REQUEST FOR PROPOSAL/QUALIFICATIONS

for

DESIGN CONCEPT FOR THE REUSE AND REDEVELOPMENT OF A FORMER QUARRY ON THE HUDSON RIVER "CORTLANDT PARK - QUARRY ON THE HUDSON" WITH FAMILY AND NEIGHBORHOOD ORIENTED RECREATION

ISSUED: FEBRUARY 1, 2017

PRE-PROPOSAL MEETING:

Thursday February 23, 2017 at 10:00 am
Cortlandt Town Hall
1 Heady Street
Cortlandt Manor, NY 10567

(Note: A site visit will be conducted in conjunction with this meeting. All attendees must RSVP prior to Feb. 16, 2017)

RFP/RFQ Deadline:

Wednesday, March 15, 2017
on or before 10am.

Attn: Michael Preziosi, P.E., Director of DOTS
Department of Technical Services (DOTS)
Engineering Division
1 Heady Street
Cortlandt Manor, NY, 10567

I. Introduction

The Town of Cortlandt intends to redevelop a portion of an approximate 99-acre parcel along the Hudson River in the hamlet of Verplanck. This parcel was formerly owned by Con Edison and was also the site of a limestone quarry, the defining feature of the property, which has filled with natural spring waters and is now a 31.66 acre pond.

The Town of Cortlandt is requesting proposals from all interested and qualified developers for design concepts for the re-use and redevelopment of the 31.66 acre quarry pond and approximately 15.5 acres of the surrounding land with family and neighborhood recreational uses including but not limited to aquatic and non-aquatic attractions such as the use of the site's quarry pond for swimming and scuba diving, the creation of a public swimming beach along the Hudson River shoreline, the installation of a boat launch, walking trails, amphitheater, educational / training center, recreational fields and courts and complementary food services (e.g., restaurant, concessions, etc.).

The proposal must be considerate of the surrounding local residential community and allow for priority use to Town residents, clubs and associations.

Aerial View of former Con Edison Property and Verplanck Quarry

Location and Description of Property

The subject property was recently acquired from Con Edison by the Town of Cortlandt and is an approximately 99-acre parcel (the "Property") on the Verplanck peninsula bounded by Broadway to the east, the Hudson River to the west, the municipal line with the Village of Buchanan to the north, and 9th and 11th Streets to the south.

The site can be accessed from the north from Route 9 via the Louisa Street exit to Broadway and from the south via Route 9 or Route 9A to Bleakley Avenue to Broadway. The site is located approximately three miles from the City of Peekskill Metro-North Railroad Station and approximately four miles from the Cortlandt Metro-North Railroad Station (**see Attachment B Location Map**).

The area surrounding the Property is a combination of industrial and residential uses with some commercial uses located along Broadway in Verplanck. The adjacent property to the north is a gypsum manufacturing plant owned by the Continental Building Products (formerly Georgia-Pacific). Further north is the Indian Point Nuclear Power Station, south and east of the property is the largely residential historic hamlet of Verplanck.

The Property is currently occupied by the quarry pond, wetlands, several vacant structures related to the site's former use as a quarry and fish hatchery, overhead transmission lines and towers owned by Con Edison, and an underground gas pipeline operated by Spectra Energy. Con Edison retains ownership of two parcels equaling approximately 21 acres, located on either side of the quarry (the "Retained Parcels") as well as a reservation of certain easement rights over the Property for access, ingress and egress from the Retained Parcels and to support continued operations and maintenance of the electric transmission facility over the Property. Spectra Energy also maintains easements over a portion of the Property containing the underground gas pipeline (**see Attachment "A" – GIS Map**).

Background and History of Property

The Property is an aggregation of parcels purchased by Con Edison in 1961, 1974 and 1982. In the early 20th century portions of the Property were used as a limestone quarry. The quarry closed in 1956 after water begun flooding the quarry from an underground stream. This resulted in the creation of a 31.66 acre pond with areas of varying depths some in excess of 150 feet. The quarry pond is currently surrounded by cliffs approximately 30 to 80 feet high. Three concrete buildings related to the former quarry operation are partially submerged and located in the southwestern corner of the pond. Two additional former quarry structures are located west of the pond.

Photo of the quarry pond and the three submerged former quarry buildings

A New York State Department of Environmental Conservation (NYSDEC) striped bass fish hatchery was operated on the Property in the eighties and nineties. The remains of the site's former hatchery buildings are located in the western portion of the property between the pond and the Hudson River. A paved roadway currently provides access to the site from 9th Street.

In 2016, the Town completed preliminary water quality analysis of the quarry pond (**see Attachment C**). The quarry pond is an un-classified surface water body. The analytical testing results were compared to surface water standards for class A, AA surface water per 6 NYCRR Part 703.5 and other applicable standards. The results indicated the quarry pond will be suitable for recreational uses as a potential water source. Follow-up water quality testing will be completed in the spring of 2017.

II. Scope of Design Concept

Objective: The objective of this RFP is to identify a concept plan for the future use of the former Con Edison property and quarry with family and neighborhood recreational uses.

The Proposer should expect to provide the following at a minimum. The Proposer is invited to provide additional information as they see fit to assist in the development of the concept. **Areas of proposed development are shaded lilac on Attachment A.**

1. A project description for the re-use and redevelopment of the Property with family and neighborhood recreational uses. The project description should describe the proposed uses, including seasonal uses as well as aquatic and non-aquatic uses, infrastructure assessment and improvements and the Proposer's willingness potential for a public-private partnership with the Town with revenue sharing.

2. The proposal should address if the applicant is willing to investigate the structural integrity and potential reuse of any of the existing structures on the site.

3. A concept plan showing the location of all proposed uses (e.g., aquatic uses and non- aquatic uses, Hudson River access, parking, restroom facilities, restaurants, etc.). All future site access must be shown from Broadway. No site access from 9th, 10th or 11th street will be considered. At minimum the site plan shall also show:

    - Site grading requirements. **Attachment A** provides 5-ft topography.
    - Wayfinding and pedestrian access through the facility (pathways, walkways, drives, etc.).
    - Preliminary on-site utility locations for water, sanitary, electrical and telephone.
    - Surfacing requirements (e.g. lawn areas, pavilion areas)

4. Number of full and part time employees expected to be employed.

5. Parking demand requirements for all proposed uses.

6. Daily sanitary requirements for all proposed uses.

7. Water consumption requirements for all proposed uses.

8. Other utility needs such as electrical demand, telephone and cable.

9. Identification of physical and environmental constraints and impacts of development.

10. Identification of federal, state and local policies, plans, laws, regulations, ordinances etc. that pertain to this work. Applicants should review the Town's recently adopted plans listed below.

    - *Envision Cortlandt* —2016 Sustainable Comprehensive Plan
    http://www.townofcortlandt.com/documents/2016_mp/cortlandt%20master%20plan_40423_final_web%20march%2015%202016%20adopted.pdf

    - *2015 Verplanck Waterfront Master Plan*
    http://www.townofcortlandt.com/Documents/Planning/Verplanck%20Waterfront%20Master%20Plan/2015-04-13_Verplanck%20Waterfront%20Master%20Plan.pdf

11. Preliminary cost estimates for infrastructure needs and project buildout. Bear in mind NYS Prevailing Wage Rates apply for all work performed by the Town of Cortlandt.

12. Potential for project phasing (if applicable).

13. Construction schedule and timeline for approval.

14. Identification of developer needs to obtain project financing.

III. DESIGN CONSIDERATIONS

New York State Environmental Quality Review Act (SEQRA)

All projects will be required to comply with SEQRA. The level of the environmental review will depend on the complexity of the project and the project's potential to result in any significant adverse environmental impacts.

Reserved Portion of the Site

The Town of Cortlandt intends to reserve the development rights to 31.4 acres of the easternmost portion of the site bounded by 11th Street to the south and Broadway to the east (**see shaded area in green on Attachment A**). The proposal should not include these areas for development.

Utilities

The subject site is currently not serviced by sanitary or water infrastructure. Potable water can be brought to the site via an extension of a water main along 9th Street into the subject property. A sanitary infrastructure assessment is a component of the proposal.

Con Edison is the regional electrical company and utility connection is readily available. Multiple cable and telecommunication options are available.

Site Access

Vehicular and service access to the proposal site will be restricted from Broadway along the access path as shown on **Attachment A**. Access will not be permitted from local residential streets such as 9th Street or 11th Street. The Town holds an access easement and rights over lands N/F Entergy to assist in vehicular access and circulation. Con Edison holds similar rights to allow access to Retained Parcel #2.

Con Edison Parcels

Con Edison retained portions of the Property for their transmission services as follows (**see shaded area in pink on Attachment A):**

- Retained Parcel #1 – 8.522 acres
- Retained Parcel #2 – 12.812 acres

Use or development on either parcel with the exception of a single vehicular crossing is not permitted at this time.

Con Edison holds rights over an access easement from 9th Street leading to Retained Parcel #1. Similarly Con Edison holds a 20-ft pole line utility easement adjacent to this travel way. Con Edison also reserves aerial rights over a portion of the quarry pond (**see shaded area in tan on Attachment A**) which does not restrict use of the waters underneath the overhead lines.

IV. SUBMISSION REQUIREMENTS

1. Name of firm submitting proposal; main office address; telephone number; email address; principal contact person.

2. Define your Scope of Services that are offered and outline of proposed time line for completion of the project.

3. Address specifically the items as outlined above under item II Scope.

4. Provide a statement of qualifications including:

    i. Organization & Staff experience
    ii. References of similar projects
    iii. Personnel (that will be assigned to or work on the project, state their credentials and experience for this type of work):
    iv. Full time & part time
    v. Proposed consultants, if any

5. Three (3) paper copies of the proposal plus an electronic cd or portable drive containing all submittals in .pdf format.

V. TOWN'S RESPONSIBILITIES

The Town of Cortlandt will make available any relevant records, surveys, reports and other items for use by the consultants at no charge. The Director of Technical Services will constantly monitor progress and expenditures to assure timely delivery and maintain cost control.

VI. PROPOSAL EVALUATION

1. The Director of Technical Services will review and evaluate all proposals submitted in response to this request. The Director of Technical Services will conduct a preliminary evaluation of all proposals on the basis of the information provided with the proposal, the ability of the consultant to perform, past performance, recommendations, ability to meet time requirements and understanding of the work to be performed.

2. As part of the criteria for evaluating the proposals, the Town will look most favorably upon those proposals that are consistent and compatible with the goals of the Town's Comprehensive Plan and best address the needs of its residents while preserving community and neighborhood character. The Town will also consider the following criteria:

    - Creativity
    - Feasibility
    - Opportunities for community betterment

- Infrastructure needs and costs
- Phasing

2. After thorough evaluation, the Director of Technical Services will recommend to the Town of Cortlandt Town Board an award of a Professional Service Contract to the individual or firm providing the proposal that is in the best interest of the Town of Cortlandt.

3. The Town of Cortlandt reserves the right to cancel the proposal.

VII. RECEIPT OF PROPOSALS

Two (2) copies of the Proposal must be received no later than Wednesday March 15, 2017 at 10:00 am.

Proposal shall be sent or delivered to:
Michael Preziosi, PE
Director of Technical Services (DOTS)
Engineering Division
Town Hall
1 Heady Street
Cortlandt Manor, New York, 10567

And sealed as

"**REQUEST FOR PROPOSAL/QUALIFICATIONS for DESIGN CONCEPT FOR THE REUSE AND REDEVELOPMENT OF A FORMER QUARRY ON THE HUDSON RIVER WITH FAMILY AND NEIGHBORHOOD ORIENTED RECREATION"**

VIII. VALIDATION PERIOD

Proposals will remain valid for a period of forty-five (45) days after date specified for receipt of proposals. The Proposals must be concise and clear. The Town of Cortlandt reserves the right to reject any or all proposals in whole or in part.

IX. CONTACT PERSON

The person(s) to contact regarding matters pertaining to the Request for Proposal is:

Michael Preziosi, P.E.
Director of Technical Services
Engineering Division
Town Hall
1 Heady Street
Cortlandt Manor, New York 10567
(914) 734-1060
michaelp@townofcortlandt.com

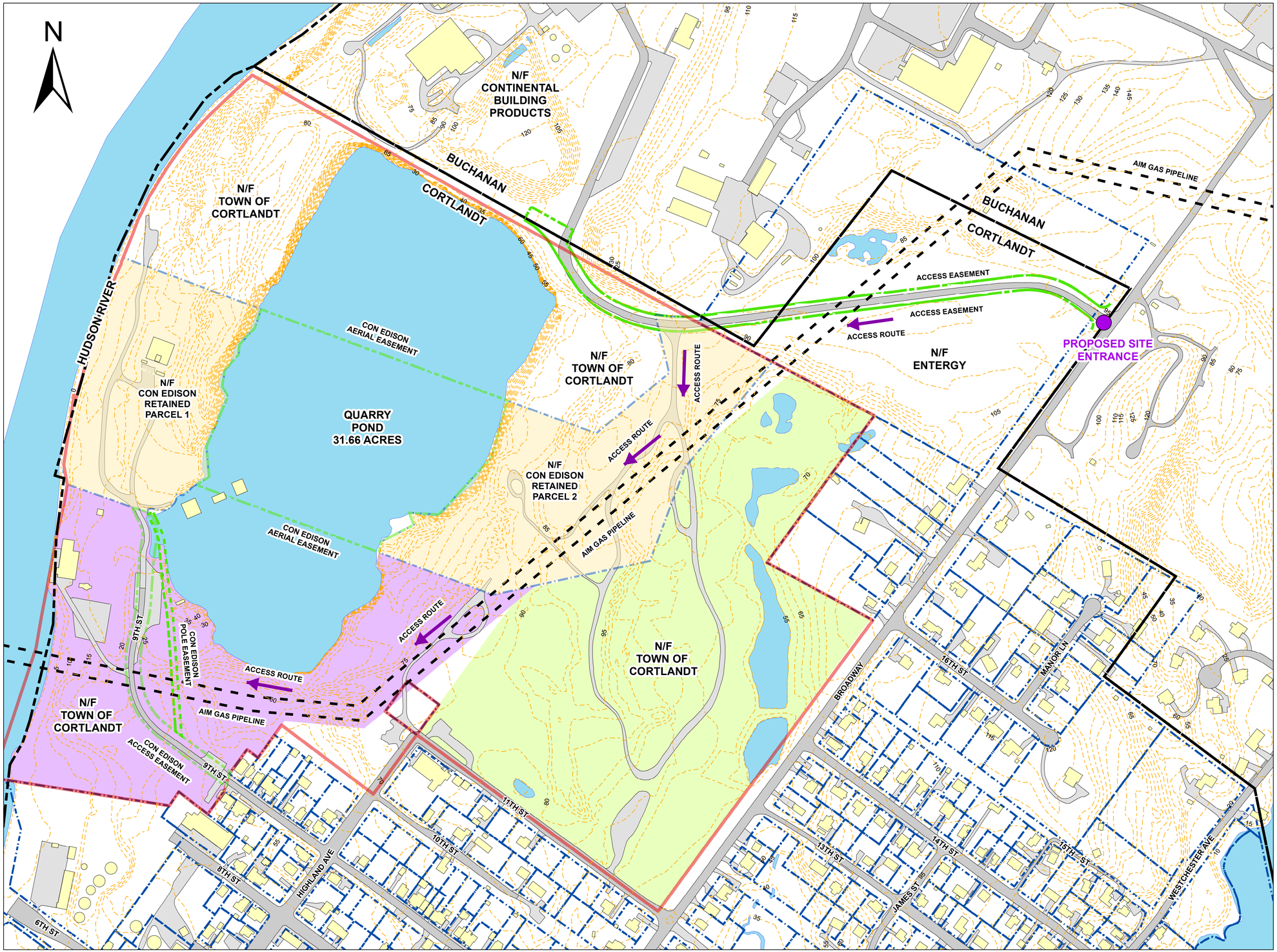
X. Attachments

- Attachment A – GIS Map
- Attachment B – Location Map
- Attachment C – Initial Water Quality Assessment Summary
- Attachment D – Westchester County Filed Map
- Attachment E – Photos

ATTACHMENT A

“GIS MAP”

ATTACHMENT "A" GIS MAP OF FORMER CON EDISON PROPERTY AND QUARRY POND VERPLANCK "QUARRY ON THE HUDSON"



12-15-2016

NOTES:

1. TAX PARCELS AS SHOWN OBTAINED FROM AVAILABLE GIS SOURCES. THESE PROPERTY LINES ARE APPROXIMATE LOCATIONS AND ARE NOT SURVEYED.
2. LANDS RETAINED BY CON EDISON AND EASEMENTS SHOWN ON THIS MAP TAKEN FROM FILED MAP 28957 IN THE WESTCHESTER COUNTY CLERK'S OFFICE DIVISION OF LAND RECORDS.
3. THIS MAP IS NOT INTENDED TO BE USED FOR FINAL DESIGN. ACCURACY IS NOT GUARANTEED BY THE TOWN OF CORTLANDT.
4. TOPOGRAPHY AS SHOWN IS 2004 AERIAL FLYOVER

   HORIZONTAL PROJECTED COORDINATE SYSTEM: NAD_1983_StatePlane_New_York_East_FIPS_3101_Feet

   VERTICAL DATUM: NAVD-88
5. DESIGN CONSIDERATIONS

   RESERVED PORTION OF SITE

   THE TOWN OF CORTLANDT INTENDS TO RESERVE THE DEVELOPMENT RIGHTS TO 31.4 ACRES OF THE EASTERN MOST PORTION BOUNDED BY 11TH STREET TO THE SOUTH AND BROADWAY TO THE EAST. THE PROPOSAL SHOULD NOT INCLUDE THESE AREAS FOR DEVELOPMENT.

   UTILITIES

   THE SUBJECT SITE IS CURRENTLY NOT SERVICED BY SANITARY OR WATER INFRASTRUCTURE. POTABLE WATER CAN BE BROUGHT TO THE SITE VIA AN EXTENSION OF A WATER MAIN ALONG 9TH STREET INTO THE SUBJECT PROPERTY. A SANITARY INFRASTRUCTURE ASSESSMENT IS A COMPONENT OF THE PROPOSAL.

   CON EDISON IS THE REGIONAL ELECTRICAL COMPANY AND UTILITY CONNECTION IS READILY AVAILABLE. MULTIPLE CABLE AND TELECOMMUNICATION OPTIONS ARE AVAILABLE.

   SITE ACCESS

   VEHICULAR AND SERVICE ACCESS TO THE PROPOSAL SITE WILL BE RESTRICTED FROM BROADWAY ALONG THE ACCESS PATH AS SHOWN ON ATTACHMENT "A". ACCESS WILL NOT BE PERMITTED FROM LOCAL RESIDENTIAL STREETS SUCH AS 9TH STREET OR 11TH STREET. THE TOWN HOLDS AN ACCESS EASEMENT AND RIGHTS OVER LANDS N/F ENTERGY TO ASSIST IN VEHICULAR CIRCULATION. CON EDISON HOLDS SIMILAR RIGHTS TO ALLOW ACCESS TO RETAINED PARCEL #2.

   CON EDISON RETENTION

   CON EDISON RETAINED PORTIONS OF THE PROPERTY FOR THEIR TRANSMISSION SERVICES AS FOLLOWS:

   RETAINED PARCEL #1 – 8.522 ACRES
   RETAINED PARCEL #2 – 12.812 ACRES

   USE OR DEVELOPMENT ON EITHER PARCEL WITH THE EXCEPTION OF A SINGLE VEHICULAR CROSSING IS PERMITTED AT THIS TIME.

   CON EDISON HOLDS RIGHTS OVER AN ACCESS EASEMENT FROM 9TH STREET LEADING TO RETAINED PARCEL #1. SIMILARLY CON EDISON HOLDS A 20-FT POLE LINE UTILITY EASEMENT ADJACENT TO THIS TRAVEL WAY. FINALLY CON EDISON RESERVED AERIAL RIGHTS OVER THE QUARRY POND WHICH DOES NOT RESTRICT USE OF THE POND UNDERNEATH.

   ALGONQUIN INCREMENTAL MARKET PIPELINE

   SPECTRA ENERGY PARTNERS CONSTRUCTED A 42" HIGH PRESSURE NATURAL GAS PIPELINE THROUGH THE SUBJECT SITE. THE APPROXIMATE LIMITS OF THEIR EASEMENT IS SHOWN. NO STRUCTURES ARE PERMITTED OVER THE PIPELINE.

Legend

- BOUNDARY (MUNI.)
- STRUCTURE
- 5-FT CONTOUR
- AIM PIPELINE
- LANDS RETAINED BY CON ED
- SITE BOUNDARY
- EASEMENT
- PARCEL
- PAVEMENT
- ROAD
- WATERBODY
- AREAS FOR DEVELOPMENT
- LANDS TO BE RESERVED

TOWN OF CORTLANDT
DEPARTMENT OF
TECHNICAL SERVICES

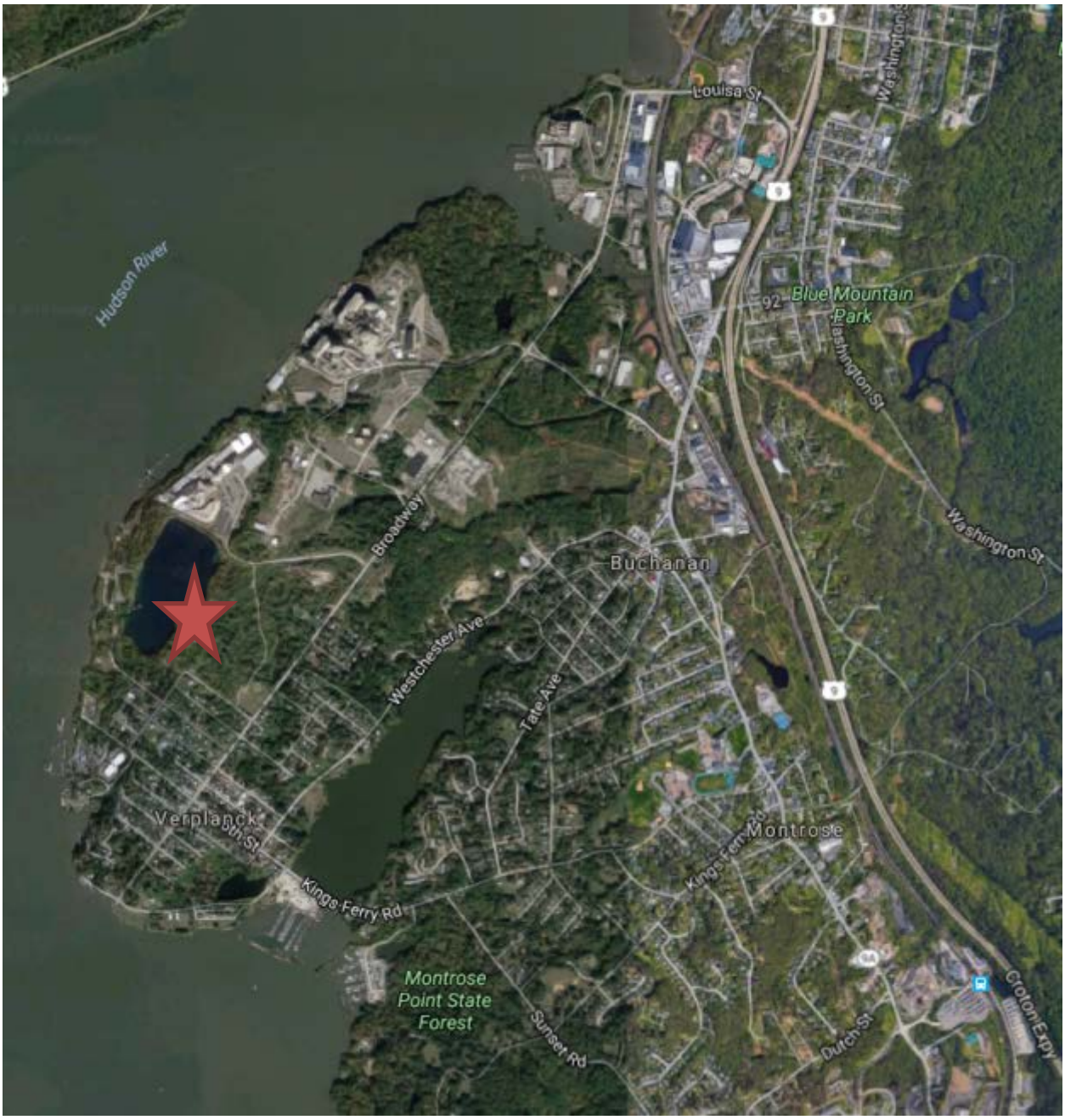
1 HEADY STREET
CORTLANDT MANOR
NEW YORK 10567

0 80 160 320 480 640 Feet

1 inch = 160 feet

ATTACHMENT B

“LOCATION MAP”



LOCATION MAP: "QUARRY ON THE HUDSON"

ATTACHMENT C

“INITIAL WATER QUALITY ASSESSMENT”

LEGGETTE, BRASHEARS & GRAHAM, INC.

PROFESSIONAL GROUNDWATER AND
ENVIRONMENTAL ENGINEERING SERVICES

4 WESTCHESTER PARK DRIVE, SUITE 175
WHITE PLAINS, NY 10604
914-694-5711
FAX 914-694-5744
www.lbgweb.com

September 29, 2016

Via e-mail: ***MichaelP@townofcortlandt.com***

Mr. Michael Preziosi, P.E., Director
Department of Technical Services
Town of Cortlandt
One Heady Street
Cortlandt, NY 10567

RE: Quarry Pond Sampling
Cortlandt Manor, New York

Dear Mr. Preziosi:

On September 7, 2016, Leggette Brashears & Graham Inc. (LBG) collected surface water samples from the Quarry Pond located off of 9th Street in Cortlandt Manor. The purpose of the sampling was to establish baseline water quality and determine if there is any evidence of potential environmental impacts from surrounding properties including Con Edison, the adjacent Continental Building Products gypsum plant and the Indian Point Power facility. The pond itself is a former quarry that flooded in the early 1940's when a water-bearing fracture was struck during operations. The pond is approximately 31 acres and is reportedly up to 300 feet deep.

To assess baseline water quality LBG collected 4 samples, two from the north end of the pond and two from the south end of the pond. At each location one sample was collected from 10 feet below the surface and a second from 60 feet below the surface, which was the limit of our sampling equipment. The samples were collected with a submersible pump and dedicated disposable tubing. All of the samples were analyzed for the following parameters which include basic water quality parameters and potential contaminants of concern from the surrounding properties noted above:

- petroleum related volatile and semivolatile organics and solvents;
- pesticides and herbicides;
- PCBs;
- metals;

- calcium, sulfate, phosphate, nitrate, ammonia, sodium and cyanide;
- temperature and pH (measured in the field); and,
- radiologicals including radon, gross alpha and beta, radium 226 and 228, strontium-90, tritium and total uranium.

The samples were submitted to two different laboratories. Pace Analytical of Greensburg, Pennsylvania completed the radiological analyses and York Laboratories of Stratford, Connecticut completed the analyses for all non-radiological parameters, with the exception of temperature and pH. Copies of the laboratory reports from both labs are attached.

Below is a summary and assessment of the results. The Quarry Pond is an un-classified surface water body that the Town is considering to use for recreational purposes and possibly as a drinking water source. In order to evaluate the analytical results we compared them to surface water standards for class A, AA surface waters per 6 NYCRR Part 703.5. In accordance with 6 NYCRR Part 701, Class A, AA surface waters are those considered suitable for use as drinking water supplies, with treatment needed only for disinfection and to remove naturally present impurities. In the absence of a Class A, AA standard for a particular parameter, we deferred to the following regulations and guidance: the New York State Department of Environmental Conservation (NYSDEC) Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1; the United States Environmental Protection Agency (USEPA) National Primary Drinking Water Regulations and proposed USEPA Drinking Water Standards (for radon).

- The following analytes were not detected in any of the samples: volatile and semivolatile organics, pesticides, herbicides, PCBs, mercury, cyanide, nitrate and ammonia nitrogen, total phosphorus, tritium and strontium-90.

- The following parameters were detected as summarized on tables 1 and 2: metals, calcium, sodium, sulfate, radon, gross alpha, gross beta, radium 226, radium 228 and total uranium. With the exception of gross alpha, the detected concentrations are all below the drinking water standards noted on the tables and in our opinion are related to naturally occurring sources. Gross alpha slightly exceeds the drinking water standard of 15 picocuries per liter in three of the four samples when the +/- variation factor is added to the result (table 2). If the Quarry Pond were to be used as a drinking water source, treatment for gross alpha might be required. However, additional sampling would be needed before that determination could be made. The gross alpha is naturally occurring and would not prevent use of the pond for recreational purposes.

- Measurements of temperature and pH are listed on table 3. The measurements were made at each sampling location, every 5 feet, from 5 to 60 feet below the water surface. The pH ranged between 8.14 and 8.30 which is within the acceptable range of 6.5–8.5. The temperature ranged between 77.43 and 54.03 degrees Fahrenheit. The temperature in the upper 25 to 30 feet of water

was fairly consistent ranging between 76–78 degrees. Below 25-30 feet the temperature begins to drop steadily reaching between 54 and 57 degrees at 60 feet.

Based on our review of the sampling results, it is our opinion that they show no indication of adverse environmental impacts from surrounding land uses including Con Edison, the Continental Building Products gypsum plant or the Indian Point Power facility. The results also indicate that the Quarry Pond would be suitable for recreational uses and as a potential drinking water source. It should be noted that additional sampling and regulatory approvals would be required before the pond could be put into service as a water supply source.

If you have any questions or need any additional information please do not hesitate to contact me.

Very truly yours,

LEGGETTE, BRASHEARS & GRAHAM, INC.

John Benvegna, CPG
Vice President

JB:dmd
Attachment
f:\reports\town of cortlandt\quarry pond\sampling ltr.docx

TABLES

TABLE 1

TOWN OF CORTLAND
QUARRY POND

Summary of Non-Radiological Detections
September 7, 2016
(all results are in mg/l)

Sample ID / Compound	South Shallow (10')	South Deep (60')	North Shallow (10')	North Deep (60')	Standard [1/]
Antimony	ND	ND	ND	ND	0.003
Arsenic	0.006	ND	0.009	0.011	0.05
Beryllium	ND	ND	ND	ND	0.003 [2/]
Cadmium	ND	ND	ND	ND	0.01
Chromium	ND	ND	ND	ND	0.05
Copper	0.007	0.006	0.005	0.005	0.20
Lead	0.006	0.005	0.004	ND	0.03
Nickel	ND	ND	ND	ND	0.10
Selenium	ND	ND	ND	ND	0.01
Silver	ND	ND	ND	ND	0.05
Thallium	ND	ND	0.007	0.011	0.50 [2/]
Zinc	0.035	0.041	0.039	0.040	0.30
Calcium	79.6	86.2	74.1	86.1	NS
Sodium	16.3	16.3	15.3	16.6	20
Sulfate	232	227	245	236	250

ND - Not detected
1/ Water Quality Standards for Class A, AA Surface Water per 6 NYCRR Parts 700 - 705 unless otherwise noted
2/ Guidance Value for A, AA Surface Water per NYSDEC TOGS 1.1.1 June 1998

TABLE 2

TOWN OF CORTLAND
QUARRY POND

Summary of Radiological Results
September 7, 2016

Sample ID / Compound	Units	South Shallow (10')	South Deep (60')	North Shallow (10')	North Deep (60')	Standards (see notes)
Radon	pCi/L	ND	28.6 +/- 25.9	ND	ND	300 / 4,000 [1/]
Gross Alpha	pCi/L	9.81 +/- 3.11	11.4 +/- 3.74	14.1 +/- 3.93	13.0 +/- 4.14	15 [2/]
Gross Beta	pCi/L	4.78 +/- 1.28	4.57 +/- 1.49	6.78 +/- 1.55	7.59 +/- 1.90	1,000 [2/]
Radium-226	pCi/L	0.345 +/- 0.395	ND	ND	0.379 +/- 0.396	3 / 5 [3/]
Radium-228	pCi/L	1.14 +/- 0.416	1.03 +/- 0.397	1.59 +/- 0.495	1.18 +/- 0.448	5 [3/]
Strontium-90	pCi/L	ND	ND	ND	ND	8 [2/]
Tritium	pCi/L	ND	ND	ND	ND	20,000 [2/]
Total Uranium	ug/l	9.42 +/- 0.192	11 +/- 0.225	10.4 +/- 0.211	10.4 +/- 0.214	30 [4/]

pCi/L = picocuries per liter ug/l = micrograms per liter

1/ Proposed USEPA drinking water standards.

2/ NYS Class A, AA Surface Water Standard for potential drinking water sources per 6 NYCRR Parts 700 - 705.

3/ Combined total for Radium 226 & 228 is 5 pCi/l. NYS Class A, AA Surface Water Standard for potential drinking water sources per 6 NYCRR Parts 700 - 705.

4/ USEPA National Primary Drinking Water Regulations.

TABLE 3

TOWN OF CORTLAND MANOR
QUARRY POND

Field Measurements
September 7, 2016

Sample Location	Depth (feet)[1/]	pH (units)	Temperature	
			Celsius[2/]	Fahrenheit[3/]
North End	5	8.18	25.24	77.43
	10	8.19	25.06	77.11
	15	8.19	25.02	77.04
	20	8.19	24.98	76.96
	25	8.20	24.96	76.93
	30	8.17	20.93	69.67
	35	8.18	20.30	68.54
	40	8.25	18.07	64.53
	45	8.30	16.18	61.12
	50	8.22	13.00	55.40
	55	8.19	12.72	54.90
	60	8.14	12.24	54.03
South End	5	8.15	25.13	77.23
	10	8.18	24.70	76.46
	15	8.18	24.74	76.53
	20	8.19	24.72	76.50
	25	8.18	24.74	76.53
	30	8.18	24.75	76.55
	35	8.10	20.90	69.62
	40	8.17	18.88	65.98
	45	8.21	18.19	64.74
	50	8.25	16.47	61.65
	55	8.26	14.75	58.55
	60	8.17	13.65	56.57

1/ Feet below water surface
2/ Measured
3/ Converted

LABORATORY REPORTS

Technical Report

prepared for:

Leggette Brashears & Graham White Plains Office
4 Westchester Park Drive, Suite 175
White Plains NY, 10604
Attention: John Benvegna

Report Date: 09/16/2016
Client Project ID: TOC Quarry
York Project (SDG) No.: 16I0228

Report Date: 09/16/2016
Client Project ID: TOC Quarry
York Project (SDG) No.: 16I0228

Leggette Brashears & Graham White Plains Office
4 Westchester Park Drive, Suite 175
White Plains NY, 10604
Attention: John Benvegna

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on September 08, 2016 and listed below. The project was identified as your project: **TOC Quarry**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the attachment to this report, and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
16I0228-01	South Deep (60')	Water	09/07/2016	09/08/2016
16I0228-02	South Shallow (10')	Water	09/07/2016	09/08/2016
16I0228-03	North Shallow (10')	Water	09/07/2016	09/08/2016
16I0228-04	North Deep (60')	Water	09/07/2016	09/08/2016
16I0228-05	Trip Blank	Water	09/07/2016	09/08/2016

General Notes for York Project (SDG) No.: 16I0228

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation, unless otherwise noted.
6. All analyses conducted met method or Laboratory SOP requirements. See the Qualifiers and/or Narrative sections for further information.
7. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
8. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.

Approved By: 

Date: 09/16/2016

Benjamin Gulizia
Laboratory Director

Sample Information

Client Sample ID: South Deep (60')

York Sample ID: 16I0228-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 11:10 am	09/08/2016

Volatile Organics, 8260 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
71-55-6	1,1,1-Trichloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
79-00-5	1,1,2-Trichloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
75-34-3	1,1-Dichloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
75-35-4	1,1-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
563-58-6	1,1-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
96-18-4	1,2,3-Trichloropropane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
106-93-4	1,2-Dibromoethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
107-06-2	1,2-Dichloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
78-87-5	1,2-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
142-28-9	1,3-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Sample Information

Client Sample ID: South Deep (60')

York Sample ID: 16I0228-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 11:10 am	09/08/2016

Volatile Organics, 8260 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
594-20-7	2,2-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51 NELAC-NY10854,NJDEP,PADEP	09/15/2016 21:55	BK
78-93-3	2-Butanone	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51 CTDOH,NELAC-NY10854,NJDEP,PADEP	09/15/2016 21:55	BK
95-49-8	2-Chlorotoluene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51 CTDOH,NELAC-NY10854,NJDEP,PADEP	09/15/2016 21:55	BK
106-43-4	4-Chlorotoluene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51 CTDOH,NELAC-NY10854,NJDEP,PADEP	09/15/2016 21:55	BK
67-64-1	Acetone	ND		ug/L	5.0	10	1	EPA 8260C Certifications:	09/15/2016 17:51 CTDOH,NELAC-NY10854,NJDEP,PADEP	09/15/2016 21:55	BK
71-43-2	Benzene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51 CTDOH,NELAC-NY10854,NJDEP,PADEP	09/15/2016 21:55	BK
108-86-1	Bromobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51 NELAC-NY10854,NJDEP,PADEP	09/15/2016 21:55	BK
74-97-5	Bromochloromethane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51 NELAC-NY10854,NJDEP,PADEP	09/15/2016 21:55	BK
75-27-4	Bromodichloromethane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51 CTDOH,NELAC-NY10854,NJDEP,PADEP	09/15/2016 21:55	BK
75-25-2	Bromoform	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51 CTDOH,NELAC-NY10854,NJDEP,PADEP	09/15/2016 21:55	BK
74-83-9	Bromomethane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51 CTDOH,NELAC-NY10854,NJDEP,PADEP	09/15/2016 21:55	BK
56-23-5	Carbon tetrachloride	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51 CTDOH,NELAC-NY10854,NJDEP,PADEP	09/15/2016 21:55	BK
108-90-7	Chlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51 CTDOH,NELAC-NY10854,NJDEP,PADEP	09/15/2016 21:55	BK
75-00-3	Chloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51 CTDOH,NELAC-NY10854,NJDEP,PADEP	09/15/2016 21:55	BK
67-66-3	Chloroform	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51 CTDOH,NELAC-NY10854,NJDEP,PADEP	09/15/2016 21:55	BK
74-87-3	Chloromethane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51 CTDOH,NELAC-NY10854,NJDEP,PADEP	09/15/2016 21:55	BK
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51 CTDOH,NELAC-NY10854,NJDEP,PADEP	09/15/2016 21:55	BK
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51 CTDOH,NELAC-NY10854,NJDEP,PADEP	09/15/2016 21:55	BK
124-48-1	Dibromochloromethane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51 CTDOH,NELAC-NY10854,NJDEP,PADEP	09/15/2016 21:55	BK
74-95-3	Dibromomethane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51 NELAC-NY10854,NJDEP,PADEP	09/15/2016 21:55	BK
75-71-8	Dichlorodifluoromethane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51 NELAC-NY10854,NJDEP,PADEP	09/15/2016 21:55	BK
100-41-4	Ethyl Benzene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51 CTDOH,NELAC-NY10854,NJDEP,PADEP	09/15/2016 21:55	BK

Sample Information

Client Sample ID: South Deep (60')

York Sample ID: 16I0228-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 11:10 am	09/08/2016

Volatile Organics, 8260 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
87-68-3	Hexachlorobutadiene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
98-82-8	Isopropylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
75-09-2	Methylene chloride	ND		ug/L	2.5	10	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
91-20-3	Naphthalene	ND		ug/L	2.5	10	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
104-51-8	n-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
103-65-1	n-Propylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
95-47-6	o-Xylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	CTDOH,NELAC-NY10854,PADEP		
179601-23-1	p- & m- Xylenes	ND		ug/L	5.0	10	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	CTDOH,NELAC-NY10854,PADEP		
99-87-6	p-Isopropyltoluene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
135-98-8	sec-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
100-42-5	Styrene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
98-06-6	tert-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
127-18-4	Tetrachloroethylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
108-88-3	Toluene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
79-01-6	Trichloroethylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
75-69-4	Trichlorofluoromethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
108-05-4	Vinyl acetate	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	NELAC-NY10854,NJDEP		
75-01-4	Vinyl Chloride	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
1330-20-7	Xylenes, Total	ND		ug/L	7.5	15	1	EPA 8260C	09/15/2016 17:51	09/15/2016 21:55	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		

Sample Information

Client Sample ID: South Deep (60')

York Sample ID: 16I0228-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 11:10 am	09/08/2016

Volatile Organics, 8260 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate Recoveries	**Result**			**Acceptance Range**						
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*101 %*			*69-130*						
2037-26-5	*Surrogate: Toluene-d8*	*99.4 %*			*81-117*						
460-00-4	*Surrogate: p-Bromofluorobenzene*	*105 %*			*79-122*						

Semi-Volatiles, PAH Target List

Log-in Notes:

Sample Notes: EXT-EM

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	2-Methylnaphthalene	ND		ug/L	2.83	5.13	1	EPA 8270D	09/12/2016 04:21	09/12/2016 14:23	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
83-32-9	Acenaphthene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	09/12/2016 04:21	09/12/2016 17:39	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
208-96-8	Acenaphthylene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	09/12/2016 04:21	09/12/2016 17:39	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
120-12-7	Anthracene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	09/12/2016 04:21	09/12/2016 17:39	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
56-55-3	Benzo(a)anthracene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	09/12/2016 04:21	09/12/2016 17:39	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
50-32-8	Benzo(a)pyrene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	09/12/2016 04:21	09/12/2016 17:39	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
205-99-2	Benzo(b)fluoranthene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	09/12/2016 04:21	09/12/2016 17:39	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	09/12/2016 04:21	09/12/2016 17:39	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
207-08-9	Benzo(k)fluoranthene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	09/12/2016 04:21	09/12/2016 17:39	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
218-01-9	Chrysene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	09/12/2016 04:21	09/12/2016 17:39	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
53-70-3	Dibenzo(a,h)anthracene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	09/12/2016 04:21	09/12/2016 17:39	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
206-44-0	Fluoranthene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	09/12/2016 04:21	09/12/2016 17:39	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
86-73-7	Fluorene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	09/12/2016 04:21	09/12/2016 17:39	SR
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	09/12/2016 04:21	09/12/2016 17:39	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
91-20-3	Naphthalene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	09/12/2016 04:21	09/12/2016 17:39	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
85-01-8	Phenanthrene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	09/12/2016 04:21	09/12/2016 17:39	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
129-00-0	Pyrene	ND		ug/L	0.0513	0.0513	1	EPA 8270D	09/12/2016 04:21	09/12/2016 17:39	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Sample Information

Client Sample ID: South Deep (60')

York Sample ID: 16I0228-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 11:10 am	09/08/2016

Semi-Volatiles, PAH Target List

Log-in Notes:

Sample Notes: EXT-EM

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate Recoveries	**Result**			**Acceptance Range**						
4165-60-0	*Surrogate: Nitrobenzene-d5*	*%*			*12-96*						
321-60-8	*Surrogate: 2-Fluorobiphenyl*	*56.6 %*			*16-84*						
1718-51-0	*Surrogate: Terphenyl-d14*	*47.0 %*			*15-106*						

Pesticides, 8081 target list

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 13:45	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
72-55-9	4,4'-DDE	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 13:45	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
50-29-3	4,4'-DDT	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 13:45	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
309-00-2	Aldrin	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 13:45	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
319-84-6	alpha-BHC	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 13:45	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
5103-71-9	alpha-Chlordane	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 13:45	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
319-85-7	beta-BHC	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 13:45	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
57-74-9	Chlordane, total	ND		ug/L	0.0410	0.0410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 13:45	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
319-86-8	delta-BHC	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 13:45	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
60-57-1	Dieldrin	ND		ug/L	0.00205	0.00205	1	EPA 8081B	09/12/2016 04:27	09/12/2016 13:45	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
959-98-8	Endosulfan I	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 13:45	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
33213-65-9	Endosulfan II	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 13:45	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
1031-07-8	Endosulfan sulfate	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 13:45	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
72-20-8	Endrin	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 13:45	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7421-93-4	Endrin aldehyde	ND		ug/L	0.0103	0.0103	1	EPA 8081B	09/12/2016 04:27	09/12/2016 13:45	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
53494-70-5	Endrin ketone	ND		ug/L	0.0103	0.0103	1	EPA 8081B	09/12/2016 04:27	09/12/2016 13:45	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
58-89-9	gamma-BHC (Lindane)	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 13:45	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Sample Information

Client Sample ID: South Deep (60')

York Sample ID: 16I0228-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 11:10 am	09/08/2016

Pesticides, 8081 target list

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
5566-34-7	gamma-Chlordane	ND		ug/L	0.0103	0.0103	1	EPA 8081B	09/12/2016 04:27	09/12/2016 13:45	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
76-44-8	Heptachlor	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 13:45	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
1024-57-3	Heptachlor epoxide	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 13:45	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
72-43-5	Methoxychlor	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 13:45	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
8001-35-2	Toxaphene	ND		ug/L	0.103	0.103	1	EPA 8081B	09/12/2016 04:27	09/12/2016 13:45	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

	Surrogate Recoveries	Result	Acceptance Range
2051-24-3	*Surrogate: Decachlorobiphenyl*	*41.0 %*	*30-150*
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*35.4 %*	*30-150*

Polychlorinated Biphenyls (PCB)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		ug/L	0.0513	0.0513	1	EPA 8082A	09/12/2016 04:27	09/13/2016 15:17	AMC
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		
11104-28-2	Aroclor 1221	ND		ug/L	0.0513	0.0513	1	EPA 8082A	09/12/2016 04:27	09/13/2016 15:17	AMC
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		
11141-16-5	Aroclor 1232	ND		ug/L	0.0513	0.0513	1	EPA 8082A	09/12/2016 04:27	09/13/2016 15:17	AMC
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		
53469-21-9	Aroclor 1242	ND		ug/L	0.0513	0.0513	1	EPA 8082A	09/12/2016 04:27	09/13/2016 15:17	AMC
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		
12672-29-6	Aroclor 1248	ND		ug/L	0.0513	0.0513	1	EPA 8082A	09/12/2016 04:27	09/13/2016 15:17	AMC
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		
11097-69-1	Aroclor 1254	ND		ug/L	0.0513	0.0513	1	EPA 8082A	09/12/2016 04:27	09/13/2016 15:17	AMC
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		
11096-82-5	Aroclor 1260	ND		ug/L	0.0513	0.0513	1	EPA 8082A	09/12/2016 04:27	09/13/2016 15:17	AMC
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		
1336-36-3	* Total PCBs	ND		ug/L	0.0513	0.0513	1	EPA 8082A	09/12/2016 04:27	09/13/2016 15:17	AMC
								Certifications:			

	Surrogate Recoveries	Result	Acceptance Range
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*43.5 %*	*30-120*
2051-24-3	*Surrogate: Decachlorobiphenyl*	*56.5 %*	*30-120*

Herbicides, Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3535A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst

Sample Information

Client Sample ID: **South Deep (60')** **York Sample ID:** **16I0228-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 11:10 am	09/08/2016

Herbicides, Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3535A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
93-76-5	2,4,5-T	ND		ug/L	5.00	5.00	1	EPA 8151A	09/14/2016 09:17	09/15/2016 11:29	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
93-72-1	2,4,5-TP (Silvex)	ND		ug/L	5.00	5.00	1	EPA 8151A	09/14/2016 09:17	09/15/2016 11:29	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
94-75-7	2,4-D	ND		ug/L	5.00	5.00	1	EPA 8151A	09/14/2016 09:17	09/15/2016 11:29	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

	Surrogate Recoveries	Result	Acceptance Range
19719-28-9	*Surrogate: 2,4-Dichlorophenylacetic acid (DCAA)*	*146 %*	*30-150*

Calcium by EPA 6010

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-70-2	**Calcium**	**86.2**		mg/L	0.0556	0.0556	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:02	KV
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Metals, Priority Pollutant

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	ND		mg/L	0.006	0.006	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:02	KV
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-38-2	Arsenic	ND		mg/L	0.004	0.004	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:02	KV
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-41-7	Beryllium	ND		mg/L	0.001	0.001	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:02	KV
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-43-9	Cadmium	ND		mg/L	0.003	0.003	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:02	KV
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-47-3	Chromium	ND		mg/L	0.006	0.006	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:02	KV
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-50-8	**Copper**	**0.006**		mg/L	0.003	0.003	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:02	KV
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-92-1	**Lead**	**0.005**		mg/L	0.003	0.003	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:02	KV
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-02-0	Nickel	ND		mg/L	0.006	0.006	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:02	KV
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7782-49-2	Selenium	ND		mg/L	0.011	0.011	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:02	KV
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-22-4	Silver	ND		mg/L	0.006	0.006	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:02	KV
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-28-0	Thallium	ND		mg/L	0.006	0.006	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:02	KV
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Sample Information

Client Sample ID: South Deep (60') **York Sample ID:** 16I0228-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 11:10 am	09/08/2016

Metals, Priority Pollutant

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-66-6	**Zinc**	**0.041**		mg/L	0.011	0.011	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:02	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Sodium by EPA 6010

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-23-5	**Sodium**	**16.3**		mg/L	0.111	0.111	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:02	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Mercury by 7473

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 7473 water

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.00020	0.00020	1	EPA 7473	09/09/2016 06:36	09/12/2016 09:06	ALD
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Nitrate as N

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14797-55-8	Nitrate as N	ND		mg/L	0.0120	0.0500	1	EPA 300.0	09/08/2016 20:13	09/08/2016 20:13	TJM
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		

Sulfate as SO4

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14808-79-8	**Sulfate**	**227**		mg/L	0.860	10.0	10	EPA 300.0	09/09/2016 11:36	09/09/2016 11:36	n.a.
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		

Ammonia Nitrogen as N

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7664-41-7	Ammonia Nitrogen as N	ND		mg/L	0.0500	0.0500	1	SM 4500-NH3 D	09/13/2016 07:44	09/13/2016 14:16	SC
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		

Cyanide, Total

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
57-12-5	Cyanide, total	ND		mg/L	0.0100	0.0100	1	SM 4500 CN C/E	09/12/2016 08:37	09/12/2016 14:21	AD
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		

Sample Information

Client Sample ID: South Deep (60') **York Sample ID:** 16I0228-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 11:10 am	09/08/2016

Phosphorous, total

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Phosphorous, Total as P	ND		mg/L	0.0500	0.0500	1	SM 4500-P B5/E	09/15/2016 07:33	09/15/2016 13:50	SC
								Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP			

Sample Information

Client Sample ID: South Shallow (10') **York Sample ID:** 16I0228-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 11:40 am	09/08/2016

Volatile Organics, 8260 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
71-55-6	1,1,1-Trichloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
79-00-5	1,1,2-Trichloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
75-34-3	1,1-Dichloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
75-35-4	1,1-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
563-58-6	1,1-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications: NELAC-NY10854,NJDEP,PADEP			
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications: NELAC-NY10854,NJDEP,PADEP			
96-18-4	1,2,3-Trichloropropane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications: NELAC-NY10854,NJDEP,PADEP			
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications: NELAC-NY10854,NJDEP,PADEP			
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
106-93-4	1,2-Dibromoethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Sample Information

Client Sample ID: South Shallow (10') **York Sample ID:** 16I0228-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 11:40 am	09/08/2016

Volatile Organics, 8260 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
107-06-2	1,2-Dichloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
78-87-5	1,2-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
142-28-9	1,3-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
594-20-7	2,2-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
78-93-3	2-Butanone	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
95-49-8	2-Chlorotoluene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
106-43-4	4-Chlorotoluene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
67-64-1	Acetone	ND		ug/L	5.0	10	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
71-43-2	Benzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
108-86-1	Bromobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
74-97-5	Bromochloromethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
75-27-4	Bromodichloromethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
75-25-2	Bromoform	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
74-83-9	Bromomethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
56-23-5	Carbon tetrachloride	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
108-90-7	Chlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
75-00-3	Chloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
67-66-3	Chloroform	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Sample Information

Client Sample ID: **South Shallow (10')** **York Sample ID:** **16I0228-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 11:40 am	09/08/2016

Volatile Organics, 8260 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-87-3	Chloromethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
124-48-1	Dibromochloromethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
74-95-3	Dibromomethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
75-71-8	Dichlorodifluoromethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
100-41-4	Ethyl Benzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
87-68-3	Hexachlorobutadiene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
98-82-8	Isopropylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
75-09-2	Methylene chloride	ND		ug/L	2.5	10	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
91-20-3	Naphthalene	ND		ug/L	2.5	10	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
104-51-8	n-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
103-65-1	n-Propylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
95-47-6	o-Xylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,PADEP		
179601-23-1	p- & m- Xylenes	ND		ug/L	5.0	10	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,PADEP		
99-87-6	p-Isopropyltoluene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
135-98-8	sec-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
100-42-5	Styrene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
98-06-6	tert-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
127-18-4	Tetrachloroethylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
108-88-3	Toluene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Sample Information

Client Sample ID: South Shallow (10')

York Sample ID: 16I0228-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 11:40 am	09/08/2016

Volatile Organics, 8260 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
79-01-6	Trichloroethylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
75-69-4	Trichlorofluoromethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
108-05-4	Vinyl acetate	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	NELAC-NY10854,NJDEP		
75-01-4	Vinyl Chloride	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
1330-20-7	Xylenes, Total	ND		ug/L	7.5	15	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:23	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*102 %*	*69-130*
2037-26-5	*Surrogate: Toluene-d8*	*99.9 %*	*81-117*
460-00-4	*Surrogate: p-Bromofluorobenzene*	*105 %*	*79-122*

Semi-Volatiles, PAH Target List

Log-in Notes:

Sample Notes: EXT-EM

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	2-Methylnaphthalene	ND		ug/L	2.91	5.26	1	EPA 8270D	09/12/2016 04:21	09/12/2016 14:56	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
83-32-9	Acenaphthene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 18:10	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
208-96-8	Acenaphthylene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 18:10	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
120-12-7	Anthracene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 18:10	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
56-55-3	Benzo(a)anthracene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 18:10	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
50-32-8	Benzo(a)pyrene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 18:10	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
205-99-2	Benzo(b)fluoranthene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 18:10	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 18:10	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
207-08-9	Benzo(k)fluoranthene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 18:10	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
218-01-9	Chrysene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 18:10	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Sample Information

Client Sample ID: South Shallow (10') **York Sample ID:** 16I0228-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 11:40 am	09/08/2016

Semi-Volatiles, PAH Target List

Log-in Notes:

Sample Notes: EXT-EM

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
53-70-3	Dibenzo(a,h)anthracene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 18:10	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
206-44-0	Fluoranthene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 18:10	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
86-73-7	Fluorene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 18:10	SR
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 18:10	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
91-20-3	Naphthalene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 18:10	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
85-01-8	Phenanthrene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 18:10	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
129-00-0	Pyrene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 18:10	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

	Surrogate Recoveries	Result	Acceptance Range
4165-60-0	*Surrogate: Nitrobenzene-d5*	*73.2 %*	*12-96*
321-60-8	*Surrogate: 2-Fluorobiphenyl*	*64.8 %*	*16-84*
1718-51-0	*Surrogate: Terphenyl-d14*	*53.9 %*	*15-106*

Pesticides, 8081 target list

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:00	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
72-55-9	4,4'-DDE	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:00	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
50-29-3	4,4'-DDT	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:00	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
309-00-2	Aldrin	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:00	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
319-84-6	alpha-BHC	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:00	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
5103-71-9	alpha-Chlordane	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:00	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
319-85-7	beta-BHC	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:00	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
57-74-9	Chlordane, total	ND		ug/L	0.0410	0.0410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:00	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
319-86-8	delta-BHC	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:00	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
60-57-1	Dieldrin	ND		ug/L	0.00205	0.00205	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:00	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Sample Information

Client Sample ID: **South Shallow (10')** **York Sample ID:** **16I0228-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 11:40 am	09/08/2016

Pesticides, 8081 target list

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
959-98-8	Endosulfan I	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:00	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
33213-65-9	Endosulfan II	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:00	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
1031-07-8	Endosulfan sulfate	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:00	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
72-20-8	Endrin	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:00	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7421-93-4	Endrin aldehyde	ND		ug/L	0.0103	0.0103	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:00	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
53494-70-5	Endrin ketone	ND		ug/L	0.0103	0.0103	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:00	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
58-89-9	gamma-BHC (Lindane)	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:00	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
5566-34-7	gamma-Chlordane	ND		ug/L	0.0103	0.0103	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:00	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
76-44-8	Heptachlor	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:00	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
1024-57-3	Heptachlor epoxide	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:00	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
72-43-5	Methoxychlor	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:00	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
8001-35-2	Toxaphene	ND		ug/L	0.103	0.103	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:00	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

	Surrogate Recoveries	Result	Acceptance Range
2051-24-3	*Surrogate: Decachlorobiphenyl*	*48.4 %*	*30-150*
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*38.1 %*	*30-150*

Polychlorinated Biphenyls (PCB)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		ug/L	0.0513	0.0513	1	EPA 8082A	09/12/2016 04:27	09/13/2016 15:47	AMC
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		
11104-28-2	Aroclor 1221	ND		ug/L	0.0513	0.0513	1	EPA 8082A	09/12/2016 04:27	09/13/2016 15:47	AMC
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		
11141-16-5	Aroclor 1232	ND		ug/L	0.0513	0.0513	1	EPA 8082A	09/12/2016 04:27	09/13/2016 15:47	AMC
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		
53469-21-9	Aroclor 1242	ND		ug/L	0.0513	0.0513	1	EPA 8082A	09/12/2016 04:27	09/13/2016 15:47	AMC
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		
12672-29-6	Aroclor 1248	ND		ug/L	0.0513	0.0513	1	EPA 8082A	09/12/2016 04:27	09/13/2016 15:47	AMC
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		

Sample Information

Client Sample ID: South Shallow (10') **York Sample ID:** 16I0228-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 11:40 am	09/08/2016

Polychlorinated Biphenyls (PCB)

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
11097-69-1	Aroclor 1254	ND		ug/L	0.0513	0.0513	1	EPA 8082A	09/12/2016 04:27	09/13/2016 15:47	AMC
								Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP			
11096-82-5	Aroclor 1260	ND		ug/L	0.0513	0.0513	1	EPA 8082A	09/12/2016 04:27	09/13/2016 15:47	AMC
								Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP			
1336-36-3	* Total PCBs	ND		ug/L	0.0513	0.0513	1	EPA 8082A	09/12/2016 04:27	09/13/2016 15:47	AMC
								Certifications:			

	Surrogate Recoveries	Result	Acceptance Range
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*41.5 %*	*30-120*
2051-24-3	*Surrogate: Decachlorobiphenyl*	*61.5 %*	*30-120*

Herbicides, Target List

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3535A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
93-76-5	2,4,5-T	ND		ug/L	5.00	5.00	1	EPA 8151A	09/14/2016 09:17	09/15/2016 11:45	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
93-72-1	2,4,5-TP (Silvex)	ND		ug/L	5.00	5.00	1	EPA 8151A	09/14/2016 09:17	09/15/2016 11:45	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
94-75-7	2,4-D	ND		ug/L	5.00	5.00	1	EPA 8151A	09/14/2016 09:17	09/15/2016 11:45	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

	Surrogate Recoveries	Result	Acceptance Range
19719-28-9	*Surrogate: 2,4-Dichlorophenylacetic acid (DCAA)*	*144 %*	*30-150*

Calcium by EPA 6010

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-70-2	**Calcium**	**79.6**		mg/L	0.0556	0.0556	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:20	KV
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Metals, Priority Pollutant

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	ND		mg/L	0.006	0.006	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:20	KV
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-38-2	**Arsenic**	**0.006**		mg/L	0.004	0.004	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:20	KV
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-41-7	Beryllium	ND		mg/L	0.001	0.001	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:20	KV
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-43-9	Cadmium	ND		mg/L	0.003	0.003	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:20	KV
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Sample Information

Client Sample ID: **South Shallow (10')** **York Sample ID:** **16I0228-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 11:40 am	09/08/2016

Metals, Priority Pollutant

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-47-3	Chromium	ND		mg/L	0.006	0.006	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:20	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-50-8	**Copper**	**0.007**		mg/L	0.003	0.003	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:20	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7439-92-1	**Lead**	**0.006**		mg/L	0.003	0.003	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:20	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-02-0	Nickel	ND		mg/L	0.006	0.006	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:20	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7782-49-2	Selenium	ND		mg/L	0.011	0.011	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:20	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-22-4	Silver	ND		mg/L	0.006	0.006	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:20	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-28-0	Thallium	ND		mg/L	0.006	0.006	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:20	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-66-6	**Zinc**	**0.035**		mg/L	0.011	0.011	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:20	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Sodium by EPA 6010

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-23-5	**Sodium**	**16.3**		mg/L	0.111	0.111	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:20	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Mercury by 7473

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 7473 water

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.00020	0.00020	1	EPA 7473	09/09/2016 06:36	09/12/2016 09:06	ALD
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Nitrate as N

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14797-55-8	Nitrate as N	ND		mg/L	0.0120	0.0500	1	EPA 300.0	09/08/2016 21:42	09/08/2016 21:42	TJM
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		

Sulfate as SO4

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14808-79-8	**Sulfate**	**232**		mg/L	0.860	10.0	10	EPA 300.0	09/09/2016 11:36	09/09/2016 11:36	n.a.
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		

Sample Information

Client Sample ID: South Shallow (10') **York Sample ID:** 16I0228-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 11:40 am	09/08/2016

Ammonia Nitrogen as N

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7664-41-7	Ammonia Nitrogen as N	ND		mg/L	0.0500	0.0500	1	SM 4500-NH3 D	09/13/2016 07:44	09/13/2016 14:16	SC
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		

Cyanide, Total

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
57-12-5	Cyanide, total	ND		mg/L	0.0100	0.0100	1	SM 4500 CN C/E	09/12/2016 08:37	09/12/2016 14:21	AD
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		

Phosphorous, total

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Phosphorous, Total as P	ND		mg/L	0.0500	0.0500	1	SM 4500-P B5/E	09/15/2016 07:33	09/15/2016 13:50	SC
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		

Sample Information

Client Sample ID: North Shallow (10') **York Sample ID:** 16I0228-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 1:15 pm	09/08/2016

Volatile Organics, 8260 List

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:50	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
71-55-6	1,1,1-Trichloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:50	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:50	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:50	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
79-00-5	1,1,2-Trichloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:50	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
75-34-3	1,1-Dichloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:50	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
75-35-4	1,1-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:50	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Sample Information

Client Sample ID: North Shallow (10') **York Sample ID:** 16I0228-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 1:15 pm	09/08/2016

Volatile Organics, 8260 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
563-58-6	1,1-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP,PADEP	09/15/2016 17:51	09/15/2016 22:50	BK
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP,PADEP	09/15/2016 17:51	09/15/2016 22:50	BK
96-18-4	1,2,3-Trichloropropane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP,PADEP	09/15/2016 17:51	09/15/2016 22:50	BK
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP,PADEP	09/15/2016 17:51	09/15/2016 22:50	BK
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	09/15/2016 17:51	09/15/2016 22:50	BK
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	09/15/2016 17:51	09/15/2016 22:50	BK
106-93-4	1,2-Dibromoethane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	09/15/2016 17:51	09/15/2016 22:50	BK
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	09/15/2016 17:51	09/15/2016 22:50	BK
107-06-2	1,2-Dichloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	09/15/2016 17:51	09/15/2016 22:50	BK
78-87-5	1,2-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	09/15/2016 17:51	09/15/2016 22:50	BK
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	09/15/2016 17:51	09/15/2016 22:50	BK
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	09/15/2016 17:51	09/15/2016 22:50	BK
142-28-9	1,3-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP,PADEP	09/15/2016 17:51	09/15/2016 22:50	BK
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	09/15/2016 17:51	09/15/2016 22:50	BK
594-20-7	2,2-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP,PADEP	09/15/2016 17:51	09/15/2016 22:50	BK
78-93-3	2-Butanone	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	09/15/2016 17:51	09/15/2016 22:50	BK
95-49-8	2-Chlorotoluene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	09/15/2016 17:51	09/15/2016 22:50	BK
106-43-4	4-Chlorotoluene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	09/15/2016 17:51	09/15/2016 22:50	BK
67-64-1	Acetone	ND		ug/L	5.0	10	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	09/15/2016 17:51	09/15/2016 22:50	BK
71-43-2	Benzene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	09/15/2016 17:51	09/15/2016 22:50	BK
108-86-1	Bromobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP,PADEP	09/15/2016 17:51	09/15/2016 22:50	BK
74-97-5	Bromochloromethane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP,PADEP	09/15/2016 17:51	09/15/2016 22:50	BK

Sample Information

Client Sample ID: North Shallow (10') **York Sample ID:** 16I0228-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 1:15 pm	09/08/2016

Volatile Organics, 8260 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-27-4	Bromodichloromethane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51	09/15/2016 22:50 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
75-25-2	Bromoform	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51	09/15/2016 22:50 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
74-83-9	Bromomethane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51	09/15/2016 22:50 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
56-23-5	Carbon tetrachloride	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51	09/15/2016 22:50 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
108-90-7	Chlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51	09/15/2016 22:50 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
75-00-3	Chloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51	09/15/2016 22:50 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
67-66-3	Chloroform	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51	09/15/2016 22:50 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
74-87-3	Chloromethane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51	09/15/2016 22:50 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51	09/15/2016 22:50 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51	09/15/2016 22:50 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
124-48-1	Dibromochloromethane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51	09/15/2016 22:50 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
74-95-3	Dibromomethane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51	09/15/2016 22:50 NELAC-NY10854,NJDEP,PADEP	BK
75-71-8	Dichlorodifluoromethane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51	09/15/2016 22:50 NELAC-NY10854,NJDEP,PADEP	BK
100-41-4	Ethyl Benzene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51	09/15/2016 22:50 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
87-68-3	Hexachlorobutadiene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51	09/15/2016 22:50 NELAC-NY10854,NJDEP,PADEP	BK
98-82-8	Isopropylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51	09/15/2016 22:50 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51	09/15/2016 22:50 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
75-09-2	Methylene chloride	ND		ug/L	2.5	10	1	EPA 8260C Certifications:	09/15/2016 17:51	09/15/2016 22:50 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
91-20-3	Naphthalene	ND		ug/L	2.5	10	1	EPA 8260C Certifications:	09/15/2016 17:51	09/15/2016 22:50 NELAC-NY10854,NJDEP,PADEP	BK
104-51-8	n-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51	09/15/2016 22:50 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
103-65-1	n-Propylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51	09/15/2016 22:50 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
95-47-6	o-Xylene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	09/15/2016 17:51	09/15/2016 22:50 CTDOH,NELAC-NY10854,PADEP	BK

Sample Information

Client Sample ID: North Shallow (10') **York Sample ID:** 16I0228-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 1:15 pm	09/08/2016

Volatile Organics, 8260 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
179601-23-1	p- & m- Xylenes	ND		ug/L	5.0	10	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:50	BK
								Certifications:	CTDOH,NELAC-NY10854,PADEP		
99-87-6	p-Isopropyltoluene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:50	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
135-98-8	sec-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:50	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
100-42-5	Styrene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:50	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
98-06-6	tert-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:50	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
127-18-4	Tetrachloroethylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:50	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
108-88-3	Toluene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:50	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:50	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:50	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
79-01-6	Trichloroethylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:50	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
75-69-4	Trichlorofluoromethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:50	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
108-05-4	Vinyl acetate	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:50	BK
								Certifications:	NELAC-NY10854,NJDEP		
75-01-4	Vinyl Chloride	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:50	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
1330-20-7	Xylenes, Total	ND		ug/L	7.5	15	1	EPA 8260C	09/15/2016 17:51	09/15/2016 22:50	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*103 %*	*69-130*
2037-26-5	*Surrogate: Toluene-d8*	*99.4 %*	*81-117*
460-00-4	*Surrogate: p-Bromofluorobenzene*	*105 %*	*79-122*

Semi-Volatiles, PAH Target List

Log-in Notes:

Sample Notes: EXT-EM

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	2-Methylnaphthalene	ND		ug/L	2.91	5.26	1	EPA 8270D	09/12/2016 04:21	09/12/2016 15:28	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
83-32-9	Acenaphthene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 18:40	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
208-96-8	Acenaphthylene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 18:40	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Sample Information

Client Sample ID: North Shallow (10') **York Sample ID:** 16I0228-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 1:15 pm	09/08/2016

Semi-Volatiles, PAH Target List

Log-in Notes:

Sample Notes: EXT-EM

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
120-12-7	Anthracene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 18:40	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
56-55-3	Benzo(a)anthracene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 18:40	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
50-32-8	Benzo(a)pyrene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 18:40	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
205-99-2	Benzo(b)fluoranthene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 18:40	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 18:40	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
207-08-9	Benzo(k)fluoranthene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 18:40	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
218-01-9	Chrysene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 18:40	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
53-70-3	Dibenzo(a,h)anthracene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 18:40	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
206-44-0	Fluoranthene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 18:40	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
86-73-7	Fluorene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 18:40	SR
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 18:40	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
91-20-3	Naphthalene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 18:40	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
85-01-8	Phenanthrene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 18:40	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
129-00-0	Pyrene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 18:40	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

	Surrogate Recoveries	Result	Acceptance Range
4165-60-0	*Surrogate: Nitrobenzene-d5*	*67.7 %*	*12-96*
321-60-8	*Surrogate: 2-Fluorobiphenyl*	*60.7 %*	*16-84*
1718-51-0	*Surrogate: Terphenyl-d14*	*50.7 %*	*15-106*

Pesticides, 8081 target list

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:29	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
72-55-9	4,4'-DDE	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:29	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
50-29-3	4,4'-DDT	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:29	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Sample Information

Client Sample ID: North Shallow (10') **York Sample ID:** 16I0228-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 1:15 pm	09/08/2016

Pesticides, 8081 target list

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
309-00-2	Aldrin	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:29	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
319-84-6	alpha-BHC	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:29	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
5103-71-9	alpha-Chlordane	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:29	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
319-85-7	beta-BHC	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:29	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
57-74-9	Chlordane, total	ND		ug/L	0.0410	0.0410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:29	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
319-86-8	delta-BHC	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:29	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
60-57-1	Dieldrin	ND		ug/L	0.00205	0.00205	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:29	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
959-98-8	Endosulfan I	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:29	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
33213-65-9	Endosulfan II	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:29	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
1031-07-8	Endosulfan sulfate	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:29	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
72-20-8	Endrin	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:29	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7421-93-4	Endrin aldehyde	ND		ug/L	0.0103	0.0103	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:29	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
53494-70-5	Endrin ketone	ND		ug/L	0.0103	0.0103	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:29	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
58-89-9	gamma-BHC (Lindane)	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:29	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
5566-34-7	gamma-Chlordane	ND		ug/L	0.0103	0.0103	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:29	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
76-44-8	Heptachlor	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:29	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
1024-57-3	Heptachlor epoxide	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:29	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
72-43-5	Methoxychlor	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:29	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
8001-35-2	Toxaphene	ND		ug/L	0.103	0.103	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:29	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

	Surrogate Recoveries	Result	Acceptance Range
2051-24-3	*Surrogate: Decachlorobiphenyl*	*57.7 %*	*30-150*
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*40.1 %*	*30-150*

Polychlorinated Biphenyls (PCB)

Log-in Notes:

Sample Notes:

Sample Information

Client Sample ID: **North Shallow (10')** **York Sample ID:** **16I0228-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 1:15 pm	09/08/2016

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		ug/L	0.0513	0.0513	1	EPA 8082A	09/12/2016 04:27	09/13/2016 16:16	AMC
								Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP			
11104-28-2	Aroclor 1221	ND		ug/L	0.0513	0.0513	1	EPA 8082A	09/12/2016 04:27	09/13/2016 16:16	AMC
								Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP			
11141-16-5	Aroclor 1232	ND		ug/L	0.0513	0.0513	1	EPA 8082A	09/12/2016 04:27	09/13/2016 16:16	AMC
								Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP			
53469-21-9	Aroclor 1242	ND		ug/L	0.0513	0.0513	1	EPA 8082A	09/12/2016 04:27	09/13/2016 16:16	AMC
								Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP			
12672-29-6	Aroclor 1248	ND		ug/L	0.0513	0.0513	1	EPA 8082A	09/12/2016 04:27	09/13/2016 16:16	AMC
								Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP			
11097-69-1	Aroclor 1254	ND		ug/L	0.0513	0.0513	1	EPA 8082A	09/12/2016 04:27	09/13/2016 16:16	AMC
								Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP			
11096-82-5	Aroclor 1260	ND		ug/L	0.0513	0.0513	1	EPA 8082A	09/12/2016 04:27	09/13/2016 16:16	AMC
								Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP			
1336-36-3	* Total PCBs	ND		ug/L	0.0513	0.0513	1	EPA 8082A	09/12/2016 04:27	09/13/2016 16:16	AMC
								Certifications:			

	Surrogate Recoveries	Result	Acceptance Range
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*38.5 %*	*30-120*
2051-24-3	*Surrogate: Decachlorobiphenyl*	*57.0 %*	*30-120*

Herbicides, Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3535A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
93-76-5	2,4,5-T	ND		ug/L	5.00	5.00	1	EPA 8151A	09/14/2016 09:17	09/15/2016 12:01	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
93-72-1	2,4,5-TP (Silvex)	ND		ug/L	5.00	5.00	1	EPA 8151A	09/14/2016 09:17	09/15/2016 12:01	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
94-75-7	2,4-D	ND		ug/L	5.00	5.00	1	EPA 8151A	09/14/2016 09:17	09/15/2016 12:01	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

	Surrogate Recoveries	Result	Acceptance Range
19719-28-9	*Surrogate: 2,4-Dichlorophenylacetic acid (DCAA)*	*149 %*	*30-150*

Calcium by EPA 6010

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-70-2	**Calcium**	**74.1**		mg/L	0.0556	0.0556	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:25	KV
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Metals, Priority Pollutant

Log-in Notes:

Sample Notes:

Sample Information

Client Sample ID: North Shallow (10') **York Sample ID:** 16I0228-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 1:15 pm	09/08/2016

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	ND		mg/L	0.006	0.006	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:25	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-38-2	**Arsenic**	**0.009**		mg/L	0.004	0.004	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:25	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-41-7	Beryllium	ND		mg/L	0.001	0.001	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:25	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-43-9	Cadmium	ND		mg/L	0.003	0.003	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:25	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-47-3	Chromium	ND		mg/L	0.006	0.006	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:25	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-50-8	**Copper**	**0.005**		mg/L	0.003	0.003	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:25	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7439-92-1	**Lead**	**0.004**		mg/L	0.003	0.003	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:25	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-02-0	Nickel	ND		mg/L	0.006	0.006	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:25	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7782-49-2	Selenium	ND		mg/L	0.011	0.011	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:25	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-22-4	Silver	ND		mg/L	0.006	0.006	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:25	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-28-0	**Thallium**	**0.007**		mg/L	0.006	0.006	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:25	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-66-6	**Zinc**	**0.039**		mg/L	0.011	0.011	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:25	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Sodium by EPA 6010

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-23-5	**Sodium**	**15.3**		mg/L	0.111	0.111	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:25	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Mercury by 7473

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 7473 water

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.00020	0.00020	1	EPA 7473	09/09/2016 06:36	09/12/2016 09:06	ALD
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Nitrate as N

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14797-55-8	Nitrate as N	ND		mg/L	0.0120	0.0500	1	EPA 300.0	09/08/2016 22:00	09/08/2016 22:00	TJM
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		

Sample Information

Client Sample ID: North Shallow (10') **York Sample ID:** 16I0228-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 1:15 pm	09/08/2016

Sulfate as SO4

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14808-79-8	**Sulfate**	**245**		mg/L	0.860	10.0	10	EPA 300.0	09/09/2016 11:36	09/09/2016 11:36	n.a.
								Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP			

Ammonia Nitrogen as N

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7664-41-7	Ammonia Nitrogen as N	ND		mg/L	0.0500	0.0500	1	SM 4500-NH3 D	09/13/2016 07:44	09/13/2016 14:16	SC
								Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP			

Cyanide, Total

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
57-12-5	Cyanide, total	ND		mg/L	0.0100	0.0100	1	SM 4500 CN C/E	09/12/2016 08:37	09/12/2016 14:21	AD
								Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP			

Phosphorous, total

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Phosphorous, Total as P	ND		mg/L	0.0500	0.0500	1	SM 4500-P B5/E	09/15/2016 07:33	09/15/2016 13:50	SC
								Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP			

Sample Information

Client Sample ID: North Deep (60') **York Sample ID:** 16I0228-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 2:00 pm	09/08/2016

Volatile Organics, 8260 List

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
71-55-6	1,1,1-Trichloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Sample Information

Client Sample ID: North Deep (60') **York Sample ID:** 16I0228-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 2:00 pm	09/08/2016

Volatile Organics, 8260 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-00-5	1,1,2-Trichloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
75-34-3	1,1-Dichloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
75-35-4	1,1-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
563-58-6	1,1-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
96-18-4	1,2,3-Trichloropropane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
106-93-4	1,2-Dibromoethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
107-06-2	1,2-Dichloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
78-87-5	1,2-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
142-28-9	1,3-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
594-20-7	2,2-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
78-93-3	2-Butanone	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
95-49-8	2-Chlorotoluene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
106-43-4	4-Chlorotoluene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
67-64-1	Acetone	ND		ug/L	5.0	10	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Sample Information

Client Sample ID: North Deep (60') **York Sample ID:** 16I0228-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 2:00 pm	09/08/2016

Volatile Organics, 8260 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
71-43-2	Benzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
108-86-1	Bromobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
74-97-5	Bromochloromethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
75-27-4	Bromodichloromethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
75-25-2	Bromoform	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
74-83-9	Bromomethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
56-23-5	Carbon tetrachloride	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
108-90-7	Chlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
75-00-3	Chloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
67-66-3	Chloroform	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
74-87-3	Chloromethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
124-48-1	Dibromochloromethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
74-95-3	Dibromomethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
75-71-8	Dichlorodifluoromethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
100-41-4	Ethyl Benzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
87-68-3	Hexachlorobutadiene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
98-82-8	Isopropylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
75-09-2	Methylene chloride	ND		ug/L	2.5	10	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
91-20-3	Naphthalene	ND		ug/L	2.5	10	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		

Sample Information

Client Sample ID: North Deep (60') **York Sample ID:** 16I0228-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 2:00 pm	09/08/2016

Volatile Organics, 8260 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
104-51-8	n-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
103-65-1	n-Propylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
95-47-6	o-Xylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,PADEP		
179601-23-1	p- & m- Xylenes	ND		ug/L	5.0	10	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,PADEP		
99-87-6	p-Isopropyltoluene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
135-98-8	sec-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
100-42-5	Styrene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
98-06-6	tert-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
127-18-4	Tetrachloroethylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
108-88-3	Toluene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
79-01-6	Trichloroethylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
75-69-4	Trichlorofluoromethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
108-05-4	Vinyl acetate	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	NELAC-NY10854,NJDEP		
75-01-4	Vinyl Chloride	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
1330-20-7	Xylenes, Total	ND		ug/L	7.5	15	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:18	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*101 %*	*69-130*
2037-26-5	*Surrogate: Toluene-d8*	*99.4 %*	*81-117*
460-00-4	*Surrogate: p-Bromofluorobenzene*	*107 %*	*79-122*

Semi-Volatiles, PAH Target List

Log-in Notes:

Sample Notes: EXT-EM

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst

Sample Information

Client Sample ID: North Deep (60') **York Sample ID:** 16I0228-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 2:00 pm	09/08/2016

Semi-Volatiles, PAH Target List

Log-in Notes:

Sample Notes: EXT-EM

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	2-Methylnaphthalene	ND		ug/L	2.91	5.26	1	EPA 8270D	09/12/2016 04:21	09/12/2016 16:00	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
83-32-9	Acenaphthene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 19:11	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
208-96-8	Acenaphthylene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 19:11	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
120-12-7	Anthracene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 19:11	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
56-55-3	Benzo(a)anthracene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 19:11	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
50-32-8	Benzo(a)pyrene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 19:11	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
205-99-2	Benzo(b)fluoranthene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 19:11	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 19:11	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
207-08-9	Benzo(k)fluoranthene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 19:11	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
218-01-9	Chrysene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 19:11	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
53-70-3	Dibenzo(a,h)anthracene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 19:11	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
206-44-0	Fluoranthene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 19:11	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
86-73-7	Fluorene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 19:11	SR
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 19:11	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
91-20-3	Naphthalene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 19:11	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
85-01-8	Phenanthrene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 19:11	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
129-00-0	Pyrene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	09/12/2016 04:21	09/12/2016 19:11	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

	Surrogate Recoveries	Result	Acceptance Range
4165-60-0	*Surrogate: Nitrobenzene-d5*	*72.9 %*	*12-96*
321-60-8	*Surrogate: 2-Fluorobiphenyl*	*63.4 %*	*16-84*
1718-51-0	*Surrogate: Terphenyl-d14*	*53.6 %*	*15-106*

Pesticides, 8081 target list

Log-in Notes:

Sample Notes:

Sample Information

Client Sample ID: North Deep (60')

York Sample ID: 16I0228-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 2:00 pm	09/08/2016

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:44	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
72-55-9	4,4'-DDE	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:44	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
50-29-3	4,4'-DDT	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:44	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
309-00-2	Aldrin	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:44	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
319-84-6	alpha-BHC	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:44	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
5103-71-9	alpha-Chlordane	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:44	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
319-85-7	beta-BHC	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:44	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
57-74-9	Chlordane, total	ND		ug/L	0.0410	0.0410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:44	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
319-86-8	delta-BHC	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:44	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
60-57-1	Dieldrin	ND		ug/L	0.00205	0.00205	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:44	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
959-98-8	Endosulfan I	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:44	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
33213-65-9	Endosulfan II	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:44	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
1031-07-8	Endosulfan sulfate	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:44	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
72-20-8	Endrin	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:44	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7421-93-4	Endrin aldehyde	ND		ug/L	0.0103	0.0103	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:44	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
53494-70-5	Endrin ketone	ND		ug/L	0.0103	0.0103	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:44	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
58-89-9	gamma-BHC (Lindane)	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:44	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
5566-34-7	gamma-Chlordane	ND		ug/L	0.0103	0.0103	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:44	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
76-44-8	Heptachlor	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:44	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
1024-57-3	Heptachlor epoxide	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:44	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
72-43-5	Methoxychlor	ND		ug/L	0.00410	0.00410	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:44	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
8001-35-2	Toxaphene	ND		ug/L	0.103	0.103	1	EPA 8081B	09/12/2016 04:27	09/12/2016 14:44	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Surrogate Recoveries	Result	Acceptance Range

Sample Information

Client Sample ID: North Deep (60') **York Sample ID:** 16I0228-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 2:00 pm	09/08/2016

Pesticides, 8081 target list

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
2051-24-3	*Surrogate: Decachlorobiphenyl*	*51.2 %*			*30-150*						
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*37.6 %*			*30-150*						

Polychlorinated Biphenyls (PCB)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		ug/L	0.0513	0.0513	1	EPA 8082A	09/12/2016 04:27	09/13/2016 16:45	AMC
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		
11104-28-2	Aroclor 1221	ND		ug/L	0.0513	0.0513	1	EPA 8082A	09/12/2016 04:27	09/13/2016 16:45	AMC
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		
11141-16-5	Aroclor 1232	ND		ug/L	0.0513	0.0513	1	EPA 8082A	09/12/2016 04:27	09/13/2016 16:45	AMC
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		
53469-21-9	Aroclor 1242	ND		ug/L	0.0513	0.0513	1	EPA 8082A	09/12/2016 04:27	09/13/2016 16:45	AMC
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		
12672-29-6	Aroclor 1248	ND		ug/L	0.0513	0.0513	1	EPA 8082A	09/12/2016 04:27	09/13/2016 16:45	AMC
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		
11097-69-1	Aroclor 1254	ND		ug/L	0.0513	0.0513	1	EPA 8082A	09/12/2016 04:27	09/13/2016 16:45	AMC
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		
11096-82-5	Aroclor 1260	ND		ug/L	0.0513	0.0513	1	EPA 8082A	09/12/2016 04:27	09/13/2016 16:45	AMC
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		
1336-36-3	* Total PCBs	ND		ug/L	0.0513	0.0513	1	EPA 8082A	09/12/2016 04:27	09/13/2016 16:45	AMC
								Certifications:			

	Surrogate Recoveries	Result	Acceptance Range
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*38.5 %*	*30-120*
2051-24-3	*Surrogate: Decachlorobiphenyl*	*58.0 %*	*30-120*

Herbicides, Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3535A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
93-76-5	2,4,5-T	ND		ug/L	5.00	5.00	1	EPA 8151A	09/14/2016 09:17	09/15/2016 12:17	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
93-72-1	2,4,5-TP (Silvex)	ND		ug/L	5.00	5.00	1	EPA 8151A	09/14/2016 09:17	09/15/2016 12:17	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
94-75-7	2,4-D	ND		ug/L	5.00	5.00	1	EPA 8151A	09/14/2016 09:17	09/15/2016 12:17	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

	Surrogate Recoveries	Result	Acceptance Range
19719-28-9	*Surrogate: 2,4-Dichlorophenylacetic acid (DCAA)*	*118 %*	*30-150*

Sample Information

Client Sample ID: North Deep (60') **York Sample ID:** 16I0228-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 2:00 pm	09/08/2016

Calcium by EPA 6010

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-70-2	**Calcium**	**86.1**		mg/L	0.0556	0.0556	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:30	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Metals, Priority Pollutant

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	ND		mg/L	0.006	0.006	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:30	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-38-2	**Arsenic**	**0.011**		mg/L	0.004	0.004	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:30	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-41-7	Beryllium	ND		mg/L	0.001	0.001	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:30	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-43-9	Cadmium	ND		mg/L	0.003	0.003	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:30	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-47-3	Chromium	ND		mg/L	0.006	0.006	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:30	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-50-8	**Copper**	**0.005**		mg/L	0.003	0.003	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:30	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7439-92-1	Lead	ND		mg/L	0.003	0.003	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:30	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-02-0	Nickel	ND		mg/L	0.006	0.006	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:30	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7782-49-2	Selenium	ND		mg/L	0.011	0.011	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:30	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-22-4	Silver	ND		mg/L	0.006	0.006	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:30	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-28-0	**Thallium**	**0.011**		mg/L	0.006	0.006	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:30	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-66-6	**Zinc**	**0.040**		mg/L	0.011	0.011	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:30	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Sodium by EPA 6010

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-23-5	**Sodium**	**16.6**		mg/L	0.111	0.111	1	EPA 6010C	09/09/2016 11:00	09/09/2016 16:30	KV
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Mercury by 7473

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 7473 water

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.00020	0.00020	1	EPA 7473	09/09/2016 06:36	09/12/2016 09:06	ALD
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Sample Information

Client Sample ID: North Deep (60') **York Sample ID:** 16I0228-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 2:00 pm	09/08/2016

Nitrate as N

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14797-55-8	Nitrate as N	ND		mg/L	0.0120	0.0500	1	EPA 300.0	09/08/2016 22:18	09/08/2016 22:18	TJM
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		

Sulfate as SO4

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14808-79-8	**Sulfate**	**236**		mg/L	0.860	10.0	10	EPA 300.0	09/09/2016 11:36	09/09/2016 11:36	n.a.
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		

Ammonia Nitrogen as N

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7664-41-7	Ammonia Nitrogen as N	ND		mg/L	0.0500	0.0500	1	SM 4500-NH3 D	09/13/2016 07:44	09/13/2016 14:16	SC
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		

Cyanide, Total

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
57-12-5	Cyanide, total	ND		mg/L	0.0100	0.0100	1	SM 4500 CN C/E	09/12/2016 08:37	09/12/2016 14:21	AD
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		

Phosphorous, total

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Phosphorous, Total as P	ND		mg/L	0.0500	0.0500	1	SM 4500-P B5/E	09/15/2016 07:33	09/15/2016 13:50	SC
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		

Sample Information

Client Sample ID: Trip Blank **York Sample ID:** 16I0228-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 12:00 am	09/08/2016

Volatile Organics, 8260 List

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst

Sample Information

Client Sample ID: **Trip Blank** **York Sample ID:** **16I0228-05**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 12:00 am	09/08/2016

Volatile Organics, 8260 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
71-55-6	1,1,1-Trichloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
79-00-5	1,1,2-Trichloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
75-34-3	1,1-Dichloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
75-35-4	1,1-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
563-58-6	1,1-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
96-18-4	1,2,3-Trichloropropane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
106-93-4	1,2-Dibromoethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
107-06-2	1,2-Dichloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
78-87-5	1,2-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
142-28-9	1,3-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Sample Information

Client Sample ID: **Trip Blank** **York Sample ID:** **16I0228-05**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 12:00 am	09/08/2016

Volatile Organics, 8260 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
594-20-7	2,2-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
78-93-3	2-Butanone	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
95-49-8	2-Chlorotoluene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
106-43-4	4-Chlorotoluene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
67-64-1	Acetone	ND		ug/L	5.0	10	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
71-43-2	Benzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
108-86-1	Bromobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
74-97-5	Bromochloromethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
75-27-4	Bromodichloromethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
75-25-2	Bromoform	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
74-83-9	Bromomethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
56-23-5	Carbon tetrachloride	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
108-90-7	Chlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
75-00-3	Chloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
67-66-3	Chloroform	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
74-87-3	Chloromethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
124-48-1	Dibromochloromethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
74-95-3	Dibromomethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
75-71-8	Dichlorodifluoromethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
100-41-4	Ethyl Benzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Sample Information

Client Sample ID: **Trip Blank** **York Sample ID:** **16I0228-05**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 12:00 am	09/08/2016

Volatile Organics, 8260 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
87-68-3	Hexachlorobutadiene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications: NELAC-NY10854,NJDEP,PADEP			
98-82-8	Isopropylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
75-09-2	Methylene chloride	ND		ug/L	2.5	10	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
91-20-3	Naphthalene	ND		ug/L	2.5	10	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications: NELAC-NY10854,NJDEP,PADEP			
104-51-8	n-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
103-65-1	n-Propylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
95-47-6	o-Xylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications: CTDOH,NELAC-NY10854,PADEP			
179601-23-1	p- & m- Xylenes	ND		ug/L	5.0	10	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications: CTDOH,NELAC-NY10854,PADEP			
99-87-6	p-Isopropyltoluene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
135-98-8	sec-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
100-42-5	Styrene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
98-06-6	tert-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
127-18-4	Tetrachloroethylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
108-88-3	Toluene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
79-01-6	Trichloroethylene	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
75-69-4	Trichlorofluoromethane	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
108-05-4	Vinyl acetate	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications: NELAC-NY10854,NJDEP			
75-01-4	Vinyl Chloride	ND		ug/L	2.5	5.0	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
1330-20-7	Xylenes, Total	ND		ug/L	7.5	15	1	EPA 8260C	09/15/2016 17:51	09/15/2016 23:46	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP			

Sample Information

Client Sample ID: **Trip Blank** **York Sample ID:** **16I0228-05**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16I0228	TOC Quarry	Water	September 7, 2016 12:00 am	09/08/2016

Volatile Organics, 8260 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate Recoveries	**Result**			**Acceptance Range**						
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*102 %*			*69-130*						
2037-26-5	*Surrogate: Toluene-d8*	*99.4 %*			*81-117*						
460-00-4	*Surrogate: p-Bromofluorobenzene*	*105 %*			*79-122*						

Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
16I0228-01	South Deep (60')	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
16I0228-02	South Shallow (10')	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
16I0228-03	North Shallow (10')	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
16I0228-04	North Deep (60')	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
16I0228-05	Trip Blank	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C

Notes and Definitions

S-08	The recovery of this surrogate was outside of QC limits.
QL-02	This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.
EXT-EM	The sample exhibited emulsion formation during the extraction process. This may affect surrogate recoveries.

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*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two.
For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

YORK ANALYTICAL LABORATORIES INC
YORK ANALYTICAL LABORATORIES
120 RESEARCH DR.
STRATFORD, CT 06615
(203) 325-1371
FAX (203) 357-0166

Field Chain-of-Custody Record

NOTE: York's Std. Terms & Conditions are listed on the back side of this document. This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

York Project No. 16IO228

YOUR Information

Company: LBG, INC.
Address: 4 WEST. PARK AV. STE. 175 WHITE PLAINS, NY 10604
Phone No. 914-694-5711
Contact Person: JOHN BENVEGNA
E-Mail Address: BENVEGNA@LBGNY.COM

Report To:

Company: SAME
Address:
Phone No.
Attention:
E-Mail Address:

Invoice To:

Company: SAME
Address:
Phone No.
Attention:
E-Mail Address:

YOUR Project ID

TOC QUARRY

Purchase Order No.

Samples from: CT ___ NY X NJ ___

Turn-Around Time

- RUSH - Same Day ☐
- RUSH - Next Day ☐
- RUSH - Two Day ☐
- RUSH - Three Day ☐
- RUSH - Four Day ☐
- Standard(5-7 Days) ☒

Report Type

- Summary Report X
- Summary w/ QA Summary
- CT RCP Package
- CTRCP DQA/DUE Pkg
- NY ASP A Package
- NY ASP B Package
- NJDEP Red. Deliv.

Electronic Data Deliverables (EDD)

- Simple Excel
- NYSDEC EQuIS
- EQuIS (std)
- EZ-EDD (EQuIS)
- NJDEP SRP HazSite EDD
- GIS/KEY (std)
- Other

York Regulatory Comparison Excel Spreadsheet
Compare to the following Regs. (please fill in):

Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.

Samples Collected/Authorized By (Signature)

BRIAN HAWE
Name (printed)

Matrix Codes
S - soil
Other - specify(oil, etc.)
WW - wastewater
GW - groundwater
DW - drinking water
Air-A - ambient air
Air-SV - soil vapor

Volatiles		Semi-Vols.	Pest/PCB/Herb	Metals	Misc. Org.	Full Lists	Misc.
8260 full	TICs	8270 or 625	8082PCB	RCRA8	TPH GRO	Pri.Poll.	Corrosivity
624	Site Spec.	STARS list	8081Pest	PP13 list	TPH DRO	TCL Organics	Reactivity
STARS list	Nassau Co.	BN Only	8151Herb	TAL	CT ETPH	TAL Met/CN	Ignitability
BTEX	Suffolk Co.	Acids Only	CT RCP	CT15 list	NY 310-13	Full TCLP	Flash Point
MTBE	Ketones	PAH list	App. IX	TAGM list	TPH 1664	Full App. IX	Sieve Anal.
TCL list	Oxygenates	TAGM list	Site Spec.	NJDEP list	Air TO14A	Part 360-Routine	Heterotrophs
TAGM list	TCLP list	CT RCP list	SPLP or TCLP	Total	Air TO15	Part 360-Baseline	TOX
CT RCP list	524.2	TCL list	TCLP Pest	Dissolved	Air STARS	Part 360-Expanded No Dioxins/Furans	BTU/lb.
Arom. only	502.2	NJDEP list	TCLP Herb	SPLP or TCLP	Air VPH	Part 360-Expanded Full List	Aquatic Tox.
Halog.only	NJDEP list	App. IX	Chlordane	Indiv. Metals	Air TICs	NYCDEP Sewer	TOC
App.IX list	SPLP or TCLP	TCLP BNA	608 Pest	LIST Below	Methane	NYSDEC Sewer	Asbestos
8021B list		SPLP or TCLP	608 PCB		Helium	TAGM	Silica

Sample Identification	Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below	Container Description(s)
SOUTH DEEP (60')	9/7/16 1110	SW	8260, CYANIDE, SODIUM	
SOUTH SHALLOW (10')	1140		8270 PAHs	
NORTH SHALLOW (10')	1315		PCBs	
NORTH DEEP (60')	1400		PESTICIDES	
			HERBICIDES	
			AMMONIA	
			NITRATES	
			PHOSPHATES	
			SULFATES	
			PP METALS + CALCIUM	

Comments
TRIP BLANK TO BE ANALYZED FOR 8260

Preservation Check those Applicable
4°C ___ Frozen ___ HCl ___ MeOH ___ HNO_3 ___ H_2SO_4 ___ NaOH ___
ZnAc ___ Ascorbic Acid ___ Other ___

Special Instructions
Field Filtered ☐
Lab to Filter ☐

	Samples Relinquished By	Date/Time
		9/8/16

	Samples Received By	Date/Time
		9/8/16 10:00
Samples Received in LAB by	M. Bradley	9/8/16 12:14

Temperature on Receipt 5.8 °C

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

September 22, 2016

John Benvegna
Legett, Brashears, & Graham, Inc.
4 Westchester Park Drive
Suite 175
West Harrison, NY 10604

RE: Project: Town of Cortlandt Quarry
Pace Project No.: 30195358

Dear John Benvegna:
Enclosed are the analytical results for sample(s) received by the laboratory on September 08, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Carin A. Ferris

Carin Ferris
carin.ferris@pacelabs.com
Project Manager

Enclosures

cc: Geoff Kristof, Legett, Brashears, & Graham, Inc.

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

CERTIFICATIONS

Project: Town of Cortlandt Quarry
Pace Project No.: 30195358

Pennsylvania Certification IDs

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

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

SAMPLE ANALYTE COUNT

Project: Town of Cortlandt Quarry
Pace Project No.: 30195358

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30195358001	**South Deep (60')**	SM7500RnB-07	NEG	1	PASI-PA
		EPA 900.0	FCC	2	PASI-PA
		EPA 903.1	AB1	1	PASI-PA
		EPA 904.0	JLW	1	PASI-PA
		ASTM D5811-95	LAL	1	PASI-PA
		EPA 906.0	WRR	1	PASI-PA
		ASTM D5174-97	RMK	1	PASI-PA
30195358002	**South Shallow (10')**	SM7500RnB-07	NEG	1	PASI-PA
		EPA 900.0	FCC	2	PASI-PA
		EPA 903.1	AB1	1	PASI-PA
		EPA 904.0	JLW	1	PASI-PA
		ASTM D5811-95	LAL	1	PASI-PA
		EPA 906.0	WRR	1	PASI-PA
		ASTM D5174-97	RMK	1	PASI-PA
30195358003	**North Shallow (10')**	SM7500RnB-07	NEG	1	PASI-PA
		EPA 900.0	FCC	2	PASI-PA
		EPA 903.1	AB1	1	PASI-PA
		EPA 904.0	JLW	1	PASI-PA
		ASTM D5811-95	LAL	1	PASI-PA
		EPA 906.0	WRR	1	PASI-PA
		ASTM D5174-97	RMK	1	PASI-PA
30195358004	**North Deep (60')**	SM7500RnB-07	NEG	1	PASI-PA
		EPA 900.0	FCC	2	PASI-PA
		EPA 903.1	AB1	1	PASI-PA
		EPA 904.0	JLW	1	PASI-PA
		ASTM D5811-95	LAL	1	PASI-PA
		EPA 906.0	WRR	1	PASI-PA
		ASTM D5174-97	RMK	1	PASI-PA

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: Town of Cortlandt Quarry
Pace Project No.: 30195358

Method: **SM7500RnB-07**
Description: 7500RnB Radon
Client: Legett, Brashears, & Graham, Inc.
Date: September 22, 2016

General Information:
4 samples were analyzed for SM7500RnB-07. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

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

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

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

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

Additional Comments:

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

PROJECT NARRATIVE

Project: Town of Cortlandt Quarry
Pace Project No.: 30195358

Method: **EPA 900.0**
Description: 900.0 Gross Alpha/Beta
Client: Legett, Brashears, & Graham, Inc.
Date: September 22, 2016

General Information:
4 samples were analyzed for EPA 900.0. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

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

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

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

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

Additional Comments:

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

PROJECT NARRATIVE

Project: Town of Cortlandt Quarry
Pace Project No.: 30195358

Method: **EPA 903.1**
Description: 903.1 Radium 226
Client: Legett, Brashears, & Graham, Inc.
Date: September 22, 2016

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

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

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

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

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

Additional Comments:

Pace Analytical Services, Inc.
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Greensburg, PA 15601
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PROJECT NARRATIVE

Project: Town of Cortlandt Quarry
Pace Project No.: 30195358

Method: **EPA 904.0**
Description: 904.0 Radium 228
Client: Legett, Brashears, & Graham, Inc.
Date: September 22, 2016

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

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

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

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

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

Additional Comments:

Pace Analytical Services, Inc.
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Greensburg, PA 15601
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PROJECT NARRATIVE

Project: Town of Cortlandt Quarry
Pace Project No.: 30195358

Method: **ASTM D5811-95**
Description: ASTM D5811 Sr 89/90 Eichrom
Client: Legett, Brashears, & Graham, Inc.
Date: September 22, 2016

General Information:
4 samples were analyzed for ASTM D5811-95. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

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

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

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

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

Additional Comments:

Analyte Comments:

QC Batch: 233457

N2: The lab does not hold TNI accreditation for this parameter.

- BLANK (Lab ID: 1144281)
  - Strontium-90
- North Deep (60') (Lab ID: 30195358004)
  - Strontium-90
- North Shallow (10') (Lab ID: 30195358003)
  - Strontium-90
- South Deep (60') (Lab ID: 30195358001)
  - Strontium-90
- South Shallow (10') (Lab ID: 30195358002)
  - Strontium-90

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

PROJECT NARRATIVE

Project: Town of Cortlandt Quarry
Pace Project No.: 30195358

Method: **EPA 906.0**
Description: 906.0 Tritium
Client: Legett, Brashears, & Graham, Inc.
Date: September 22, 2016

General Information:
4 samples were analyzed for EPA 906.0. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

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

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

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

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

Additional Comments:

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

PROJECT NARRATIVE

Project: Town of Cortlandt Quarry
Pace Project No.: 30195358

Method: **ASTM D5174-97**
Description: D517497 Total Uranium KPA
Client: Legett, Brashears, & Graham, Inc.
Date: September 22, 2016

General Information:
4 samples were analyzed for ASTM D5174-97. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

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

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

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

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

Additional Comments:

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

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Town of Cortlandt Quarry
Pace Project No.: 30195358

Sample: South Deep (60') **Lab ID: 30195358001** Collected: 09/07/16 11:10 Received: 09/08/16 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Comments: • Sample IDs, collection dates and times were not present on the sample containers.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radon	SM7500RnB-07	**28.6 ± 25.9 (42.0) C:NA T:NA**	pCi/L	09/08/16 21:38	10043-92-2	
Gross Alpha	EPA 900.0	**11.4 ± 3.74 (2.96) C:NA T:NA**	pCi/L	09/13/16 14:42	12587-46-1	
Gross Beta	EPA 900.0	**4.57 ± 1.49 (1.74) C:NA T:NA**	pCi/L	09/13/16 14:42	12587-47-2	
Radium-226	EPA 903.1	**0.174 ± 0.481 (0.934) C:NA T:77%**	pCi/L	09/20/16 11:21	13982-63-3	
Radium-228	EPA 904.0	**1.03 ± 0.397 (0.587) C:79% T:72%**	pCi/L	09/19/16 23:09	15262-20-1	
Strontium-90	ASTM D5811-95	**0.375 ± 0.720 (1.59) C:87% T:NA**	pCi/L	09/20/16 08:13	10098-97-2	N2
Tritium	EPA 906.0	**-128 ± 147 (271) C:NA T:NA**	pCi/L	09/15/16 20:36	10028-17-8	
Total Uranium	ASTM D5174-97	**11.0 ± 0.225 (0.385) C:NA T:NA**	ug/L	09/21/16 12:59	7440-61-1	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Town of Cortlandt Quarry
Pace Project No.: 30195358

Sample: South Shallow (10') **Lab ID: 30195358002** Collected: 09/07/16 11:40 Received: 09/08/16 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radon	SM7500RnB-07	**6.6 ± 24.4 (42.0) C:NA T:NA**	pCi/L	09/08/16 22:11	10043-92-2	
Gross Alpha	EPA 900.0	**9.81 ± 3.11 (2.96) C:NA T:NA**	pCi/L	09/13/16 14:42	12587-46-1	
Gross Beta	EPA 900.0	**4.78 ± 1.28 (1.32) C:NA T:NA**	pCi/L	09/13/16 14:42	12587-47-2	
Radium-226	EPA 903.1	**0.345 ± 0.395 (0.233) C:NA T:78%**	pCi/L	09/20/16 11:36	13982-63-3	
Radium-228	EPA 904.0	**1.14 ± 0.416 (0.601) C:78% T:76%**	pCi/L	09/19/16 23:09	15262-20-1	
Strontium-90	ASTM D5811-95	**-0.272 ± 0.584 (1.56) C:92% T:NA**	pCi/L	09/20/16 08:13	10098-97-2	N2
Tritium	EPA 906.0	**-14.6 ± 156 (277) C:NA T:NA**	pCi/L	09/15/16 21:38	10028-17-8	
Total Uranium	ASTM D5174-97	**9.42 ± 0.192 (0.385) C:NA T:NA**	ug/L	09/21/16 13:10	7440-61-1	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Town of Cortlandt Quarry
Pace Project No.: 30195358

Sample: North Shallow (10') **Lab ID: 30195358003** Collected: 09/07/16 13:15 Received: 09/08/16 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radon	SM7500RnB-07	**14.6 ± 24.7 (41.7) C:NA T:NA**	pCi/L	09/08/16 22:44	10043-92-2	
Gross Alpha	EPA 900.0	**14.1 ± 3.93 (2.97) C:NA T:NA**	pCi/L	09/13/16 14:42	12587-46-1	
Gross Beta	EPA 900.0	**6.78 ± 1.55 (1.06) C:NA T:NA**	pCi/L	09/13/16 14:42	12587-47-2	
Radium-226	EPA 903.1	**0.172 ± 0.477 (0.925) C:NA T:82%**	pCi/L	09/20/16 11:43	13982-63-3	
Radium-228	EPA 904.0	**1.59 ± 0.495 (0.634) C:81% T:76%**	pCi/L	09/19/16 23:23	15262-20-1	
Strontium-90	ASTM D5811-95	**0.735 ± 0.772 (1.64) C:83% T:NA**	pCi/L	09/20/16 08:13	10098-97-2	N2
Tritium	EPA 906.0	**-63.7 ± 153 (275) C:NA T:NA**	pCi/L	09/15/16 22:39	10028-17-8	
Total Uranium	ASTM D5174-97	**10.4 ± 0.211 (0.385) C:NA T:NA**	ug/L	09/21/16 13:14	7440-61-1	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Town of Cortlandt Quarry
Pace Project No.: 30195358

Sample: North Deep (60') **Lab ID: 30195358004** Collected: 09/07/16 14:00 Received: 09/08/16 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radon	SM7500RnB-07	**6.5 ± 24.2 (41.6) C:NA T:NA**	pCi/L	09/08/16 23:17	10043-92-2	
Gross Alpha	EPA 900.0	**13.0 ± 4.14 (2.88) C:NA T:NA**	pCi/L	09/13/16 14:43	12587-46-1	
Gross Beta	EPA 900.0	**7.59 ± 1.90 (1.55) C:NA T:NA**	pCi/L	09/13/16 14:43	12587-47-2	
Radium-226	EPA 903.1	**0.379 ± 0.396 (0.558) C:NA T:86%**	pCi/L	09/20/16 11:36	13982-63-3	
Radium-228	EPA 904.0	**1.18 ± 0.448 (0.675) C:80% T:73%**	pCi/L	09/19/16 23:23	15262-20-1	
Strontium-90	ASTM D5811-95	**0.199 ± 0.661 (1.57) C:91% T:NA**	pCi/L	09/20/16 08:13	10098-97-2	N2
Tritium	EPA 906.0	**-29.2 ± 156 (278) C:NA T:NA**	pCi/L	09/15/16 23:40	10028-17-8	
Total Uranium	ASTM D5174-97	**10.4 ± 0.214 (0.385) C:NA T:NA**	ug/L	09/21/16 13:17	7440-61-1	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: Town of Cortlandt Quarry
Pace Project No.: 30195358

QC Batch: 232953 Analysis Method: EPA 900.0
QC Batch Method: EPA 900.0 Analysis Description: 900.0 Gross Alpha/Beta
Associated Lab Samples: 30195358001, 30195358002, 30195358003, 30195358004

METHOD BLANK: 1141689 Matrix: Water
Associated Lab Samples: 30195358001, 30195358002, 30195358003, 30195358004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Gross Alpha	0.468 ± 0.725 (1.59) C:NA T:NA	pCi/L	09/13/16 14:42	
Gross Beta	-0.321 ± 0.697 (1.81) C:NA T:NA	pCi/L	09/13/16 14:42	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: Town of Cortlandt Quarry
Pace Project No.: 30195358

QC Batch: 233457 Analysis Method: ASTM D5811-95
QC Batch Method: ASTM D5811-95 Analysis Description: ASTM D5811 Sr 89/90 Eichrom
Associated Lab Samples: 30195358001, 30195358002, 30195358003, 30195358004

METHOD BLANK: 1144281 Matrix: Water
Associated Lab Samples: 30195358001, 30195358002, 30195358003, 30195358004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Strontium-90	-0.414 ± 0.490 (1.37) C:101% T:NA	pCi/L	09/20/16 10:32	N2

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: Town of Cortlandt Quarry
Pace Project No.: 30195358

QC Batch: 232629 Analysis Method: ASTM D5174-97
QC Batch Method: ASTM D5174-97 Analysis Description: D5174.97 Total Uranium KPA
Associated Lab Samples: 30195358001, 30195358002, 30195358003, 30195358004

METHOD BLANK: 1140052 Matrix: Water
Associated Lab Samples: 30195358001, 30195358002, 30195358003, 30195358004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Total Uranium	0.034 ± 0.001 (0.193) C:NA T:NA	ug/L	09/20/16 14:41	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: Town of Cortlandt Quarry
Pace Project No.: 30195358

QC Batch: 233170 Analysis Method: EPA 906.0
QC Batch Method: EPA 906.0 Analysis Description: 906.0 Tritium
Associated Lab Samples: 30195358001, 30195358002, 30195358003, 30195358004

METHOD BLANK: 1142869 Matrix: Water
Associated Lab Samples: 30195358001, 30195358002, 30195358003, 30195358004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Tritium	-149 ± 147 (272) C:NA T:NA	pCi/L	09/15/16 19:35	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: Town of Cortlandt Quarry
Pace Project No.: 30195358

QC Batch: 233175 Analysis Method: EPA 903.1
QC Batch Method: EPA 903.1 Analysis Description: 903.1 Radium-226
Associated Lab Samples: 30195358001, 30195358002, 30195358003, 30195358004

METHOD BLANK: 1142874 Matrix: Water
Associated Lab Samples: 30195358001, 30195358002, 30195358003, 30195358004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0733 ± 0.334 (0.199) C:NA T:97%	pCi/L	09/20/16 11:29	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: Town of Cortlandt Quarry
Pace Project No.: 30195358

QC Batch: 233176 Analysis Method: EPA 904.0
QC Batch Method: EPA 904.0 Analysis Description: 904.0 Radium 228
Associated Lab Samples: 30195358001, 30195358002, 30195358003, 30195358004

METHOD BLANK: 1142875 Matrix: Water
Associated Lab Samples: 30195358001, 30195358002, 30195358003, 30195358004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.746 ± 0.395 (0.693) C:82% T:74%	pCi/L	09/19/16 23:22	

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REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: Town of Cortlandt Quarry
Pace Project No.: 30195358

QC Batch: 232564 Analysis Method: SM7500RnB-07
QC Batch Method: SM7500RnB-07 Analysis Description: 7500Rn B Radon
Associated Lab Samples: 30195358001, 30195358002, 30195358003, 30195358004

METHOD BLANK: 1139746 Matrix: Water
Associated Lab Samples: 30195358001, 30195358002, 30195358003, 30195358004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radon	0.7 ± 18.6 (32.4) C:NA T:NA	pCi/L	09/08/16 19:25	

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REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Town of Cortlandt Quarry
Pace Project No.: 30195358

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

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

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

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

TNI - The NELAC Institute.

LABORATORIES

PASI-PA	Pace Analytical Services - Greensburg

ANALYTE QUALIFIERS

N2	The lab does not hold TNI accreditation for this parameter.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Town of Cortlandt Quarry
Pace Project No.: 30195358

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30195358001	**South Deep (60')**	SM7500RnB-07	232564		
30195358002	**South Shallow (10')**	SM7500RnB-07	232564		
30195358003	**North Shallow (10')**	SM7500RnB-07	232564		
30195358004	**North Deep (60')**	SM7500RnB-07	232564		
30195358001	**South Deep (60')**	EPA 900.0	232953		
30195358002	**South Shallow (10')**	EPA 900.0	232953		
30195358003	**North Shallow (10')**	EPA 900.0	232953		
30195358004	**North Deep (60')**	EPA 900.0	232953		
30195358001	**South Deep (60')**	EPA 903.1	233175		
30195358002	**South Shallow (10')**	EPA 903.1	233175		
30195358003	**North Shallow (10')**	EPA 903.1	233175		
30195358004	**North Deep (60')**	EPA 903.1	233175		
30195358001	**South Deep (60')**	EPA 904.0	233176		
30195358002	**South Shallow (10')**	EPA 904.0	233176		
30195358003	**North Shallow (10')**	EPA 904.0	233176		
30195358004	**North Deep (60')**	EPA 904.0	233176		
30195358001	**South Deep (60')**	ASTM D5811-95	233457		
30195358002	**South Shallow (10')**	ASTM D5811-95	233457		
30195358003	**North Shallow (10')**	ASTM D5811-95	233457		
30195358004	**North Deep (60')**	ASTM D5811-95	233457		
30195358001	**South Deep (60')**	EPA 906.0	233170		
30195358002	**South Shallow (10')**	EPA 906.0	233170		
30195358003	**North Shallow (10')**	EPA 906.0	233170		
30195358004	**North Deep (60')**	EPA 906.0	233170		
30195358001	**South Deep (60')**	ASTM D5174-97	232629		
30195358002	**South Shallow (10')**	ASTM D5174-97	232629		
30195358003	**North Shallow (10')**	ASTM D5174-97	232629		
30195358004	**North Deep (60')**	ASTM D5174-97	232629		

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CHAIN WO#:30195358 ument

The Chain-of ccurately.

30195358

Page:	1	of	1

2061339

Section A
Required Client Information:

Company:	LBG, INC.
Address:	4 WESTCHESTER PARK DR. STE. 175
	WHITE PLAINS NY 10604
Email To:	BENVEGNA@LBGNY.COM
Phone: 914-694-5711	Fax: 914-694-5744
Requested Due Date/TAT:	STANDARD

Section B
Required Project Information:

Report To:	JOHN BENVEGNA
Copy To:	—
Purchase Order No.:	—
Project Name:	TOWN OF CORTLANDT QUARRY
Project Number:	—

Invoice Information:

Attention:	
Company Name:	SAME
Address:	
Pace Quote Reference:	
Pace Project Manager:	
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES	☒ GROUND WATER	☐ DRINKING WATER
☐ UST	☐ RCRA	☐ OTHER ______

Site Location STATE:	NY

Section D
Required Client Information

Matrix Codes MATRIX / CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test ↓ Y/N	RADIUM 226/228	GROSS ALPHA/BETA	STRONTIUM 90	URANIUM	TRITIUM	RADON						Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	SOUTH DEEP (60')	WT	G	—	—	9/7/16	1110		7	4		3							X	X	X	X	X	X							001
2	SOUTH SHALLOW (10')	↓	↓	—	—	↓	1140		↓	↓		↓							↓	↓	↓	↓	↓	↓							002
3	NORTH SHALLOW (10')	↓	↓	—	—	↓	1315		↓	↓		↓							↓	↓	↓	↓	↓	↓							003
4	NORTH DEEP (60')	↓	↓	—	—	↓	1400		↓	↓		↓							↓	↓	↓	↓	↓	↓							004
5																															
6																															
7																															
8																															
9																															
10																															
11																															
12																															

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[signature] / LBG	9/7/16	1700	Karen E. Hill	9-8-16	1020	9.8	Y	N	Y
							Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:	BRIAN HAWE
SIGNATURE of SAMPLER: [signature]	DATE Signed (MM/DD/YY): 09/07/16

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

Client Name: LBG, INC Project # 30195358

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

Tracking #: 8097 2058 5790

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Thermometer Used 8 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 9.7 °C Correction Factor: +0.1 °C Final Temp: 9.8 °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: KH 9-8-16

Comments:	Yes	No	N/A	
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:	✓			3.
Sampler Name & Signature on COC:	✓			4.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: WT		✓		5. The South Deep (60') 1L bottles have no info on the labels but a "D" on the lids like the other bottles.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):	✓			7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.
Containers Intact:		✓		11. One North Deep (60) radon broke
Filtered volume received for Dissolved tests			✓	12.
All containers needing preservation have been checked. All containers needing preservation are found to be in compliance with EPA recommendation. exceptions: VOA, coliform, TOC, O&G, Phenolics	✓ ✓			13. Initial when completed KH Date/time of preservation Lot # of added preservative
Headspace in VOA Vials (>6mm):		✓		14.
Trip Blank Present:		✓		15.
Trip Blank Custody Seals Present			✓	
Rad Aqueous Samples Screened > 0.5 mrem/hr		✓		Initial when completed: KH Date: 9-8-16

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: The South Shallow (10') bottles (12) have no info on them but was able to match them based on being the last ones to need matched to a sample. The radons and tritium bottles have matching info.

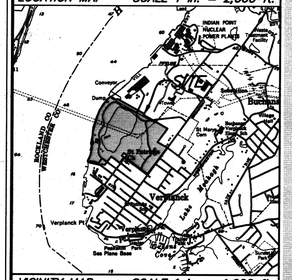
Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

ATTACHMENT D

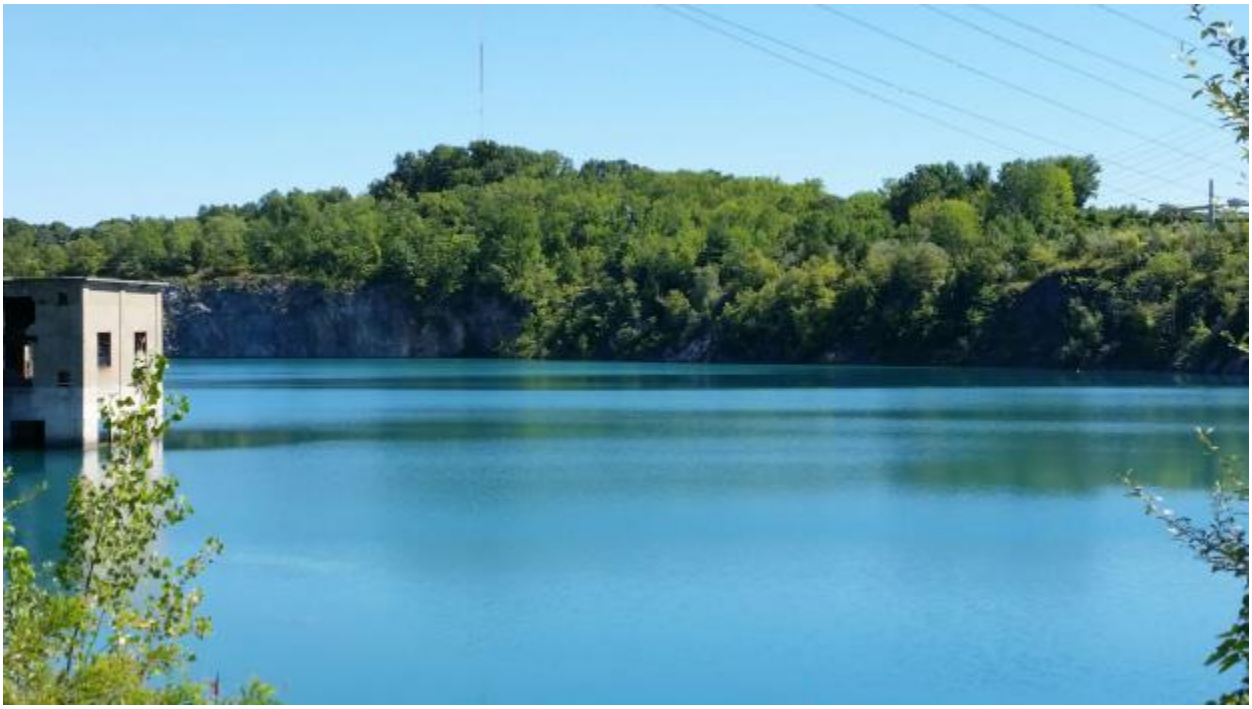
“FILED MAP”

LOCATION MAP SCALE 1 in. = 2,000 ft.


INDIAN POINT NUCLEAR POWER PLANT
SITE
Buchanan
Verplanck
Peekskill
Cortlandt Manor
Montrose
Crugers
Oscawana
Yorktown Heights
Croton Falls
Somers
Lake Mohegan
Lake Kitchawan
Lake Meahagh
Lake Gleneida
Lake Waccabuc
Lake Truesdale
Lake Oscawana
Lake Shenorock
Lake Peekskill
Lake Lincolndale
Lake Katonah
Lake Titicus
Lake Muscoot
Lake Waccabuc
Lake Truesdale
Lake Oscawana
Lake Shenorock
Lake Peekskill
Lake Lincolndale
Lake Katonah
Lake Titicus
Lake Muscoot
Hudson River
Croton Point Park
Croton Point Ave
Croton Point Park
Croton Point Nature Preserve

ATTACHMENT E

“PHOTOS”



AUGUST 20, 2016 – QUARRY POND

SEPTEMBER 28, 2016 – QUARRY BUILDINGS LOOKING NORTH EAST

SEPTEMBER 28, 2016 – CON EDISON AERIAL WIRES ACROSS QUARRY

SEPTEMBER 28, 2016 – QUARRY BUILDINGS LOOKING NORTH