difference between two points.

EnviroTest Laboratories, LLC
315 Fullerton Avenue
Newburgh, NY 12550
Phone (845) 562-0890 Fax (845) 562-0841

Chain of Custody Record

EnviroTest Laboratories

Client Information	Sampler: William Bright	Lab PM:	Deliverable Type: Level I, Level II, NYS ASP Cat B EDD (Specify):	JOB #:
Client Contact: William Bright	Phone: 518-452-1290	E-Mail: wbright55@aol.com		
Company: Delaware Engineering		Analysis Requested		Page: Page 1 of 1
Address:	Due Date Requested:			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - H2SO4, F - MeOH, G - NH4CL, H - Ascorbic Acid, I - Ice, J - DI Water, K - Sodium Thiosulfate, L- EDA, M - Sodium Sulfite, N - None, O - MCAA, P - Other (specify)
City: 28 Madison Avenue Extension	TAT Requested (days):			Other:
State, Zip: New York 12203				
Phone: 518-452-1290	PO #:			
Email: wbright55@aol.com	PWS #: NY 1302776			
Project Name: Village of Rhinebeck Water Treatment Facility	Project #:			
Site: Water Treatment Facility	Additional Contacts:			

Sample Identification Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (DW=drinking water, W=water, S=solid, O=waste/oil,	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Chlorine Present (Yes or No)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
SLUDGE	7/9/20	10:45 AM	C	W	n				see ATTACHED list of parameters
Sludge	7/9/20	11:00 AM							
Sludge	7/9/20	11:10 AM							
Sludge	7/9/20	11:20 AM							
☆ Only 1 sample w/ 1 - 1 L plain Amber MA 7/10/20									

420-175930-B-1
Sludge
Date Sampled: 7/9/2020 420-1511591

Container Code: P=Plastic, A=Amber, V=Vial, G=Glass, B=Bacteria, C=Cube, O=Other, T=Terracore, D=BOD Bottle — *Container Type*

Size Code: 1=Liter, 2=250 mL, 3=125 mL, 4=40 mL, 5=Gallon, 6=Half Gallon, 7=Other — *Container Size*

Preservation Added Upon Receipt: Manufacturer/Lot #:	Date:	Time:	Sample # (s):

	Date/Time:	Company	Received by:	Date/Time:	Company
William Bright		Delaware Engineering			
Relinquished by:	Date/Time: 7/9/20 12:59 pm	Company Delaware Engineering	Received by:	Date/Time: 7/9/20 1259	Company BAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

ICE Present: ∆ Yes ∆ No	Custody Seal No.:	Custody Seals Intact: ∆ Yes ∆ No	Cooler Temperature(s) °C/ IR GUN #: 18.6°	07/31/2020

Village of Rhinebeck Water Treatment Facility – PWS # **NY1302776**

c/o William Bright – Delaware Engineering – 7/9/2020

Water Facility Sludge Sample Parameters

Parameter	Method	Qty.
Metals (Al,As,Cd,Cr,Cu,Hg,Pb,Ni,K,Mo,Se,Zn)	EPA 6010C/7471B	1
Metals Digestion, total	EPA 3050A	1
Phosphorus, total	SM 4500PE	1
Kjeldahl Nitrogen, total	EPA 351.1	1
Ammonia	EPA 350.1	1
Nitrate	EPA 300.0	1
Nitrite	EPA 300.0	1
TCLP Metals (Al,As,Ba,Cd,Cr,Cu,Hg,Ni,Pb,Mo,Se,Zn)	EPA 6010C/7471B	1
TCLP Extraction	EPA 1311	1
% Total Solids	SM 2540B	1
% Total Volatile Solids	SM 2540E	1
pH	EPA 9045C	1
PCB's, arochlor 1248	EPA 8082A	1

LOGIN SAMPLE RECEIPT CHECK LIST

Client: Village of Rhinebeck

Job Number: 420-175930-1

Login Number: **175930**

Question	T/F/NA	Comment
Samples were collected by ETL employee as per SOP-SAM-1	NA	
The cooler's custody seal, if present, is intact.	NA	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is recorded.	True	18.6 C
Cooler Temp. is within method specified range.(0-6 C PW, 0-8 C NPW, or BAC <10 C	True	
If false, was sample received on ice within 6 hours of collection.	NA	
Based on above criteria cooler temperature is acceptable.	True	
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 sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	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, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	NA	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

Sludge Analyses **Rhinebeck (V)**

7/9/2020

Alpha Analytical - Mansfield Lab (subbed through Envirotest)

Perfluorintated Alkyl Acids by Isotope Dilution

Parameter	Result	Qualifier	Units	RL
Perfluorobutanoic Acid (PFBA)	ND		ug/Kg	2.03
Perfluoropentanoic Acid (PFPeA)	ND		ug/Kg	2.03
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/Kg	2.03
Perfluorohexanoic Acid (PFHxA)	0.221	J	ug/Kg	2.03
Perfluorheptanoic Acid (PFHpA)	ND		ug/Kg	2.03
Perflurohexanesulfonic Acid (PFHxS	ND		ug/Kg	2.03
Perfluorooctanoic Acid (PFOA)	0.203	JF	ug/Kg	2.03
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/Kg	2.03
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/Kg	2.03
Perflurononanoic Acid (PFNA)	ND		ug/Kg	2.03
Perfluorooctanesulfonic Acid (PFOS)	0.648	J	ug/Kg	2.03
Perfluorodecanoic Acid (PFDA)	ND		ug/Kg	2.03
1H,1H,2H,2H-Perfluroodecanesulfonic Acid (8:2FTS)	ND		ug/Kg	2.03
N-Methyl Perfluorooctanesulfonamideoacetic Acid (NMeFOSAA)	ND		ug/Kg	2.03
Perfluoroundecanoic Acid (PFUnA)	0.262	J	ug/Kg	2.03
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/Kg	2.03
Perfluorooctanesulfonamide (FOSA)	ND		ug/Kg	2.03
N-Ethyl Perfluoroocatanesulfonamidoacetic Acid (NetFOSSA)	1.45	JF	ug/Kg	2.03
Perfluorodecanoic Acid (PFDA)	ND		ug/Kg	2.03
Perfluorododecanoic Acid (PFDoA)	ND		ug/Kg	2.03
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/Kg	2.03
Perfluorotetradecanoic Acid (PFTA)	ND		ug/Kg	2.03
PFOA/PFOS Total	0.851	J	ug/Kg	2.03

Blank analysis were all non-detect <0.500 ug/Kg

Qualifiers

J = Estimated value, below the RL and above MDL

F = ratio of quantifier ion response to qualifier ion response outside of lab criteria, results considered es

RL = reporting limit, concentration above which there is some confidence at that concentration

MDL = Method Dection Limit, concentration above which method can identify parameter, but less confi

MDL	Dilution Factor
0.092	1
0.187	1
0.158	1
0.213	1
0.183	1
0.246	1
0.170	1
0.729	1
0.555	1
0.305	1
0.528	1
0.272	1
1.170	1
0.819	1
0.190	1
0.622	1
0.396	1
0.343	1
0.272	1
0.284	1
0.831	1
0.219	1
0.170	1

stimated maximum

idence of concentration

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Non-Collusion Affidavit

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NON-COLLUSION AFFIDAVIT OF BIDDER

State of_____ County of_____

_____, being first duly sworn, deposes and says that:

1. He is (owner, partner, officer, representative, or agent) of _____, the Bidder that has submitted the attached Bid;
2. He is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;
3. Such Bid is genuine and is not a collusive or sham Bid;
4. By submission of this Bid, each Bidder and each person signing on behalf of any Bidder certifies, and in the case of a joint Bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of his knowledge and belief;
   a. The prices in this Bid, have been arrived at independently without collusion, consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor;
   b. Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the Bidder and will not knowingly be disclosed by the Bidder prior to opening, directly or indirectly, to any other bidder or to any competitor; and
   c. No attempt has been made or will be made by the Bidder to induce any other person, partnership or corporation to submit or not to submit a Bid for the purpose of restricting competition.

A Bid shall not be considered for award nor shall any award be made where clauses 4-a, b, and c above have not been complied with; provided however, that if in any case the Bidder cannot make the foregoing certification, the Bidder shall so state and shall furnish with the Bid a signed statement which sets forth in detail the reasons therefore. Where 4-a, b, and c above have not been complied with, the Bid shall not be considered for award nor shall any award be made unless the head of the purchasing unit of the state, public department or agency to which the Bid is made, or his designee, determines that such disclosure was not made for the purpose of restricting competition.

The fact that a Bidder (i) has published price lists, rates, or tariffs covering items being procured, (ii) has informed prospective customers of proposed or pending publication of new or revised price lists for such items, or (iii) has sold the same items to other customers at the same prices being bid, does not constitute, without more, a disclosure within the meaning of clause 4-b.

Any Bid hereafter made to the Municipality or any public department, agency or official thereof by a corporate Bidder for work or services performed or to be performed or goods sold or to be sold, where competitive bidding is required by statute, rule or regulation, and where such Bid contains the certification referred to in subparagraph 4-b, of this section, shall be deemed to have been authorized by the Board of Directors of the Bidder and such authorization shall be deemed to include the signing and submission of the Bid and the inclusion therein of the certificate as to non-collusion as the act and deed of the corporation.

Signed: _____, Title: _____

Subscribed and sworn to before me this ____ day of _____, 20___.

_____Notary Public, My Commission expires_____

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EEO Policy Statement

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AGREEMENT TO ABIDE BY EQUAL EMPLOYMENT OPPORTUNITY POLICY STATEMENT REQUIREMENTS
NEW YORK STATE REVOLVING FUND (SRF)

I,_____, am the authorized representative of_____.
Name of Representative Name of Contractor/Service Provider

I hereby certify that_____will abide by the equal employment
Name of Contractor/Service Provider

opportunity (EEO) policy statement provisions outlined below.

(i) A statement that the contractor will not discriminate on the basis of race, creed, color, national origin, sex, age, disability, or marital status against any employee or applicant for employment, will undertake or continue existing programs of affirmative action to ensure that minority group members and women are afforded equal employment opportunities without discrimination and will make and document its conscientious and active efforts to employ and utilize minority group members and women in its work force on contracts relating to the Project.

(ii) An agreement that all of contractor's solicitations or advertisements for employees will state that, in the performance of the contract relating to this Project, all qualified applicants will be afforded equal employment opportunities without discrimination on the basis of race, creed, color, national origin, sex, age, disability or marital status.

(iii) An agreement to request each employment agency, labor union, or authorized representative of workers with which it has a collective bargaining or other agreement or understanding, to furnish a written statement that such employment agency, labor union, or representative will not discriminate on the basis of race, creed, color, national origin, sex, age, disability or marital status and that such union or representative will affirmatively cooperate in the implementation of the contractor's obligations herein.

(iv) An agreement to comply with the provisions of the Human Rights Law (Article 15 of the Executive Law), including those relating to non-discrimination on the basis of prior criminal conviction and prior arrest, and with all other State and federal statutory constitutional non-discrimination provisions.

Blank EEO Policy Statements are available at www.efc.ny.gov/mwbe, if needed.

If contractor fails to submit to Recipient an EEO policy statement consistent with the provisions set forth above in clauses (i), (ii), (iii) and (iv) and within the timeframe required thereof, Recipient may declare this contract to be null and void.

X_____

Contractor/Service Provider Representative

Once completed, please provide to the Prime Contractor and/or the community MBO

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Statement on Sexual Harassment

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STATEMENT ON SEXUAL HARASSMENT

New York State Finance Law § 139-l

STATE OF _____)
) SS.:
COUNTY OF _____)

_____, being first duly sworn, deposes and says that:

"By submission of this Bid, each Bidder and each person signing on behalf of any Bidder certifies, and in the case of a joint Bid each party thereto certifies as to its own organization, under penalty of perjury, that the Bidder has and has implemented a written policy addressing sexual harassment prevention in the workplace and provides annual sexual harassment prevention training to all of its employees. Such policy shall, at a minimum, meet the requirements of section two hundred one-g of the labor law."

A Bid shall not be considered for award nor shall any award be made to a Bidder who has not complied with the above certification; provided, however, that if the Bidder cannot make the foregoing certification, such Bidder shall so state and shall furnish with the Bid a signed statement which sets forth in detail the reasons therefor.

Any Bid hereafter made to the Municipality or any public department, agency or official thereof by a corporate Bidder for work or services performed or to be performed or goods sold or to be sold, where such Bid contains the above certification, shall be deemed to have been authorized by the Board of Directors of the Bidder and such authorization shall be deemed to include the signing and submission of the Bide and the inclusion therein of such statement as the act and deed of the corporation.

Signed:_____, Title: _____

Subscribed and sworn before me this_____day of_____, 20____.

_____
Notary Public
My commission expires: _____

[affix stamp]

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