MATTHEW MEYER
COUNTY EXECUTIVE

TRACY ZLOCK SURLES
GENERAL MANAGER

DEPARTMENT OF PUBLIC WORKS
187-A OLD CHURCHMANS ROAD
NEW CASTLE, DE 19720
(302) 395-5700

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

March 12, 2020

Ms. Joy Gillespie
Pretreatment Program Coordinator
US EPA Region III
1650 Arch Street
Philadelphia, PA 19103

RE: 2019 Annual Pretreatment Report

Dear Ms. Gillespie,

Enclosed, please find the Annual Pretreatment Report for the 2019 reporting year as required per Special Condition 2.b. of the NPDES Permit DE0050547. The report includes the activities of the New Castle County Pretreatment Program in relation to the regulated industries in the MOT service area.

Should you have any questions, please feel free to contact Amber Moore at 302.395.5728.

Regards,

Michael D. Harris

Michael D. Harris
Storm Water & Environmental Programs Division Manager
New Castle County
Department of Public Works

Attachment

cc: File, encl.
Nicole Smith, DNREC (Surface Water Disch. Section, 89 Kings Hwy., Dover, DE), encl.

GreeNCC
Creating a Cleaner, Greener New Castle County

Clean Water Tip: *Putting fats, oils and grease down the drain can clog sewer pipes causing backups that get into our streams. Instead, let it cool in a container and throw it in the trash. Find more tips at* ***NewCastleDE.gov/GreeNCC***

DEPARTMENT OF PUBLIC WORKS
NEW CASTLE COUNTY, DELAWARE

ANNUAL REPORT for the
INDUSTRIAL PRETREATMENT PROGRAM
(JANUARY 2019 - DECEMBER 2019)

Submitted To:

USEPA Region III
1650 Arch Street
Philadelphia, PA 19103

and

Delaware DNREC, Division of Water Resources
89 Kings Highway
Dover, DE 19903

March 12, 2020

TABLE OF CONTENTS

PART A. MOT WATER FARM #1 WWTP PRETREATMENT PERFORMANCE SUMMARY 1

I. GENERAL INFORMATION 1
II. COMPLIANCE MONITORING PROGRAM 1
III. SIGNIFICANT INDUSTRIAL USER COMPLIANCE 1
IV. ENFORCEMENT ACTIONS 1

ATTACHMENT 1. GENERAL INFORMATION 2

1.1 List of Categorical Users 2
1.1.1 List of New Categorical Users 2
1.2. List of Significant non-categorical users 3
1.3 List of Non-significant Non-categorical Industrial Users 3
1.4. Changes in Industrial Listing since 12/31/18 4
1.4.1 Additions 4
1.4.2 Deletions 4
1.4.3 Name Changes 4
1.4.4 Categorical Changes 4

ATTACHMENT II. COMPLIANCE MONITORING PROGRAM 5

2.1 List of issuance and expiration dates for SIU control documents 5
2.2 List of users regulated under a general control mechanism 5
2.3 List of CIUs assigned mass limits in place of concentration-based categorical limits 5
2.4 List of CIUs issued a monitoring waiver in accordance with 40 CFR 403.12(e)(2) 5
2.5 Sampling and inspection summary for Categorical SIUs 6
2.6 Sampling and inspection summary for Non-Categorical SIUs 7
2.7 Sampling and inspections summary for Non-Categorical Non-SIUS 8
2.8 List of facilities not inspected 8
2.9 List of facilities not sampled by control authority 8
2.10 Facilities submitting less than 2 self-monitoring reports 8

ATTACHMENT III. SIGNIFICANT INDUSTRIAL USER COMPLIANCE 9

3.1 List of significant users in SNC at any time during reporting period and reason for SNC 9
3.2 List of facilities that were in SNC for this reporting year that were also in SNC for the last reporting year 9
3.3 List of significant users on FORMAL COMPLIANCE SCHEDULES 9
3.4 List of users on INFORMAL COMPLIANCE SCHEDULES 9
3.5 Copy of newspaper listing of SIUs in SNC during the calendar year 10

ATTACHMENT IV ENFORCEMENT ACTIONS 11

4.1 List of significant users that have received written notices of violation and/or Notices of Non-compliance and number of notices issued 11
4.2 List of significant users that have received administrative orders 11
4.3 List of users assessed penalties 11

TABLE OF CONTENTS (cont.)

4.4 Description of all actions included as "Administrative Orders" 11
4.5 Description of any "Other Actions" 11
4.6 List of SIUs which had SNC violations but were not subject to Enforcement, and the reason for no action 11

PART B: PRETREATMENT DEVELOPMENTS **12**

I. SUMMARY OF POTW OPERATIONS **12**

1.0 POTW Interferences 12
2.0 Influent, Effluent and Dewatered Sludge Monitoring 12
3.0 Headworks Loading Summary 13
4.0 Sludge Production 13
5.0 Trucked and hauled waste to POTW 13

II. PRETREATMENT PROGRAM CHANGES **15**

III. MISCELLANEOUS DEVELOPMENTS **15**

TABLES

Table 1 Influent Monitoring Results
Table 2 Effluent Monitoring Results
Table 3 Dewatered Sludge Monitoring Results
Table 4 Priority Pollutants Summary
Table 5 Headworks Loading Summary

APPENDIX

Appendix A Listing of SIU Facility Addresses
Appendix B SNC Notice
Appendix C Priority Pollutant Analysis Analytical Reports – See electronic file.

PART A. MOT WATER FARM #1 WWTP PRETREATMENT PERFORMANCE SUMMARY

I. GENERAL INFORMATION

Control Authority Name.....New Castle County
Address.....187-A Old Churchman's Road
City, State, Zip .....New Castle, DE 19720
Contact Person.....Michael D. Harris
Contact Title.....Storm Water & Environmental Programs Division Manager
Telephone Number.....302-395-5806
E-mail Address.....Michael.Harris@newcastlede.gov
NPDES Permit No.....DE 0050547
Permit Issuance Date: October 1, 2014 ..... Expiration Date: September 30, 2019
Reporting Period .....January 1 - December 31, 2019
Total Categorical IUs (CIUs) 0
Total "Middle Tier" CIUs (MTCIUs) 0
Total Non-significant CIUs (NSCIUs).....0
Total Significant Non-categorical SIUs (SNIUs).....0
Total Non-significant Non-categorical Industrial Users 0

II. COMPLIANCE MONITORING PROGRAM

1. No. of SIUs with current Control Documents.....0
2. No. of SIU Facilities Inspected 0
3. No. of SIU Facilities Sampled.....0
4. No. of SIUs submitting self-monitoring reports.....0

III. SIGNIFICANT INDUSTRIAL USER COMPLIANCE

1. No. of SIUs violating a compliance schedule/No. on a schedule.....0/0
2. No. of SIUs in SNC for the July to December period.....0
3. No. of SIUs in SNC at any time during the calendar year 0
4. No. of SIUs that were also in SNC during the previous calendar year 0
5. No. of NSCIUs that violated any standards or requirements 0

IV. ENFORCEMENT ACTIONS

1. Notices /Letters of Violation issued to SIUs 0
2. Enforceable Compliance Schedules issued to SIUs 0
3. Civil suits filed 0
4. Criminal Suits filed. 0
5. No. of SIUs from which penalties have been collected.....0
6. Other actions (Show Cause Hearing and Administrative Order) 0

I certify that the information contained in this report and attachments is complete and accurate to the best of my knowledge.

Michael D. Harris
Name of Authorized Representative

Storm Water & Env. Programs Div. Manager
Title

Signature

3/12/2020
Date

ATTACHMENT 1. GENERAL INFORMATION

1.1. List of Categorical Users
NONE

1.1.1 List of New Categorical Users
NONE

1.2. List of Significant noncategorical users (see Appendix A for addresses)
NONE

1.3. List of Non-significant Non-categorical Industrial Users (see Appendix A for addresses)
NONE

1.4. Changes in Industrial Listing since Annual Report for Calendar Year 2019

1.4.1 Additions
NONE

1.4.2 Deletions
NONE

1.4.3 Name Changes
NONE

1.4.4 Categorical Changes
NONE

ATTACHMENT II. COMPLIANCE MONITORING PROGRAM

2.1 **List of issuance and expiration dates for SIU control documents:**
NONE

2.2 **List of users regulated under a general control mechanism**
NONE

2.3 **List of CIUs assigned mass limits IN PLACE OF concentration-based categorical limits**
NONE

2.4 **List of CIUs issued a monitoring waiver in accordance with 40CFR 403.12(e)(2)**
NONE

2.5 **Sampling and inspection summary for Categorical SIUs – Year 2019**
NONE

2.6 **Sampling and inspection summary for Non-Categorical SIUs – Year 2019**
NONE

2.8 **List of Facilities not inspected:**
NONE

2.9 **List of Facilities not sampled by control authority:**
NONE

2.10 **Facilities submitting less than two self-monitoring reports**
NONE

ATTACHMENT III. SIGNIFICANT INDUSTRIAL USER COMPLIANCE

3.1 **List of significant users in SNC at any time during reporting period and reason for SNC:**
NONE

3.2 **List of facilities that were in SNC for this reporting year that were also in SNC for the last reporting year:**
NONE

3.3 **List of significant users on FORMAL COMPLIANCE SCHEDULES:**
NONE

3.4 **List of users on INFORMAL COMPLIANCE SCHEDULES:**
NONE

3.5 **Copy of newspaper listing of SIUs in SNC during the calendar year.**
N/A

ATTACHMENT IV. ENFORCEMENT ACTIONS

4.1 **List of significant users that have received written notices/letters of violation and the number of written notices ISSUED to each user during the reporting period.**
NONE

4.2 **List of significant users that have received administrative orders**
NONE

4.3 **List of users assessed penalties**
NONE

4.4 **Description of all actions included as "Administrative Orders"**
NONE

4.5 **Description of any "Other Actions"**
NONE

4.6 **List of SIUs which had SNC violations but were not subject to enforcement, and the reason for no action**
NONE

PART B: PRETREATMENT DEVELOPMENTS

I. SUMMARY OF POTW OPERATIONS

Plant Interference, upset, pass-through and permit violations. In 2019 the Facility treated 216,479,000 gallons through stream discharge and 239,361,705 gallons through spray land application. No permit violations were reported for 2019.

1.0 Influent and Effluent Metals Summaries (Annual Average, mg/l):

Parameter	Fourth Quarter		RDL	UNIT
	Influent (12/11/19)	Effluent (12/11/19)		
TSS	382	1	5.0	mg/l
CBOD	356	3	2.0	mg/l
Ammonia*	34.2	0.19	2.0	mg/l
Antimony	ND	ND	.001	mg/l
TKN	61.81	1.70	0.2	mg/l
Total Phosphorus	7.60	0.59	0.1	mg/l
Cyanide	ND	ND	0.01	mg/l
Arsenic	0.0029	0.00212	0.002	mg/l
Beryllium	ND	ND	0.001	mg/l
Cadmium	ND	ND	0.0005	mg/l
Chromium	0.00296	ND	0.002	mg/l
Hexavalent Chromium	0.020	ND	0.0024	mg/l
Copper	NT	NT	0.005	mg/l
Lead	0.00116	ND	0.001	mg/l
Mercury	ND	ND	0.00005	mg/l
Molybdenum	0.00398	0.00560	0.0005	mg/l
Nickel	0.00244	ND	0.002	mg/l
Selenium	ND	0.0129	0.002	mg/l
Silver	ND	ND	0.0005	mg/l
Zinc	0.147	0.663	0.01	mg/l
Thallium	ND	ND	0.001	mg/l
Phenols	0.12	ND	0.005	mg/l
PCBs	ND	ND	0.00018/0.0004	mg/l
Pesticides	ND	ND	0.5-2.5	mg/l

ND=None Detectable
NT: Not Tested
***sample taken on 12/3/2019.**

2.0 Dewatered Sludge Quality Data (Annual Average, mg/kg dry weight)

The MOT facility uses an Aerobic Digester to stabilize the waste sludge from the activated sludge SBR BNR system onsite. Stabilized sludge from the Aerobic Digester is pumped to the #2 lagoon onsite for long-term storage. The sludge is not analyzed for constituent content.

3.0 Trucked and hauled waste to POTW

The MOT Facility does not accept hauled or trucked wastewater at the plant or in the MOT service area.

4.0 Organic Priority Pollutants

Samples were taken from the influent and effluent of the plant and analyzed for Organic Priority Pollutants in the reporting year 2019.

NOTES: a. MDL- Minimum Detection Limit. Varied depending on sample type and parameter.
b. Units for values in parenthesis are identified next to sample type.

INFLUENT WASTEWATER SAMPLES RESULTS: SAMPLES in ug/l

1. Volatile detected at > MDL/RL, EPA 624:
   a. Acetone: 96.4 ug/l @ RL of 10.0 ug/l
   b. Toluene: 2.2 ug/l @ RL of 1.0 ug/l
2. Acid/Base Compounds detected at >MDL/RL EPA 625:
   a. Phenolics, Total Recoverable: 0.12 ug/l, RL 0.050 ug/l
3. Pesticides/PCBs detected at >MDL EPA 608: None Detected

EFFLUENT WASTEWATER SAMPLES RESULTS: SAMPLES in ug/l

1. Volatile detected at > MDL/RL, EPA 624: None Detected
2. Acid/Base Compounds detected at >MDL/RL EPA 625: None Detected
3. Pesticides/PCBs detected at >MDL EPA 608: None Detected

II. PRETREATMENT PROGRAM CHANGES

NONE

III. MISCELLANEOUS DEVELOPMENTS

NONE

ENVIROCORP LABORATORIES INC.

51 CLARK STREET, HARRINGTON, DE 19952
302-398-4313
www.envirocorplabs.com

ANALYTICAL SERVICES: NPDES, RCRA, GROUND WATER

January 02, 2020

Vince Disciullo
New Castle County Lab
187A Old Churchmans
New Castle, DE 19720

RE: NCC Annual

Enclosed are the results of analyses for samples received by our laboratory on 12/ 11/2019. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Shelly Bloom

Shelly Bloom
Office Manager

Table of Contents

Cover Letter	1
Samples in Report	3
Sample Results	4
Qualifiers and Definitions	5
Chain of Custody PDF	6
Subcontracted	7

ENVIROCORP LABORATORIES INC.

51 CLARK STREET, HARRINGTON, DE 19952
302-398-4313
www.envirocorplabs.com

ANALYTICAL SERVICES: NPDES, RCRA, GROUND WATER

New Castle County Lab	**Project:** NCC Annual
187A Old Churchmans	**Project Number:**
New Castle, DE 19720	**Reported:** 01/02/2020 13:39

Sample Summary

Lab ID	Sample	Matrix	Sampled	Received
1906682-01	Effluent	Waste Water	12/11/2019 7:20	12/11/19 13:40
1906682-02	Effluent	Waste Water	12/11/2019 7:40	12/11/19 13:40

ENVIROCORP LABORATORIES INC.

51 CLARK STREET, HARRINGTON, DE 19952
302-398-4313
www.envirocorplabs.com

ANALYTICAL SERVICES: NPDES, RCRA, GROUND WATER

New Castle County Lab		**Project:**	NCC Annual
187A Old Churchmans		**Project Number:**	
New Castle, DE 19720		**Reported:**	01/02/2020 13:39

Analytical Results

Sample ID:	Effluent	**Sample Start:**	12/10/19 07:15
Lab ID:	1906682-01	**Sample End:**	12/11/19 07:20
Matrix:	Waste Water	**Received:**	12/11/19 13:40
Sample Type:	Composite		

Analyte	Result	Units	Reporting Limit	Qualifier	Method	Date Prepared	Date Analyzed	Analyst
Metals								
Silver	ND	mg/L	0.000500		EPA 200.8	12/19/19 10:54	12/19/19 12:30	JMW
Arsenic	0.00212	mg/L	0.00100		EPA 200.8	12/19/19 10:54	12/19/19 12:30	JMW
Beryllium	ND	mg/L	0.00100		EPA 200.8	12/19/19 10:54	12/19/19 12:30	JMW
Cadmium	ND	mg/L	0.000500		EPA 200.8	12/19/19 10:54	12/19/19 12:30	JMW
Chromium	ND	mg/L	0.00100		EPA 200.8	12/19/19 10:54	12/19/19 12:30	JMW
Molybdenum	0.00560	mg/L	0.00100		EPA 200.8	12/19/19 10:54	12/19/19 12:30	JMW
Nickel	ND	mg/L	0.00100		EPA 200.8	12/19/19 10:54	12/19/19 12:30	JMW
Lead	ND	mg/L	0.00100		EPA 200.8	12/19/19 10:54	12/19/19 12:30	JMW
Antimony	ND	mg/L	0.00100		EPA 200.8	12/19/19 10:54	12/19/19 12:30	JMW
Selenium	0.0129	mg/L	0.00100		EPA 200.8	12/19/19 10:54	12/19/19 12:30	JMW
Thallium	ND	mg/L	0.00100		EPA 200.8	12/19/19 10:54	12/19/19 12:30	JMW
Zinc	0.0663	mg/L	0.00100		EPA 200.8	12/19/19 10:54	12/19/19 12:30	JMW

ENVIROCORP LABORATORIES INC.

51 CLARK STREET, HARRINGTON, DE 19952
302-398-4313
www.envirocorplabs.com

ANALYTICAL SERVICES: NPDES, RCRA, GROUND WATER

New Castle County Lab	**Project:** NCC Annual
187A Old Churchmans	**Project Number:**
New Castle, DE 19720	**Reported:** 01/02/2020 13:39

Notes and Definitions

Item	Definition
Dry-WT	Sample results reported on a dry weight basis.
ND	Analyte NOT DETECTED at or above the reporting limit.
Reporting Limit	Lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

Chain of Custody for Work Order

1906682

Annual

Lab I.D.	-01 -02		
Facility Name (Source)	New Castle County		
Sample Location	Effluent		
	Date	Time	Performed by
Composite Sample Start	12·10·19	0715	ME
Composite Sample End	12·11·19	0720	ME

Circle Selection from list below	Circle Grab/ Composite	Analysis	Comments
1-2-3-4-5-6-7	Grab/Comp	Sb, As, Be, Cd, Cr, Pb, Mo, Ni, Se, Ag, Tl, Zn	
1-2-3-4-5-6-7	Grab/Comp	245 Hg	
1-2-3-4-5-6-7	Grab/Comp	608 PCB/Pesticides	
1-2-3-4-5-6-7	Grab/Comp	624 (Volatiles)	12/11/19 @740 per Brian Buckman
1-2-3-4-5-6-7	Grab/Comp	625 (w/ Dioxin Screen)	
1-2-3-4-5-6-7	Grab/Comp	Cyanide	
1-2-3-4-5-6-7	Grab/Comp	Hex-Cr	
1-2-3-4-5-6-7	Grab/Comp	420 Phenolics	
1-2-3-4-5-6-7	Grab/Comp	Asbestos	No Container collecting 12/18

Select number for each analysis in row above
Preservations List
1.) None
2.) None - Iced
3.) H2S04, pH <2, Iced
4.) HNO3, pH <2, Iced
5.) NAOH, pH >12, Iced
6.) HCL, pH <2, Iced
7.) Other (Explain in comments)

Comments regarding special circumstances, appearance of effluent, etc.

Relinquished By	Date	Time	Received By	Date	Time
[signature]	12·11·19	0830	[signature]	12/11/19	1125
[signature]	12/11/19	1340	[signature]	12/11/19	1340

Vince Disciullo – 302-388-8392

EI Labs Cooler Temperature 2.6

Pace Analytical®
www.pacelabs.com

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

December 27, 2019

Shelly Bloom
Envirocorp Labs, Inc.
51 Clark Street
Harrington, DE 19952

RE: Project: 1906682
Pace Project No.: 30340324

Dear Shelly Bloom:
Enclosed are the analytical results for sample(s) received by the laboratory on December 12, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses have been subcontracted outside of the Pace Network. The subcontracted laboratory report has been attached.

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

Sincerely,

Samantha Merrill
samantha.merrill@pacelabs.com
(570)326-4001
Project Manager

Enclosures

cc: Erin Bichy, Envirocorp Labs
Ashley Burns, Envirocorp Labs
Rachael Needam, Envirocorp Labs

NELAP ACCREDITED TNI LABORATORY

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

CERTIFICATIONS

Project: 1906682
Pace Project No.: 30340324

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services Williamsport
2829 Reach Rd, Williamsport, PA 17701
Delaware H&SS NELAP
Maryland DOE NELAP 202
New York DOH NELAP 12028
Pennsylvania Dept of Agriculture 42-B-00142
Pennsylvania DEP NELAP 41-00034
USFDA Registered DUNS 117006653

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

SAMPLE SUMMARY

Project: 1906682
Pace Project No.: 30340324

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30340324001	**1906682-01**	Water	12/11/19 07:20	12/12/19 10:45
30340324002	**1906682-02**	Water	12/11/19 07:40	12/12/19 10:45
30340324003	**Trip Blanks**	Water	12/11/19 07:40	12/12/19 10:45

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

SAMPLE ANALYTE COUNT

Project: 1906682
Pace Project No.: 30340324

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30340324001	**1906682-01**	EPA 608.3 Dec 2016	CWB	9	PASI-PA
		EPA 608.3 Dec 2016	TAW	20	PASI-PA
		245.1 Rev. 3.0, 1994	KAS	1	PASI-PA
		EPA 420.1	PAS	1	PASI-PA
		SM 4500CNE-2011	EKM	1	PASI-PA
		SM3500-CrB	SEF1	1	PASI-WP
30340324002	**1906682-02**	624.1 Dec 2016	LEL	52	PASI-PA
30340324003	**Trip Blanks**	624.1 Dec 2016	LEL	52	PASI-PA

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical®
www.pacelabs.com

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

ANALYTICAL RESULTS

Project: 1906682
Pace Project No.: 30340324

Sample: 1906682-01 **Lab ID: 30340324001** Collected: 12/11/19 07:20 Received: 12/12/19 10:45 Matrix: Water

Comments: • The sample was received outside the EPA recommended holding time for Hex Cr. The client was contacted on 12/12/19, and instructed the lab to run the samples. (Williamsport, PA)

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
608.3 GCS PCBs	Analytical Method: EPA 608.3 Dec 2016 Preparation Method: EPA 608.3 DEC 2016							
PCB-1016 (Aroclor 1016)	ND	ug/L	0.26	1	12/18/19 11:20	12/19/19 16:50	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/L	0.26	1	12/18/19 11:20	12/19/19 16:50	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/L	0.26	1	12/18/19 11:20	12/19/19 16:50	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/L	0.26	1	12/18/19 11:20	12/19/19 16:50	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/L	0.26	1	12/18/19 11:20	12/19/19 16:50	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/L	0.26	1	12/18/19 11:20	12/19/19 16:50	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/L	0.26	1	12/18/19 11:20	12/19/19 16:50	11096-82-5	
Surrogates								
Tetrachloro-m-xylene (S)	55	%.	16-117	1	12/18/19 11:20	12/19/19 16:50	877-09-8	
Decachlorobiphenyl (S)	51	%.	10-146	1	12/18/19 11:20	12/19/19 16:50	2051-24-3	
608.3 GCS Pesticides	Analytical Method: EPA 608.3 Dec 2016 Preparation Method: EPA 608.3 DEC 2016							
Aldrin	ND	ug/L	0.026	1	12/18/19 11:20	12/24/19 07:34	309-00-2	1c
alpha-BHC	ND	ug/L	0.026	1	12/18/19 11:20	12/24/19 07:34	319-84-6	1c
beta-BHC	ND	ug/L	0.026	1	12/18/19 11:20	12/24/19 07:34	319-85-7	1c
delta-BHC	ND	ug/L	0.026	1	12/18/19 11:20	12/24/19 07:34	319-86-8	1c
gamma-BHC (Lindane)	ND	ug/L	0.026	1	12/18/19 11:20	12/24/19 07:34	58-89-9	1c
Chlordane (Technical)	ND	ug/L	0.26	1	12/18/19 11:20	12/24/19 07:34	57-74-9	1c
4,4'-DDD	ND	ug/L	0.053	1	12/18/19 11:20	12/24/19 07:34	72-54-8	1c
4,4'-DDE	ND	ug/L	0.053	1	12/18/19 11:20	12/24/19 07:34	72-55-9	1c
4,4'-DDT	ND	ug/L	0.053	1	12/18/19 11:20	12/24/19 07:34	50-29-3	1c
Dieldrin	ND	ug/L	0.053	1	12/18/19 11:20	12/24/19 07:34	60-57-1	1c
Endosulfan I	ND	ug/L	0.026	1	12/18/19 11:20	12/24/19 07:34	959-98-8	1c
Endosulfan II	ND	ug/L	0.053	1	12/18/19 11:20	12/24/19 07:34	33213-65-9	1c
Endosulfan sulfate	ND	ug/L	0.053	1	12/18/19 11:20	12/24/19 07:34	1031-07-8	1c
Endrin	ND	ug/L	0.053	1	12/18/19 11:20	12/24/19 07:34	72-20-8	1c
Endrin aldehyde	ND	ug/L	0.053	1	12/18/19 11:20	12/24/19 07:34	7421-93-4	1c
Heptachlor	ND	ug/L	0.026	1	12/18/19 11:20	12/24/19 07:34	76-44-8	1c
Heptachlor epoxide	ND	ug/L	0.026	1	12/18/19 11:20	12/24/19 07:34	1024-57-3	1c
Toxaphene	ND	ug/L	0.53	1	12/18/19 11:20	12/24/19 07:34	8001-35-2	1c
Surrogates								
Tetrachloro-m-xylene (S)	48	%.	21-100	1	12/18/19 11:20	12/24/19 07:34	877-09-8	
Decachlorobiphenyl (S)	48	%.	10-113	1	12/18/19 11:20	12/24/19 07:34	2051-24-3	
245.1 Mercury	Analytical Method: 245.1 Rev. 3.0, 1994 Preparation Method: 245.1 Rev. 3.0, 1994							
Mercury	ND	ug/L	0.20	1	12/19/19 13:49	12/19/19 22:04	7439-97-6	
Phenolics, Total Recoverable	Analytical Method: EPA 420.1 Preparation Method: EPA 420.1							
Phenolics, Total Recoverable	ND	mg/L	0.050	1	12/16/19 16:04	12/16/19 16:26	64743-03-9	
4500CNE Cyanide, Total	Analytical Method: SM 4500CNE-2011 Preparation Method: SM 4500CNC-2011							
Cyanide	ND	mg/L	0.010	1	12/13/19 10:00	12/13/19 12:22	57-12-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

ANALYTICAL RESULTS

Project: 1906682
Pace Project No.: 30340324

Sample: 1906682-01 **Lab ID: 30340324001** Collected: 12/11/19 07:20 Received: 12/12/19 10:45 Matrix: Water

Comments: • The sample was received outside the EPA recommended holding time for Hex Cr. The client was contacted on 12/12/19, and instructed the lab to run the samples. (Williamsport, PA)

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent	Analytical Method: SM3500-CrB							
Chromium, Hexavalent	ND	mg/L	0.010	1		12/12/19 14:34	18540-29-9	H3

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical®
www.pacelabs.com

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

ANALYTICAL RESULTS

Project: 1906682
Pace Project No.: 30340324

Sample: 1906682-02 **Lab ID: 30340324002** Collected: 12/11/19 07:40 Received: 12/12/19 10:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624.1 Volatile Organics	Analytical Method: 624.1 Dec 2016							
Acetone	ND	ug/L	10.0	1		12/19/19 19:12	67-64-1	L1
Acrolein	ND	ug/L	4.0	1		12/19/19 19:12	107-02-8	AC,L2
Acrylonitrile	ND	ug/L	4.0	1		12/19/19 19:12	107-13-1	AC
Benzene	ND	ug/L	1.0	1		12/19/19 19:12	71-43-2	
Bromochloromethane	ND	ug/L	1.0	1		12/19/19 19:12	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/19/19 19:12	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/19/19 19:12	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/19/19 19:12	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		12/19/19 19:12	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/19/19 19:12	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/19/19 19:12	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/19/19 19:12	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/19/19 19:12	75-00-3	
2-Chloroethylvinyl ether	ND	ug/L	2.0	1		12/19/19 19:12	110-75-8	c3
Chloroform	ND	ug/L	1.0	1		12/19/19 19:12	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/19/19 19:12	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/19/19 19:12	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/19/19 19:12	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/19/19 19:12	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/19/19 19:12	106-46-7	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/19/19 19:12	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/19/19 19:12	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/19/19 19:12	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/19/19 19:12	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/19/19 19:12	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/19/19 19:12	78-87-5	
2,2-Dichloropropane	ND	ug/L	1.0	1		12/19/19 19:12	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		12/19/19 19:12	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/19/19 19:12	10061-01-5	N2
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/19/19 19:12	10061-02-6	N2
Ethylbenzene	ND	ug/L	1.0	1		12/19/19 19:12	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		12/19/19 19:12	591-78-6	
Methylene Chloride	ND	ug/L	1.0	1		12/19/19 19:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		12/19/19 19:12	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		12/19/19 19:12	1634-04-4	
Styrene	ND	ug/L	1.0	1		12/19/19 19:12	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/19/19 19:12	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/19/19 19:12	127-18-4	
Toluene	ND	ug/L	1.0	1		12/19/19 19:12	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/19/19 19:12	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/19/19 19:12	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/19/19 19:12	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/19/19 19:12	75-69-4	
Vinyl chloride	ND	ug/L	1.0	1		12/19/19 19:12	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		12/19/19 19:12	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/19/19 19:12	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/19/19 19:12	95-47-6	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

ANALYTICAL RESULTS

Project: 1906682
Pace Project No.: 30340324

Sample: 1906682-02 **Lab ID: 30340324002** Collected: 12/11/19 07:40 Received: 12/12/19 10:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624.1 Volatile Organics	Analytical Method: 624.1 Dec 2016							
Surrogates								
4-Bromofluorobenzene (S)	99	%.	80-120	1		12/19/19 19:12	460-00-4	
Toluene-d8 (S)	93	%.	80-120	1		12/19/19 19:12	2037-26-5	
1,2-Dichloroethane-d4 (S)	92	%.	80-120	1		12/19/19 19:12	17060-07-0	
Dibromofluoromethane (S)	98	%.	80-120	1		12/19/19 19:12	1868-53-7	
Preservation pH	**2.0**		2.0	1		12/19/19 19:12		B

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical®
www.pacelabs.com

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

ANALYTICAL RESULTS

Project: 1906682
Pace Project No.: 30340324

Sample: Trip Blanks **Lab ID: 30340324003** Collected: 12/11/19 07:40 Received: 12/12/19 10:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624.1 Volatile Organics	Analytical Method: 624.1 Dec 2016							
Acetone	ND	ug/L	10.0	1		12/19/19 15:28	67-64-1	L1
Acrolein	ND	ug/L	4.0	1		12/19/19 15:28	107-02-8	AC,L2
Acrylonitrile	ND	ug/L	4.0	1		12/19/19 15:28	107-13-1	AC
Benzene	ND	ug/L	1.0	1		12/19/19 15:28	71-43-2	
Bromochloromethane	ND	ug/L	1.0	1		12/19/19 15:28	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/19/19 15:28	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/19/19 15:28	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/19/19 15:28	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		12/19/19 15:28	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/19/19 15:28	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/19/19 15:28	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/19/19 15:28	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/19/19 15:28	75-00-3	
2-Chloroethylvinyl ether	ND	ug/L	2.0	1		12/19/19 15:28	110-75-8	c3
Chloroform	ND	ug/L	1.0	1		12/19/19 15:28	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/19/19 15:28	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/19/19 15:28	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/19/19 15:28	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/19/19 15:28	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/19/19 15:28	106-46-7	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/19/19 15:28	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/19/19 15:28	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/19/19 15:28	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/19/19 15:28	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/19/19 15:28	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/19/19 15:28	78-87-5	
2,2-Dichloropropane	ND	ug/L	1.0	1		12/19/19 15:28	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		12/19/19 15:28	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/19/19 15:28	10061-01-5	N2
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/19/19 15:28	10061-02-6	N2
Ethylbenzene	ND	ug/L	1.0	1		12/19/19 15:28	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		12/19/19 15:28	591-78-6	
Methylene Chloride	ND	ug/L	1.0	1		12/19/19 15:28	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		12/19/19 15:28	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		12/19/19 15:28	1634-04-4	
Styrene	ND	ug/L	1.0	1		12/19/19 15:28	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/19/19 15:28	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/19/19 15:28	127-18-4	
Toluene	ND	ug/L	1.0	1		12/19/19 15:28	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/19/19 15:28	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/19/19 15:28	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/19/19 15:28	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/19/19 15:28	75-69-4	
Vinyl chloride	ND	ug/L	1.0	1		12/19/19 15:28	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		12/19/19 15:28	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/19/19 15:28	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/19/19 15:28	95-47-6	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical®
www.pacelabs.com

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

ANALYTICAL RESULTS

Project: 1906682
Pace Project No.: 30340324

Sample: Trip Blanks **Lab ID: 30340324003** Collected: 12/11/19 07:40 Received: 12/12/19 10:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624.1 Volatile Organics	Analytical Method: 624.1 Dec 2016							
Surrogates								
4-Bromofluorobenzene (S)	101	%.	80-120	1		12/19/19 15:28	460-00-4	
Toluene-d8 (S)	93	%.	80-120	1		12/19/19 15:28	2037-26-5	
1,2-Dichloroethane-d4 (S)	91	%.	80-120	1		12/19/19 15:28	17060-07-0	
Dibromofluoromethane (S)	97	%.	80-120	1		12/19/19 15:28	1868-53-7	
Preservation pH	**2.0**		2.0	1		12/19/19 15:28		B

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical®
www.pacelabs.com

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

QUALITY CONTROL DATA

Project: 1906682
Pace Project No.: 30340324

QC Batch: 376305
QC Batch Method: 245.1 Rev. 3.0, 1994
Associated Lab Samples: 30340324001

Analysis Method: 245.1 Rev. 3.0, 1994
Analysis Description: 245.1 Mercury

METHOD BLANK: 1825302
Matrix: Water
Associated Lab Samples: 30340324001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	12/19/19 21:49	

LABORATORY CONTROL SAMPLE: 1825303

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	1	0.97	97	85-115	

MATRIX SPIKE SAMPLE: 1825305

Parameter	Units	30340577001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	2.5	2.5	101	70-130	

MATRIX SPIKE SAMPLE: 1825307

Parameter	Units	30340969001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	2.5	2.1	83	70-130	

SAMPLE DUPLICATE: 1825304

Parameter	Units	30340577001 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	ug/L	ND	ND		20	

SAMPLE DUPLICATE: 1825306

Parameter	Units	30340969001 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	ug/L	ND	ND		20	

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical®
www.pacelabs.com

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

QUALITY CONTROL DATA

Project: 1906682
Pace Project No.: 30340324

QC Batch: 376297 | Analysis Method: 624.1 Dec 2016
QC Batch Method: 624.1 Dec 2016 | Analysis Description: 6241 MSV
Associated Lab Samples: 30340324002, 30340324003

METHOD BLANK: 1825253 | Matrix: Water
Associated Lab Samples: 30340324002, 30340324003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	12/19/19 14:13	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	12/19/19 14:13	
1,1,2-Trichloroethane	ug/L	ND	1.0	12/19/19 14:13	
1,1-Dichloroethane	ug/L	ND	1.0	12/19/19 14:13	
1,1-Dichloroethene	ug/L	ND	1.0	12/19/19 14:13	
1,1-Dichloropropene	ug/L	ND	1.0	12/19/19 14:13	
1,2-Dichlorobenzene	ug/L	ND	1.0	12/19/19 14:13	
1,2-Dichloroethane	ug/L	ND	1.0	12/19/19 14:13	
1,2-Dichloropropane	ug/L	ND	1.0	12/19/19 14:13	
1,3-Dichlorobenzene	ug/L	ND	1.0	12/19/19 14:13	
1,4-Dichlorobenzene	ug/L	ND	1.0	12/19/19 14:13	
2,2-Dichloropropane	ug/L	ND	1.0	12/19/19 14:13	
2-Butanone (MEK)	ug/L	ND	10.0	12/19/19 14:13	
2-Chloroethylvinyl ether	ug/L	ND	2.0	12/19/19 14:13	
2-Hexanone	ug/L	ND	10.0	12/19/19 14:13	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	12/19/19 14:13	
Acetone	ug/L	ND	10.0	12/19/19 14:13	
Acrolein	ug/L	ND	4.0	12/19/19 14:13	
Acrylonitrile	ug/L	ND	4.0	12/19/19 14:13	
Benzene	ug/L	ND	1.0	12/19/19 14:13	
Bromochloromethane	ug/L	ND	1.0	12/19/19 14:13	
Bromodichloromethane	ug/L	ND	1.0	12/19/19 14:13	
Bromoform	ug/L	ND	1.0	12/19/19 14:13	
Bromomethane	ug/L	ND	1.0	12/19/19 14:13	
Carbon disulfide	ug/L	ND	1.0	12/19/19 14:13	
Carbon tetrachloride	ug/L	ND	1.0	12/19/19 14:13	
Chlorobenzene	ug/L	ND	1.0	12/19/19 14:13	
Chloroethane	ug/L	ND	1.0	12/19/19 14:13	
Chloroform	ug/L	ND	1.0	12/19/19 14:13	
Chloromethane	ug/L	ND	1.0	12/19/19 14:13	
cis-1,2-Dichloroethene	ug/L	ND	1.0	12/19/19 14:13	
cis-1,3-Dichloropropene	ug/L	ND	1.0	12/19/19 14:13	N2
Dibromochloromethane	ug/L	ND	1.0	12/19/19 14:13	
Ethylbenzene	ug/L	ND	1.0	12/19/19 14:13	
m&p-Xylene	ug/L	ND	2.0	12/19/19 14:13	
Methyl-tert-butyl ether	ug/L	ND	1.0	12/19/19 14:13	
Methylene Chloride	ug/L	ND	1.0	12/19/19 14:13	
o-Xylene	ug/L	ND	1.0	12/19/19 14:13	
Styrene	ug/L	ND	1.0	12/19/19 14:13	
Tetrachloroethene	ug/L	ND	1.0	12/19/19 14:13	
Toluene	ug/L	ND	1.0	12/19/19 14:13	

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical®
www.pacelabs.com

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

QUALITY CONTROL DATA

Project: 1906682
Pace Project No.: 30340324

METHOD BLANK: 1825253 Matrix: Water
Associated Lab Samples: 30340324002, 30340324003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
trans-1,2-Dichloroethene	ug/L	ND	1.0	12/19/19 14:13	
trans-1,3-Dichloropropene	ug/L	ND	1.0	12/19/19 14:13	N2
Trichloroethene	ug/L	ND	1.0	12/19/19 14:13	
Trichlorofluoromethane	ug/L	ND	1.0	12/19/19 14:13	
Vinyl chloride	ug/L	ND	1.0	12/19/19 14:13	
Xylene (Total)	ug/L	ND	3.0	12/19/19 14:13	
1,2-Dichloroethane-d4 (S)	%.	91	80-120	12/19/19 14:13	
4-Bromofluorobenzene (S)	%.	98	80-120	12/19/19 14:13	
Dibromofluoromethane (S)	%.	98	80-120	12/19/19 14:13	
Toluene-d8 (S)	%.	95	80-120	12/19/19 14:13	
Preservation pH		7.0	2.0	12/19/19 14:13	

LABORATORY CONTROL SAMPLE: 1825254

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	17.4	87	70-130	
1,1,2,2-Tetrachloroethane	ug/L	20	19.0	95	60-140	
1,1,2-Trichloroethane	ug/L	20	18.1	91	70-130	
1,1-Dichloroethane	ug/L	20	18.5	92	70-130	
1,1-Dichloroethene	ug/L	20	15.9	80	50-150	
1,1-Dichloropropene	ug/L	20	17.7	89	77-120	
1,2-Dichlorobenzene	ug/L	20	18.4	92	65-135	
1,2-Dichloroethane	ug/L	20	16.9	85	70-130	
1,2-Dichloropropane	ug/L	20	20.4	102	35-165	
1,3-Dichlorobenzene	ug/L	20	18.6	93	70-130	
1,4-Dichlorobenzene	ug/L	20	17.5	88	65-135	
2,2-Dichloropropane	ug/L	20	17.6	88	54-130	
2-Butanone (MEK)	ug/L	20	19.9	100	59-128	
2-Chloroethylvinyl ether	ug/L	20	20.3	102	10-225	
2-Hexanone	ug/L	20	21.8	109	49-145	
4-Methyl-2-pentanone (MIBK)	ug/L	20	22.7	113	63-126	
Acetone	ug/L	20	31.7	159	37-150	L1
Acrolein	ug/L	20	10.6	53	60-140	L2
Acrylonitrile	ug/L	20	21.9	110	60-140	
Benzene	ug/L	20	17.0	85	65-135	
Bromochloromethane	ug/L	20	18.0	90	59-137	
Bromodichloromethane	ug/L	20	17.4	87	65-135	
Bromoform	ug/L	20	15.2	76	70-130	
Bromomethane	ug/L	20	11.5	57	15-185	
Carbon disulfide	ug/L	20	16.0	80	55-123	
Carbon tetrachloride	ug/L	20	16.2	81	70-130	
Chlorobenzene	ug/L	20	19.4	97	65-135	
Chloroethane	ug/L	20	17.7	88	40-160	
Chloroform	ug/L	20	16.8	84	70-135	

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical®
www.pacelabs.com

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

QUALITY CONTROL DATA

Project: 1906682
Pace Project No.: 30340324

LABORATORY CONTROL SAMPLE: 1825254

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloromethane	ug/L	20	15.6	78	10-205	
cis-1,2-Dichloroethene	ug/L	20	17.9	90	66-120	
cis-1,3-Dichloropropene	ug/L	20	18.4	92	25-175	N2
Dibromochloromethane	ug/L	20	16.7	83	70-135	
Ethylbenzene	ug/L	20	18.9	95	60-140	
m&p-Xylene	ug/L	40	37.3	93	80-120	
Methyl-tert-butyl ether	ug/L	20	17.3	86	74-120	
Methylene Chloride	ug/L	20	21.0	105	60-140	
o-Xylene	ug/L	20	18.2	91	78-120	
Styrene	ug/L	20	19.7	98	79-120	
Tetrachloroethene	ug/L	20	18.6	93	70-130	
Toluene	ug/L	20	18.6	93	70-130	
trans-1,2-Dichloroethene	ug/L	20	18.3	92	70-130	
trans-1,3-Dichloropropene	ug/L	20	18.3	91	50-150	N2
Trichloroethene	ug/L	20	18.6	93	65-135	
Trichlorofluoromethane	ug/L	20	17.3	86	50-150	
Vinyl chloride	ug/L	20	19.1	96	5-195	
Xylene (Total)	ug/L	60	55.5	93	80-120	
1,2-Dichloroethane-d4 (S)	%.			91	80-120	
4-Bromofluorobenzene (S)	%.			96	80-120	
Dibromofluoromethane (S)	%.			100	80-120	
Toluene-d8 (S)	%.			98	80-120	
Preservation pH			7.0			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1825255 1825256

Parameter	Units	30341428001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	40000	40000	28300	31300	71	78	52-162	10	36	
1,1,2,2-Tetrachloroethane	ug/L	ND	40000	40000	28000	31700	70	79	46-157	13	61	
1,1,2-Trichloroethane	ug/L	ND	40000	40000	28200	30300	70	76	52-150	7	45	
1,1-Dichloroethane	ug/L	ND	40000	40000	29200	31800	73	79	59-155	8	40	
1,1-Dichloroethene	ug/L	ND	40000	40000	26500	27300	66	68	10-234	3	32	
1,1-Dichloropropene	ug/L	ND	40000	40000	29100	31400	73	79	74-122	8	30	ML
1,2-Dichlorobenzene	ug/L	ND	40000	40000	28200	30100	71	75	18-190	6	57	
1,2-Dichloroethane	ug/L	ND	40000	40000	25900	28400	65	71	49-155	9	49	
1,2-Dichloropropane	ug/L	ND	40000	40000	31000	33300	77	83	10-210	7	55	
1,3-Dichlorobenzene	ug/L	ND	40000	40000	28900	31000	72	77	59-156	7	43	
1,4-Dichlorobenzene	ug/L	ND	40000	40000	27900	29700	70	74	18-190	6	57	
2,2-Dichloropropane	ug/L	ND	40000	40000	26400	28000	66	70	58-125	6	30	
2-Butanone (MEK)	ug/L	ND	40000	40000	34300	39300	60	73	44-125	14	30	
2-Chloroethylvinyl ether	ug/L	ND	40000	40000	29400	31100	73	78	10-305	6	71	
2-Hexanone	ug/L	ND	40000	40000	29400	32400	74	81	49-124	10	30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	40000	40000	31600	35500	79	89	60-118	12	30	

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical®
www.pacelabs.com

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

QUALITY CONTROL DATA

Project: 1906682
Pace Project No.: 30340324

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1825255 1825256

Parameter	Units	30341428001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acetone	ug/L	32500	40000	40000	60300	72300	69	99	11-168	18	30	
Acrolein	ug/L	ND	40000	40000	20300	22600	51	56	40-160	11	60	AC
Acrylonitrile	ug/L	ND	40000	40000	30500	35800	76	89	40-160	16	60	AC
Benzene	ug/L	ND	40000	40000	28100	29900	70	75	37-151	6	61	
Bromochloromethane	ug/L	ND	40000	40000	29000	31200	73	78	72-134	7	30	
Bromodichloromethane	ug/L	ND	40000	40000	26400	28000	66	70	35-155	6	56	
Bromoform	ug/L	ND	40000	40000	22200	24100	55	60	45-169	8	42	
Bromomethane	ug/L	ND	40000	40000	20000	26800	50	67	10-242	29	61	
Carbon disulfide	ug/L	ND	40000	40000	23800	26900	60	67	39-113	12	30	
Carbon tetrachloride	ug/L	ND	40000	40000	26500	28600	66	72	70-140	8	41	ML
Chlorobenzene	ug/L	ND	40000	40000	30800	32400	77	81	37-160	5	53	
Chloroethane	ug/L	ND	40000	40000	37900	38400	95	96	14-230	1	78	
Chloroform	ug/L	ND	40000	40000	26400	27800	66	70	51-138	5	54	
Chloromethane	ug/L	ND	40000	40000	29000	30700	72	77	10-273	6	60	
cis-1,2-Dichloroethene	ug/L	ND	40000	40000	28300	31800	71	79	50-150	11	30	
cis-1,3-Dichloropropene	ug/L	ND	40000	40000	27200	30100	68	75	10-227	10	58	N2
Dibromochloromethane	ug/L	ND	40000	40000	24500	26600	61	67	53-149	9	50	
Ethylbenzene	ug/L	ND	40000	40000	30900	31500	77	79	37-162	2	63	
m&p-Xylene	ug/L	ND	80000	80000	61500	64700	75	79	65-129	5	30	
Methyl-tert-butyl ether	ug/L	ND	40000	40000	25200	28100	63	70	65-109	11	30	ML
Methylene Chloride	ug/L	4520	40000	40000	36200	37800	79	83	10-221	4	28	
o-Xylene	ug/L	ND	40000	40000	28300	30500	71	76	65-126	7	30	
Styrene	ug/L	ND	40000	40000	31300	32600	78	81	69-120	4	30	
Tetrachloroethene	ug/L	ND	40000	40000	30100	31900	75	80	64-148	6	39	
Toluene	ug/L	ND	40000	40000	29700	31200	72	76	47-150	5	41	
trans-1,2-Dichloroethene	ug/L	ND	40000	40000	29200	31800	73	79	54-156	8	45	
trans-1,3-Dichloropropene	ug/L	ND	40000	40000	27500	29500	69	74	17-183	7	86	N2
Trichloroethene	ug/L	ND	40000	40000	29900	32800	75	82	70-157	9	48	
Trichlorofluoromethane	ug/L	ND	40000	40000	32300	32600	81	82	17-181	1	84	
Vinyl chloride	ug/L	ND	40000	40000	36200	37600	90	94	10-251	4	66	
Xylene (Total)	ug/L	ND	120000	120000	89800	95200	74	78	65-128	6	30	
1,2-Dichloroethane-d4 (S)	%.						87	91	80-120			
4-Bromofluorobenzene (S)	%.						98	98	80-120			
Dibromofluoromethane (S)	%.						96	100	80-120			
Toluene-d8 (S)	%.						97	97	80-120			
Preservation pH		14.0			14.0	14.0				0		

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical®
www.pacelabs.com

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

QUALITY CONTROL DATA

Project: 1906682
Pace Project No.: 30340324

QC Batch: 375978
QC Batch Method: EPA 608.3 DEC 2016
Analysis Method: EPA 608.3 Dec 2016
Analysis Description: 6083 GCS PCB
Associated Lab Samples: 30340324001

METHOD BLANK: 1823825
Matrix: Water
Associated Lab Samples: 30340324001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	ND	0.25	12/19/19 15:50	
PCB-1221 (Aroclor 1221)	ug/L	ND	0.25	12/19/19 15:50	
PCB-1232 (Aroclor 1232)	ug/L	ND	0.25	12/19/19 15:50	
PCB-1242 (Aroclor 1242)	ug/L	ND	0.25	12/19/19 15:50	
PCB-1248 (Aroclor 1248)	ug/L	ND	0.25	12/19/19 15:50	
PCB-1254 (Aroclor 1254)	ug/L	ND	0.25	12/19/19 15:50	
PCB-1260 (Aroclor 1260)	ug/L	ND	0.25	12/19/19 15:50	
Decachlorobiphenyl (S)	%.	43	10-146	12/19/19 15:50	
Tetrachloro-m-xylene (S)	%.	73	16-117	12/19/19 15:50	

LABORATORY CONTROL SAMPLE: 1823826

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	2.5	1.7	70	61-103	
PCB-1260 (Aroclor 1260)	ug/L	2.5	1.8	71	37-130	
Decachlorobiphenyl (S)	%.			37	10-146	
Tetrachloro-m-xylene (S)	%.			69	16-117	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1823827 1823828

Parameter	Units	30340558002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/L	ND	2.4	3.6	1.4	1.3	58	36	50-140	8	36	ML
PCB-1260 (Aroclor 1260)	ug/L	ND	2.4	3.6	29.5	49.3	1210	1370	8-140	50	38	E,MH, R1
Decachlorobiphenyl (S)	%.						11	12	10-146			
Tetrachloro-m-xylene (S)	%.						38	39	16-117			

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical®
www.pacelabs.com

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

QUALITY CONTROL DATA

Project: 1906682
Pace Project No.: 30340324

QC Batch: 375977
QC Batch Method: EPA 608.3 DEC 2016
Analysis Method: EPA 608.3 Dec 2016
Analysis Description: 608.3 GCS Pesticide
Associated Lab Samples: 30340324001

METHOD BLANK: 1823821
Matrix: Water
Associated Lab Samples: 30340324001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
4,4'-DDD	ug/L	ND	0.050	12/24/19 10:18	
4,4'-DDE	ug/L	ND	0.050	12/24/19 10:18	
4,4'-DDT	ug/L	ND	0.050	12/24/19 10:18	
Aldrin	ug/L	ND	0.025	12/24/19 10:18	
alpha-BHC	ug/L	ND	0.025	12/24/19 10:18	
beta-BHC	ug/L	ND	0.025	12/24/19 10:18	
Chlordane (Technical)	ug/L	ND	0.25	12/24/19 10:18	
delta-BHC	ug/L	ND	0.025	12/24/19 10:18	
Dieldrin	ug/L	ND	0.050	12/24/19 10:18	
Endosulfan I	ug/L	ND	0.025	12/24/19 10:18	
Endosulfan II	ug/L	ND	0.050	12/24/19 10:18	
Endosulfan sulfate	ug/L	ND	0.050	12/24/19 10:18	
Endrin	ug/L	ND	0.050	12/24/19 10:18	
Endrin aldehyde	ug/L	ND	0.050	12/24/19 10:18	
gamma-BHC (Lindane)	ug/L	ND	0.025	12/24/19 10:18	
Heptachlor	ug/L	ND	0.025	12/24/19 10:18	
Heptachlor epoxide	ug/L	ND	0.025	12/24/19 10:18	
Toxaphene	ug/L	ND	0.50	12/24/19 10:18	
Decachlorobiphenyl (S)	%.	42	10-113	12/24/19 10:18	
Tetrachloro-m-xylene (S)	%.	67	21-100	12/24/19 10:18	

LABORATORY CONTROL SAMPLE: 1823822

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4,4'-DDD	ug/L	0.4	0.31	77	48-130	
4,4'-DDE	ug/L	0.4	0.29	73	54-130	
4,4'-DDT	ug/L	0.4	0.28	71	46-137	
Aldrin	ug/L	0.2	0.13	65	54-130	
alpha-BHC	ug/L	0.2	0.14	70	49-130	
beta-BHC	ug/L	0.2	0.14	68	39-130	
delta-BHC	ug/L	0.2	0.16	80	51-130	
Dieldrin	ug/L	0.4	0.30	75	58-130	
Endosulfan I	ug/L	0.2	0.14	71	57-141	
Endosulfan II	ug/L	0.4	0.29	72	22-171	
Endosulfan sulfate	ug/L	0.4	0.32	80	38-132	
Endrin	ug/L	0.4	0.31	77	51-130	
Endrin aldehyde	ug/L	0.4	0.29	73	54-117	
gamma-BHC (Lindane)	ug/L	0.2	0.14	71	43-130	
Heptachlor	ug/L	0.2	0.13	65	43-130	
Heptachlor epoxide	ug/L	0.2	0.14	70	57-132	

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical®
www.pacelabs.com

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

QUALITY CONTROL DATA

Project: 1906682
Pace Project No.: 30340324

LABORATORY CONTROL SAMPLE: 1823822

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Decachlorobiphenyl (S)	%.			57	10-113	
Tetrachloro-m-xylene (S)	%.			69	21-100	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1823823 1823824

Parameter	Units	30340558001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
4,4'-DDD	ug/L	ND	0.39	0.39	.17J	.2J	44	52	31-141		39	
4,4'-DDE	ug/L	ND	0.39	0.39	.17J	.24J	43	63	30-145		35	
4,4'-DDT	ug/L	ND	0.39	0.39	.12J	.16J	31	41	25-160		42	
Aldrin	ug/L	ND	0.2	0.19	.13J	.17J	66	87	42-140		35	
alpha-BHC	ug/L	ND	0.2	0.19	.24J	.12J	122	62	37-140		36	
beta-BHC	ug/L	ND	0.2	0.19	0.37	0.40	190	206	17-147	7	44	M6
delta-BHC	ug/L	ND	0.2	0.19	0.25	0.26	127	136	19-140	5	52	
Dieldrin	ug/L	ND	0.39	0.39	.21J	.27J	54	69	36-146		49	
Endosulfan I	ug/L	ND	0.2	0.19	.074J	.19J	38	96	45-153		28	M6
Endosulfan II	ug/L	ND	0.39	0.39	.17J	.2J	43	52	10-202		53	
Endosulfan sulfate	ug/L	ND	0.39	0.39	.3J	.33J	75	86	26-144		38	
Endrin	ug/L	ND	0.39	0.39	.2J	.24J	52	61	30-147		48	
Endrin aldehyde	ug/L	ND	0.39	0.39	.27J	.35J	69	91	13-139		25	
gamma-BHC (Lindane)	ug/L	ND	0.2	0.19	.2J	.2J	102	102	32-140		39	
Heptachlor	ug/L	ND	0.2	0.19	.13J	.13J	64	65	34-140		43	
Heptachlor epoxide	ug/L	ND	0.2	0.19	.081J	.14J	41	71	37-142		26	
Decachlorobiphenyl (S)	%.						22	30	10-113			
Tetrachloro-m-xylene (S)	%.						121	87	21-100			S4

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical®
www.pacelabs.com

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

QUALITY CONTROL DATA

Project: 1906682
Pace Project No.: 30340324

QC Batch: 375560
QC Batch Method: EPA 420.1
Analysis Method: EPA 420.1
Analysis Description: 420.1 Phenolics
Associated Lab Samples: 30340324001

METHOD BLANK: 1822069
Matrix: Water
Associated Lab Samples: 30340324001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phenolics, Total Recoverable	mg/L	ND	0.050	12/16/19 16:20	

LABORATORY CONTROL SAMPLE: 1822070

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenolics, Total Recoverable	mg/L	0.25	0.23	92	85-115	

MATRIX SPIKE SAMPLE: 1822072

Parameter	Units	30340324001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Phenolics, Total Recoverable	mg/L	ND	0.25	0.22	87	85-115	

SAMPLE DUPLICATE: 1822071

Parameter	Units	30340324001 Result	Dup Result	RPD	Max RPD	Qualifiers
Phenolics, Total Recoverable	mg/L	ND	ND		20	

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical®
www.pacelabs.com

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

QUALITY CONTROL DATA

Project: 1906682
Pace Project No.: 30340324

QC Batch: 375331
QC Batch Method: SM 4500CNC-2011
Associated Lab Samples: 30340324001

Analysis Method: SM 4500CNE-2011
Analysis Description: 4500CNE Cyanide, Total

METHOD BLANK: 1820770
Matrix: Water
Associated Lab Samples: 30340324001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.010	12/13/19 11:49	

LABORATORY CONTROL SAMPLE: 1820771

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	0.2	0.21	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1820772 1820773

Parameter	Units	30339930001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	ND	0.1	0.1	0.080	0.065	76	61	90-110	21	20	ML,R1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1820774 1820775

Parameter	Units	30339866005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	ND	0.1	0.1	0.11	0.11	106	106	90-110	1	20	

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical®
www.pacelabs.com

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

QUALITY CONTROL DATA

Project: 1906682
Pace Project No.: 30340324

QC Batch: 375218
QC Batch Method: SM3500-CrB
Associated Lab Samples: 30340324001

Analysis Method: SM3500-CrB
Analysis Description: Chromium, Hexavalent by 3500

METHOD BLANK: 1820034
Matrix: Water
Associated Lab Samples: 30340324001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	ND	0.010	12/12/19 14:30	

LABORATORY CONTROL SAMPLE & LCSD: 1820035 1820036

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Chromium, Hexavalent	mg/L	0.05	0.051	0.048	101	96	88-114	5	11.5	

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical®
www.pacelabs.com

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

QUALIFIERS

Project: 1906682
Pace Project No.: 30340324

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.

TNTC - Too Numerous To Count

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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.

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
PASI-WP	Pace Analytical Services - Williamsport

SAMPLE QUALIFIERS

Sample: 1825255

[1] 624.1: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

[2] The pH of the VOA vial used for analysis was 14.

Sample: 1825256

[1] 624.1: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

[2] The pH of the VOA vial used for analysis was 14.

BATCH QUALIFIERS

Batch: 375977

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

1c	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
AC	Analysis of acrolein and/or acrylonitrile was performed from a sample that was field preserved to pH < 2, which is less than the pH range of 4-5 specified in the test method and required for NPDES compliance per 40CFR Part 136.
B	Analyte was detected in the associated method blank.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

QUALIFIERS

Project: 1906682
Pace Project No.: 30340324

ANALYTE QUALIFIERS

E	Analyte concentration exceeded the calibration range. The reported result is estimated.
H3	Sample was received or analysis requested beyond the recognized method holding time.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.
M6	Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.
MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.
R1	RPD value was outside control limits.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.
c3	Analysis of 2-chloroethyl vinyl ether was performed from a sample that was field preserved to pH < 2 with HCl. Acid preservation is not allowed for this parameter by the test method or for NPDES compliance per 40CFR Part 136.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 1906682
Pace Project No.: 30340324

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30340324001	**1906682-01**	EPA 608.3 DEC 2016	375978	EPA 608.3 Dec 2016	376092
30340324001	**1906682-01**	EPA 608.3 DEC 2016	375977	EPA 608.3 Dec 2016	376097
30340324001	**1906682-01**	245.1 Rev. 3.0, 1994	376305	245.1 Rev. 3.0, 1994	376390
30340324002	**1906682-02**	624.1 Dec 2016	376297		
30340324003	**Trip Blanks**	624.1 Dec 2016	376297		
30340324001	**1906682-01**	EPA 420.1	375560	EPA 420.1	375696
30340324001	**1906682-01**	SM 4500CNC-2011	375331	SM 4500CNE-2011	375377
30340324001	**1906682-01**	SM3500-CrB	375218		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SUBCONTRACT OF WO#: 30340324

1906682

30340324

Sending Laboratory:

Envirocorp
51 Clark Street
Harrington, DE 19952
Phone: 302-398-4313
Fax: 302-398-4312
Email Results to:
rachael@envirocorplabs.com, ashley@envirocorplabs.com, & erin@envircorplabs.com
Email Invoice to Shelly Bloom:
shelly@envirocorplabs.com

Subcontract Laboratory:

Pace Analytical Services
2829 Reach Rd.
Williamsport, PA 17701
Phone: (724) 850-5600
Fax:

0,8°C

Sample ID: 1906682-01 *Waste Water* *Sampled: 12/11/2019 07:20*

Analysis	Method	Report Due Date	Hold Time Expires	Comments
Sub_Cn	SM-4500CNE-2011	12/25/2019	12/25/2019 07:20	
Sub_Hex-Cr	SM 3500	12/25/2019	12/12/2019 07:20	
Sub_Hg	EPA 245.1	12/25/2019	01/08/2020 07:20	-001
Sub_PCB/Pesticides	EPA 505	12/25/2019	01/10/2020 07:20	
Sub_Phenolics	EPA 420.1	12/25/2019	01/10/2020 07:20	
Sub_SVOC	EPA 625	12/25/2019	12/18/2019 07:20	w/ Dioxin Screen

Container(s):

Sample ID: 1906682-02 *Waste Water* *Sampled: 12/11/2019 07:40*

Analysis	Method	Report Due Date	Hold Time Expires	Comments
Sub_VOC	EPA 624	12/24/2019	12/25/2019 07:40	-002

Container(s): -003

Subcontract Shipping Checklist

Method of Shipment (circle one): FedEx / UPS / Field Service Vehicle / Other

Tracking Number: _____

LIMS #(s) match on container(s) and COC(s)	Yes ☐	No ☐	NA ☐
Does the container(s) match the analysis	Yes ☐	No ☐	NA ☐
Containers(s) and COC(s) properly packed	Yes ☐	No ☐	NA ☐
Sample containers on ice or ice pack(s)	Yes ☐	No ☐	NA ☐
Container(s) properly sealed and secure	Yes ☐	No ☐	NA ☐

Sample delivery verified? ☐ Yes

Checked by: _____ Date: _____ Received Date _____ Initials: _____

Released By	Date	Time	Received By	Date	Time
[illegible]	12/11/19	1600	UPS		
UPS	12/12/19	10:45am	Kendra Clymer	12/12/19	10:45am
			Marvin L Clay	12-12-19	2345

WO#: 30340324

PM: SLM **Due Date: 12/27/19**
CLIENT: WP-ENVIROCOR

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Envirocorp Labs

Label _____
LIMS Login

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

Tracking #: na

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

Thermometer Used #6 Type of Ice: Wet Blue None

Cooler Temperature Observed Temp 0.8 °C Correction Factor: 0 °C Final Temp: 0.8 °C

Temp should be above freezing to 6°C

pH paper Lot# _____ Date and Initials of person examining contents: EMC 12/12/19

Comments:	Yes	No	N/A	
Chain of Custody Present:	—			1. 19066082
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 Matrix:	—			5.
Samples Arrived within Hold Time:		—		6. Hex-Cr out of hold time
Short Hold Time Analysis (<72hr remaining):	—			7.
Rush Turn Around Time Requested:		—		8.
Sufficient Volume:	—			9.
Correct Containers Used:	—			10.
-Pace Containers Used:	—			
Containers Intact:	—			11.
Orthophosphate field filtered		—		12.
Hex Cr Aqueous sample field filtered		—		13.
Organic Samples checked for dechlorination:		—		14.
Filtered volume received for Dissolved tests		—		15.
All containers have been checked for preservation. exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix		—		16.
All containers meet method preservation requirements.		—		Initial when completed / Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):		—		17.
Trip Blank Present:		—		18.
Trip Blank Custody Seals Present		—		
Rad Samples Screened < 0.5 mrem/hr		—		Initial when completed: / Date:

Client Notification/ Resolution:

Person Contacted: Ashley Burns Date/Time: 12/12/19 @ 11:00 AM Contacted By: SLM

Comments/ Resolution: Client indicated to run the Hex-Cr out of hold time.

☐ **A check in this box indicates that additional information has been stored in ereports.**

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.

SUBURBAN
TESTING LABS

Client: Pace Analytical Services

Project: 30340324

Attn: Don Pearson

Date: 12/23/2019

Submitted by:
Suburban Testing Labs, Inc.
1037F MacArthur Road, Reading, PA 19605
1.800.433.6595

NELAP ACCREDITED TNI LABORATORY
PA DEP # 06-00208
NJDEP# PA081

SUBURBAN
TESTING LABS

12/23/2019

Don Pearson
Pace Analytical Services
1638 Roseytown Rd, Suite 2, 3, 4
Greensburg, PA 15601

Enclosed are the results of analyses for samples received by the laboratory on 12/13/2019 10:06. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Arianna Horonzy

Arianna Horonzy
Project Manager

SUBURBAN TESTING LABS

1037F MacArthur Road
Reading, PA 19605
610-375-8378 Phone
610-375-4090 Fax

Pace Analytical Services 1638 Roseytown Rd, Suite 2, 3, 4 Greensburg PA, 15601	Project Name: 30340324 Project Number: 30340324 Project Manager: Don Pearson	Reported: 12/23/2019 16:28

ANALYTICAL REPORT FOR SAMPLES

Laboratory ID	Sample ID	Matrix	Date Sampled	Date Received
9123079-01	30340324 001	Non-potable	12/11/2019 07:20	12/13/2019 10:06

Chain of Custody

Pace Analytical™
www.pacelabs.com

Pace Analytical Services, Inc.
2829 Reach Road
Williamsport, PA 17701
Phone: (570) 326-4001
FAX: (570) 326-0339

Sample Condition upon Receipt: (Please record the following information)		
Temp in C		
Received on Ice	Yes	No
Sealed Cooler	Yes	No
Samples Intact	Yes	No

9123079
Arianna Horonzy

R- 30340324

Shipped By: FedEx

Analysis Due Date: 12/27/2019

Certification Required: Pennsylvania

Page 1 of 1

Pace Project No.: 30340324
Report/Invoice to: Samantha Merrill

	Pace Sample ID:	Matrix:	Collection Date:	Time:	Analysis Requested:	Analytical Method:	Preservative Type:
1	30340324 001	WW	12/11/19	7:20	625 w/ Dioxin Screen	EPA 625	Unpre.
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							

Special Requirements: (1) 1LGA w/ Na2S2O3 CIV LAH

****Please supply a method blank and LCS QC information on the final report****

Subcontract Lab: Suburban Testing
Address: 1037F MacArthur Rd.
Reading PA 19605
Phone: 800-433-6595

Analysis Authorized By:

Acceptance o

Relinquished By: RJF 12/12/19 1540
(Signature & Affiliation) (Date) (Time)

Relinquished By:
(Signature & Affiliation) (Date) (Time)

Comments:

In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signatu of custody is considered complete as is since this information is available in the owner laboratory.

Suburban Testing Labs

Lab Date/Time: 12/13/19 10:06 **Lab Temp:** 3.3°C on ice

Number of containers/coolers match number on COC? Y / N
Sample labels and COC are free of discrepancies? Y / N
All containers in tact? Y / N
Received in lab within acceptable temperature limits? Y / N
40mL VOA vials free of headspace? Y / N

Relinquished by:

Received in Lab by : LAH (1) 3.3 ice

SUBURBAN TESTING LABS
1037F MacArthur Road
Reading, PA 19605
610-375-8378 Phone
610-375-4090 Fax

Pace Analytical Services	Project Name: 30340324	
1638 Roseytown Rd, Suite 2, 3, 4	Project Number: 30340324	Reported:
Greensburg PA, 15601	Project Manager: Don Pearson	12/23/2019 16:28

Sample Number: 9123079-01	Site: 30340324 001	Sample ID: 30340324
Collector: client	Collect Date: 12/11/2019 7:20 am	Sample Type: Grab

Department / Test / Parameter	Result		Units	Method	R.L.	DF	Prep Date	By	Analysis Date	By
Semivolatiles										
Dioxin	Absent	A	N/A	EPA 625.1		1	12/16/19	KMH	12/19/19 4:51	MAG
SVOA, 625, PPL										
Acenaphthene	< 1.05		µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
Acenaphthylene	< 1.05		µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
Anthracene	< 1.05		µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
Benzidine	< 5.26		µg/L	EPA 625.1	5.26	1	12/16/19	KMH	12/19/19 2:54	MAG
Benzo(a)anthracene	< 1.05		µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
Benzo(a)pyrene	< 1.05		µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
Benzo(b)fluoranthene	< 1.05		µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
Benzo(g,h,i)perylene	< 1.05		µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
Benzo(k)fluoranthene	< 1.05		µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
4-Bromophenyl phenyl ether	< 1.05		µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
Butyl benzyl phthalate	< 1.05		µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
4-Chloro-3-methylphenol	< 1.05		µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
bis(2-Chloroethoxy) methane	< 1.05		µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
bis(2-Chloroethyl) ether	< 1.05		µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
bis(2-Chloroisopropyl) ether	< 1.05	L1	µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
2-Chloronaphthalene	< 1.05	L1	µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
2-Chlorophenol	< 1.05		µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
4-Chlorophenyl phenyl ether	< 1.05		µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
Chrysene	< 1.05		µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
Dibenz(a,h)anthracene	< 1.05		µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
Di-n-butyl phthalate	< 3.16		µg/L	EPA 625.1	3.16	1	12/16/19	KMH	12/19/19 2:54	MAG
3,3'-Dichlorobenzidine	< 10.5		µg/L	EPA 625.1	10.5	1	12/16/19	KMH	12/19/19 2:54	MAG
2,4-Dichlorophenol	< 1.05		µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
Diethyl phthalate	< 1.05		µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
2,4-Dimethylphenol	< 1.05		µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
Dimethyl phthalate	< 1.05		µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
4,6-Dinitro-2-methylphenol	< 1.05		µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
2,4-Dinitrophenol	< 3.16		µg/L	EPA 625.1	3.16	1	12/16/19	KMH	12/19/19 2:54	MAG
2,6-Dinitrotoluene	< 1.05	L1	µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
2,4-Dinitrotoluene	< 1.05		µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
Di-n-octyl phthalate	< 1.05		µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
1,2-Diphenylhydrazine	< 1.05		µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
bis(2-Ethylhexyl) phthalate	< 3.16		µg/L	EPA 625.1	3.16	1	12/16/19	KMH	12/19/19 2:54	MAG
Fluoranthene	< 1.05		µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
Fluorene	< 1.05	L1	µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
Hexachlorobenzene	< 1.05		µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
Hexachlorobutadiene	< 1.05		µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
Hexachlorocyclopentadiene	< 1.05		µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
Hexachloroethane	< 10.5		µg/L	EPA 625.1	10.5	1	12/16/19	KMH	12/19/19 2:54	MAG
Indeno(1,2,3-cd)pyrene	< 1.05		µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
Isophorone	< 1.05		µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
Naphthalene	< 1.05		µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
Nitrobenzene	< 1.05		µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
4-Nitrophenol	< 1.05		µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
2-Nitrophenol	< 1.05		µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
N-Nitrosodimethylamine	< 1.05		µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG

SUBURBAN TESTING LABS

1037F MacArthur Road
Reading, PA 19605
610-375-8378 Phone
610-375-4090 Fax

Pace Analytical Services 1638 Roseytown Rd, Suite 2, 3, 4 Greensburg PA, 15601	Project Name: 30340324 Project Number: 30340324 Project Manager: Don Pearson	Reported: 12/23/2019 16:28

Sample Number: 9123079-01	Site: 30340324 001	Sample ID: 30340324
Collector: client	Collect Date: 12/11/2019 7:20 am	Sample Type: Grab

Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	By	Analysis Date	By
Semivolatiles (Continued)									
SVOA, 625, PPL (Continued)									
n-Nitrosodiphenylamine	< 1.05	µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
N-Nitrosodi-n-propylamine	< 1.05	µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
Pentachlorophenol	< 1.05	µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
Phenanthrene	< 1.05	µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
Phenol	< 5.26	µg/L	EPA 625.1	5.26	1	12/16/19	KMH	12/19/19 2:54	MAG
Pyrene	< 1.05	µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
1,2,4-Trichlorobenzene	< 1.05	µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG
2,4,6-Trichlorophenol	< 1.05	µg/L	EPA 625.1	1.05	1	12/16/19	KMH	12/19/19 2:54	MAG

Surrogate Recoveries	*Results*	*Units*	*Method*	*%Recovery*	*DF*	*Limits (%Recovery)*	*Analysis Date*
Surrogate: 2-Fluorophenol	71.1	µg/L	EPA 625.1	34%	1	10-79	12/19/19 2:54
Surrogate: Phenol-d6	45.9	µg/L	EPA 625.1	22%	1	10-57	12/19/19 2:54
Surrogate: Nitrobenzene-d5	62.8	µg/L	EPA 625.1	60%	1	24-119	12/19/19 2:54
Surrogate: 2-Fluorobiphenyl	62.1	µg/L	EPA 625.1	59%	1	29-115	12/19/19 2:54
Surrogate: 2,4,6-Tribromophenol	138	µg/L	EPA 625.1	65%	1	10-141	12/19/19 2:54
Surrogate: p-Terphenyl-d14	63.8	µg/L	EPA 625.1	61%	1	44-124	12/19/19 2:54

Work Order Memo

Data Qualifiers:

A	This parameter is not included in STLs NELAC Scope of Accreditation and should not be used for regulatory compliance ; however, the analysis has been completed in accordance with STLs NELAC Quality System requirements.
L1	The Laboratory Control Sample for the analysis batch associated with this sample was below acceptance criteria. Results may have greater uncertainty.

Sample Receipt Conditions:

All samples met the sample receipt requirements for the relevant analyses.

SUBURBAN TESTING LABS

1037F MacArthur Road
Reading, PA 19605
610-375-8378 Phone
610-375-4090 Fax

Pace Analytical Services	Project Name: 30340324	
1638 Roseytown Rd, Suite 2, 3, 4	Project Number: 30340324	**Reported:**
Greensburg PA, 15601	Project Manager: Don Pearson	12/23/2019 16:28

The test *pH, Lab* is performed in the Laboratory as soon as possible. These results are not appropriate for compliance with NPDES, SDWA, or other regulatory programs that require analysis within 15 minutes of sample collection and should be considered for informational purposes only.

All results meet the requirements of STL's TNI (NELAC) Accredited Quality System unless otherwise noted. If your results contain any data qualifiers or comments, you should evaluate useability relative to your needs.

If collectors initials include "STL", samples have been collected in accordance with STL SOP SL0015.

All results reported on an As Received (Wet Weight) basis unless otherwise noted.

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

Results are considered Preliminary unless report is signed by authorized representative of STL.

Reviewed and Released By:
Arianna Horonzy
Project Manager

Arianna Horonzy

ENVIROCORP LABORATORIES INC.

51 CLARK STREET, HARRINGTON, DE 19952
302-398-4313
www.envirocorplabs.com

ANALYTICAL SERVICES: NPDES, RCRA, GROUND WATER

January 02, 2020

Vince Disciullo
New Castle County Lab
187A Old Churchmans
New Castle, DE 19720

RE: NCC Annual

Enclosed are the results of analyses for samples received by our laboratory on 12/ 11/2019. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Shelly Bloom

Shelly Bloom
Office Manager

Table of Contents

Cover Letter	1
Samples in Report	3
Sample Results	4
Qualifiers and Definitions	5
Chain of Custody PDF	6
Subcontracted	7

ENVIROCORP LABORATORIES INC.

51 CLARK STREET, HARRINGTON, DE 19952
302-398-4313
www.envirocorplabs.com

ANALYTICAL SERVICES: NPDES, RCRA, GROUND WATER

New Castle County Lab	**Project:** NCC Annual
187A Old Churchmans	**Project Number:**
New Castle, DE 19720	**Reported:** 01/02/2020 13:38

Sample Summary

Lab ID	Sample	Matrix	Sampled	Received
1906681-01	Influent	Waste Water	12/11/2019 7:30	12/11/19 13:40
1906681-02	Influent	Waste Water	12/11/2019 7:20	12/11/19 13:40

ENVIROCORP LABORATORIES INC.

51 CLARK STREET, HARRINGTON, DE 19952
302-398-4313
www.envirocorplabs.com

ANALYTICAL SERVICES: NPDES, RCRA, GROUND WATER

New Castle County Lab	**Project:** NCC Annual
187A Old Churchmans	**Project Number:**
New Castle, DE 19720	**Reported:** 01/02/2020 13:38

Analytical Results

Sample ID:	Influent	**Sample Start:**	12/10/19 07:25
Lab ID:	1906681-01	**Sample End:**	12/11/19 07:30
Matrix:	Waste Water	**Received:**	12/11/19 13:40
Sample Type:	Composite		

Analyte	Result	Units	Reporting Limit	Qualifier	Method	Date Prepared	Date Analyzed	Analyst
Metals								
Silver	ND	mg/L	0.000500		EPA 200.8	12/19/19 10:54	12/19/19 12:36	JMW
Arsenic	0.00290	mg/L	0.00100		EPA 200.8	12/19/19 10:54	12/19/19 12:36	JMW
Beryllium	ND	mg/L	0.00100		EPA 200.8	12/19/19 10:54	12/19/19 12:36	JMW
Cadmium	ND	mg/L	0.000500		EPA 200.8	12/19/19 10:54	12/19/19 12:36	JMW
Chromium	0.00296	mg/L	0.00100		EPA 200.8	12/19/19 10:54	12/19/19 12:36	JMW
Molybdenum	0.00398	mg/L	0.00100		EPA 200.8	12/19/19 10:54	12/19/19 12:36	JMW
Nickel	0.00244	mg/L	0.00100		EPA 200.8	12/19/19 10:54	12/19/19 12:36	JMW
Lead	0.00116	mg/L	0.00100		EPA 200.8	12/19/19 10:54	12/19/19 12:36	JMW
Antimony	ND	mg/L	0.00100		EPA 200.8	12/19/19 10:54	12/19/19 12:36	JMW
Selenium	0.0127	mg/L	0.00100		EPA 200.8	12/19/19 10:54	12/19/19 12:36	JMW
Thallium	ND	mg/L	0.00100		EPA 200.8	12/19/19 10:54	12/19/19 12:36	JMW
Zinc	0.147	mg/L	0.00100		EPA 200.8	12/19/19 10:54	12/19/19 12:36	JMW

ENVIROCORP LABORATORIES INC.

51 CLARK STREET, HARRINGTON, DE 19952
302-398-4313
www.envirocorplabs.com

ANALYTICAL SERVICES: NPDES, RCRA, GROUND WATER

New Castle County Lab	**Project:** NCC Annual
187A Old Churchmans	**Project Number:**
New Castle, DE 19720	**Reported:** 01/02/2020 13:38

Notes and Definitions

Item	Definition
Dry-WT	Sample results reported on a dry weight basis.
ND	Analyte NOT DETECTED at or above the reporting limit.
Reporting Limit	Lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

Chain of Custody for Work Order

1906681

Annual

Lab I.D.			-01 -02
Facility Name (Source)	New Castle County		
Sample Location	Influent		
	Date	Time	Performed by
Composite Sample Start	12/10/19	0725	ME
Composite Sample End	12·11·19	0730	ME

Circle Selection from list below	Circle Grab/ Composite	Analysis	Comments
1-2-3-4-5-6-7	Grab/Comp	Sb, As, Be, Cd, Cr, Pb, Mo, Ni, Se, Ag, Tl, Zn	
1-2-3-4-5-6-7	Grab/Comp	245 Hg	
1-2-3-4-5-6-7	Grab/Comp	608 PCB/Pesticides	✓ cont.
1-2-3-4-5-6-7	Grab/Comp	624 (Volatiles)	12/11/19 @720 per Brian Blackburn
1-2-3-4-5-6-7	Grab/Comp	625 (w/ Dioxin Screen)	
1-2-3-4-5-6-7	Grab/Comp	Cyanide	
1-2-3-4-5-6-7	Grab/Comp	Hex-Cr	
1-2-3-4-5-6-7	Grab/Comp	420 Phenolics	
1-2-3-4-5-6-7	Grab/Comp	Asbestos	~~cont~~ No container collecting 12/18

Select number for each analysis in row above
Preservations List
1.) None
2.) None - Iced
3.) H2S04, pH <2, Iced
4.) HNO3, pH <2, Iced
5.) NAOH, pH >12, Iced
6.) HCL, pH <2, Iced
7.) Other (Explain in comments)

Comments regarding special circumstances, appearance of effluent, etc.

Relinquished By	Date	Time	Received By	Date	Time
[signature]	12·11·19	0830	[signature]	12/11/19	1125
[signature]	12/11/19	1340	[signature]	12/11/19	1340

Vince Disciullo – 302-388-8392

EI Labs Cooler Temperature 2.6

Pace Analytical®
www.pacelabs.com

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

December 27, 2019

Shelly Bloom
Envirocorp Labs, Inc.
51 Clark Street
Harrington, DE 19952

RE: Project: 1906681
Pace Project No.: 30340304

Dear Shelly Bloom:
Enclosed are the analytical results for sample(s) received by the laboratory on December 12, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses have been subcontracted outside of the Pace Network. The subcontracted laboratory report has been attached.

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

Sincerely,

Samantha Merrill
samantha.merrill@pacelabs.com
(570)326-4001
Project Manager

Enclosures

cc: Erin Bichy, Envirocorp Labs
Ashley Burns, Envirocorp Labs
Rachael Needam, Envirocorp Labs

NELAP ACCREDITED TNI LABORATORY

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

CERTIFICATIONS

Project: 1906681
Pace Project No.: 30340304

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services Williamsport
2829 Reach Rd, Williamsport, PA 17701
Delaware H&SS NELAP
Maryland DOE NELAP 202
New York DOH NELAP 12028
Pennsylvania Dept of Agriculture 42-B-00142
Pennsylvania DEP NELAP 41-00034
USFDA Registered DUNS 117006653

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

SAMPLE SUMMARY

Project: 1906681
Pace Project No.: 30340304

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30340304001	**1906681-01**	Water	12/11/19 07:30	12/12/19 10:45
30340304002	**1906681-02**	Water	12/11/19 07:40	12/12/19 10:45
30340304003	**Trip Blank**	Water	12/11/19 07:40	12/12/19 10:45

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

SAMPLE ANALYTE COUNT

Project: 1906681
Pace Project No.: 30340304

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30340304001	**1906681-01**	EPA 608.3 Dec 2016	CWB	9	PASI-PA
		EPA 608.3 Dec 2016	TAW	20	PASI-PA
		245.1 Rev. 3.0, 1994	KAS	1	PASI-PA
		EPA 420.1	PAS	1	PASI-PA
		SM 4500CNE-2011	EKM	1	PASI-PA
		SM3500-CrB	SEF1	1	PASI-WP
30340304002	**1906681-02**	624.1 Dec 2016	LEL	52	PASI-PA
30340304003	**Trip Blank**	624.1 Dec 2016	LEL	52	PASI-PA

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical®
www.pacelabs.com

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

ANALYTICAL RESULTS

Project: 1906681
Pace Project No.: 30340304

Sample: 1906681-01 **Lab ID: 30340304001** Collected: 12/11/19 07:30 Received: 12/12/19 10:45 Matrix: Water

Comments: • The sample was received outside the EPA recommended holding time for Hex Cr. The client was contacted on 12/12/19, and instructed the lab to run the samples. (Williamsport, PA)

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
608.3 GCS PCBs	Analytical Method: EPA 608.3 Dec 2016 Preparation Method: EPA 608.3 DEC 2016							
PCB-1016 (Aroclor 1016)	ND	ug/L	1.2	5	12/18/19 11:20	12/19/19 16:32	12674-11-2	ED
PCB-1221 (Aroclor 1221)	ND	ug/L	1.2	5	12/18/19 11:20	12/19/19 16:32	11104-28-2	ED
PCB-1232 (Aroclor 1232)	ND	ug/L	1.2	5	12/18/19 11:20	12/19/19 16:32	11141-16-5	ED
PCB-1242 (Aroclor 1242)	ND	ug/L	1.2	5	12/18/19 11:20	12/19/19 16:32	53469-21-9	ED
PCB-1248 (Aroclor 1248)	ND	ug/L	1.2	5	12/18/19 11:20	12/19/19 16:32	12672-29-6	ED
PCB-1254 (Aroclor 1254)	ND	ug/L	1.2	5	12/18/19 11:20	12/19/19 16:32	11097-69-1	ED
PCB-1260 (Aroclor 1260)	ND	ug/L	1.2	5	12/18/19 11:20	12/19/19 16:32	11096-82-5	ED
Surrogates								
Tetrachloro-m-xylene (S)	64	%.	16-117	5	12/18/19 11:20	12/19/19 16:32	877-09-8	
Decachlorobiphenyl (S)	37	%.	10-146	5	12/18/19 11:20	12/19/19 16:32	2051-24-3	
608.3 GCS Pesticides	Analytical Method: EPA 608.3 Dec 2016 Preparation Method: EPA 608.3 DEC 2016							
Aldrin	ND	ug/L	0.025	1	12/18/19 11:20	12/24/19 08:28	309-00-2	1c
alpha-BHC	ND	ug/L	0.025	1	12/18/19 11:20	12/24/19 08:28	319-84-6	1c
beta-BHC	ND	ug/L	0.025	1	12/18/19 11:20	12/24/19 08:28	319-85-7	1c
delta-BHC	ND	ug/L	0.025	1	12/18/19 11:20	12/24/19 08:28	319-86-8	1c
gamma-BHC (Lindane)	ND	ug/L	0.025	1	12/18/19 11:20	12/24/19 08:28	58-89-9	1c
Chlordane (Technical)	ND	ug/L	0.25	1	12/18/19 11:20	12/24/19 08:28	57-74-9	1c
4,4'-DDD	ND	ug/L	0.050	1	12/18/19 11:20	12/24/19 08:28	72-54-8	1c
4,4'-DDE	ND	ug/L	0.050	1	12/18/19 11:20	12/24/19 08:28	72-55-9	1c
4,4'-DDT	ND	ug/L	0.050	1	12/18/19 11:20	12/24/19 08:28	50-29-3	1c
Dieldrin	ND	ug/L	0.050	1	12/18/19 11:20	12/24/19 08:28	60-57-1	1c
Endosulfan I	ND	ug/L	0.025	1	12/18/19 11:20	12/24/19 08:28	959-98-8	1c
Endosulfan II	ND	ug/L	0.050	1	12/18/19 11:20	12/24/19 08:28	33213-65-9	1c
Endosulfan sulfate	ND	ug/L	0.050	1	12/18/19 11:20	12/24/19 08:28	1031-07-8	1c
Endrin	ND	ug/L	0.050	1	12/18/19 11:20	12/24/19 08:28	72-20-8	1c
Endrin aldehyde	ND	ug/L	0.050	1	12/18/19 11:20	12/24/19 08:28	7421-93-4	1c
Heptachlor	ND	ug/L	0.025	1	12/18/19 11:20	12/24/19 08:28	76-44-8	1c
Heptachlor epoxide	ND	ug/L	0.025	1	12/18/19 11:20	12/24/19 08:28	1024-57-3	1c
Toxaphene	ND	ug/L	0.50	1	12/18/19 11:20	12/24/19 08:28	8001-35-2	1c
Surrogates								
Tetrachloro-m-xylene (S)	76	%.	21-100	1	12/18/19 11:20	12/24/19 08:28	877-09-8	
Decachlorobiphenyl (S)	37	%.	10-113	1	12/18/19 11:20	12/24/19 08:28	2051-24-3	
245.1 Mercury	Analytical Method: 245.1 Rev. 3.0, 1994 Preparation Method: 245.1 Rev. 3.0, 1994							
Mercury	ND	ug/L	0.20	1	12/19/19 13:49	12/19/19 22:02	7439-97-6	
Phenolics, Total Recoverable	Analytical Method: EPA 420.1 Preparation Method: EPA 420.1							
Phenolics, Total Recoverable	**0.12**	mg/L	0.050	1	12/16/19 16:04	12/16/19 16:26	64743-03-9	
4500CNE Cyanide, Total	Analytical Method: SM 4500CNE-2011 Preparation Method: SM 4500CNC-2011							
Cyanide	ND	mg/L	0.010	1	12/13/19 10:00	12/13/19 12:19	57-12-5	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

ANALYTICAL RESULTS

Project: 1906681
Pace Project No.: 30340304

Sample: 1906681-01 **Lab ID: 30340304001** Collected: 12/11/19 07:30 Received: 12/12/19 10:45 Matrix: Water

Comments: • The sample was received outside the EPA recommended holding time for Hex Cr. The client was contacted on 12/12/19, and instructed the lab to run the samples. (Williamsport, PA)

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent	Analytical Method: SM3500-CrB							
Chromium, Hexavalent	**0.020**	mg/L	0.010	1		12/12/19 14:35	18540-29-9	H3

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical®
www.pacelabs.com

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

ANALYTICAL RESULTS

Project: 1906681
Pace Project No.: 30340304

Sample: 1906681-02 **Lab ID: 30340304002** Collected: 12/11/19 07:40 Received: 12/12/19 10:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624.1 Volatile Organics	Analytical Method: 624.1 Dec 2016							
Acetone	**96.4**	ug/L	10.0	1		12/19/19 20:27	67-64-1	L1
Acrolein	ND	ug/L	4.0	1		12/19/19 20:27	107-02-8	AC,L2
Acrylonitrile	ND	ug/L	4.0	1		12/19/19 20:27	107-13-1	AC
Benzene	ND	ug/L	1.0	1		12/19/19 20:27	71-43-2	
Bromochloromethane	ND	ug/L	1.0	1		12/19/19 20:27	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/19/19 20:27	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/19/19 20:27	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/19/19 20:27	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		12/19/19 20:27	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/19/19 20:27	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/19/19 20:27	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/19/19 20:27	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/19/19 20:27	75-00-3	
2-Chloroethylvinyl ether	ND	ug/L	2.0	1		12/19/19 20:27	110-75-8	c3
Chloroform	ND	ug/L	1.0	1		12/19/19 20:27	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/19/19 20:27	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/19/19 20:27	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/19/19 20:27	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/19/19 20:27	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/19/19 20:27	106-46-7	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/19/19 20:27	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/19/19 20:27	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/19/19 20:27	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/19/19 20:27	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/19/19 20:27	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/19/19 20:27	78-87-5	
2,2-Dichloropropane	ND	ug/L	1.0	1		12/19/19 20:27	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		12/19/19 20:27	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/19/19 20:27	10061-01-5	N2
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/19/19 20:27	10061-02-6	N2
Ethylbenzene	ND	ug/L	1.0	1		12/19/19 20:27	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		12/19/19 20:27	591-78-6	
Methylene Chloride	ND	ug/L	1.0	1		12/19/19 20:27	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		12/19/19 20:27	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		12/19/19 20:27	1634-04-4	
Styrene	ND	ug/L	1.0	1		12/19/19 20:27	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/19/19 20:27	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/19/19 20:27	127-18-4	
Toluene	**2.2**	ug/L	1.0	1		12/19/19 20:27	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/19/19 20:27	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/19/19 20:27	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/19/19 20:27	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/19/19 20:27	75-69-4	
Vinyl chloride	ND	ug/L	1.0	1		12/19/19 20:27	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		12/19/19 20:27	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/19/19 20:27	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/19/19 20:27	95-47-6	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical®
www.pacelabs.com

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

ANALYTICAL RESULTS

Project: 1906681
Pace Project No.: 30340304

Sample: 1906681-02 **Lab ID: 30340304002** Collected: 12/11/19 07:40 Received: 12/12/19 10:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624.1 Volatile Organics	Analytical Method: 624.1 Dec 2016							
Surrogates								
4-Bromofluorobenzene (S)	98	%.	80-120	1		12/19/19 20:27	460-00-4	
Toluene-d8 (S)	94	%.	80-120	1		12/19/19 20:27	2037-26-5	
1,2-Dichloroethane-d4 (S)	94	%.	80-120	1		12/19/19 20:27	17060-07-0	
Dibromofluoromethane (S)	97	%.	80-120	1		12/19/19 20:27	1868-53-7	
Preservation pH	**3.0**		2.0	1		12/19/19 20:27		B

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical®
www.pacelabs.com

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

ANALYTICAL RESULTS

Project: 1906681
Pace Project No.: 30340304

Sample: Trip Blank **Lab ID: 30340304003** Collected: 12/11/19 07:40 Received: 12/12/19 10:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624.1 Volatile Organics	Analytical Method: 624.1 Dec 2016							
Acetone	ND	ug/L	10.0	1		12/19/19 16:18	67-64-1	L1
Acrolein	ND	ug/L	4.0	1		12/19/19 16:18	107-02-8	AC,L2
Acrylonitrile	ND	ug/L	4.0	1		12/19/19 16:18	107-13-1	AC
Benzene	ND	ug/L	1.0	1		12/19/19 16:18	71-43-2	
Bromochloromethane	ND	ug/L	1.0	1		12/19/19 16:18	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/19/19 16:18	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/19/19 16:18	75-25-2	
Bromomethane	ND	ug/L	1.0	1		12/19/19 16:18	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		12/19/19 16:18	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		12/19/19 16:18	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		12/19/19 16:18	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/19/19 16:18	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/19/19 16:18	75-00-3	
2-Chloroethylvinyl ether	ND	ug/L	2.0	1		12/19/19 16:18	110-75-8	c3
Chloroform	ND	ug/L	1.0	1		12/19/19 16:18	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/19/19 16:18	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	1		12/19/19 16:18	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/19/19 16:18	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/19/19 16:18	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/19/19 16:18	106-46-7	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/19/19 16:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/19/19 16:18	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/19/19 16:18	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/19/19 16:18	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/19/19 16:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/19/19 16:18	78-87-5	
2,2-Dichloropropane	ND	ug/L	1.0	1		12/19/19 16:18	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		12/19/19 16:18	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/19/19 16:18	10061-01-5	N2
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/19/19 16:18	10061-02-6	N2
Ethylbenzene	ND	ug/L	1.0	1		12/19/19 16:18	100-41-4	
2-Hexanone	ND	ug/L	10.0	1		12/19/19 16:18	591-78-6	
Methylene Chloride	ND	ug/L	1.0	1		12/19/19 16:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		12/19/19 16:18	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		12/19/19 16:18	1634-04-4	
Styrene	ND	ug/L	1.0	1		12/19/19 16:18	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/19/19 16:18	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/19/19 16:18	127-18-4	
Toluene	ND	ug/L	1.0	1		12/19/19 16:18	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/19/19 16:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/19/19 16:18	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/19/19 16:18	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/19/19 16:18	75-69-4	
Vinyl chloride	ND	ug/L	1.0	1		12/19/19 16:18	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		12/19/19 16:18	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/19/19 16:18	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/19/19 16:18	95-47-6	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

ANALYTICAL RESULTS

Project: 1906681
Pace Project No.: 30340304

Sample: Trip Blank **Lab ID: 30340304003** Collected: 12/11/19 07:40 Received: 12/12/19 10:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624.1 Volatile Organics	Analytical Method: 624.1 Dec 2016							
Surrogates								
4-Bromofluorobenzene (S)	99	%.	80-120	1		12/19/19 16:18	460-00-4	
Toluene-d8 (S)	95	%.	80-120	1		12/19/19 16:18	2037-26-5	
1,2-Dichloroethane-d4 (S)	91	%.	80-120	1		12/19/19 16:18	17060-07-0	
Dibromofluoromethane (S)	96	%.	80-120	1		12/19/19 16:18	1868-53-7	
Preservation pH	**2.0**		2.0	1		12/19/19 16:18		B

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical®
www.pacelabs.com

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

QUALITY CONTROL DATA

Project: 1906681
Pace Project No.: 30340304

QC Batch: 376305
QC Batch Method: 245.1 Rev. 3.0, 1994
Analysis Method: 245.1 Rev. 3.0, 1994
Analysis Description: 245.1 Mercury
Associated Lab Samples: 30340304001

METHOD BLANK: 1825302
Matrix: Water
Associated Lab Samples: 30340304001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	12/19/19 21:49	

LABORATORY CONTROL SAMPLE: 1825303

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	1	0.97	97	85-115	

MATRIX SPIKE SAMPLE: 1825305

Parameter	Units	30340577001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	2.5	2.5	101	70-130	

MATRIX SPIKE SAMPLE: 1825307

Parameter	Units	30340969001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	2.5	2.1	83	70-130	

SAMPLE DUPLICATE: 1825304

Parameter	Units	30340577001 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	ug/L	ND	ND		20	

SAMPLE DUPLICATE: 1825306

Parameter	Units	30340969001 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	ug/L	ND	ND		20	

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical®
www.pacelabs.com

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

QUALITY CONTROL DATA

Project: 1906681
Pace Project No.: 30340304

QC Batch: 376297 | Analysis Method: 624.1 Dec 2016
QC Batch Method: 624.1 Dec 2016 | Analysis Description: 6241 MSV
Associated Lab Samples: 30340304002, 30340304003

METHOD BLANK: 1825253 | Matrix: Water
Associated Lab Samples: 30340304002, 30340304003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	12/19/19 14:13	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	12/19/19 14:13	
1,1,2-Trichloroethane	ug/L	ND	1.0	12/19/19 14:13	
1,1-Dichloroethane	ug/L	ND	1.0	12/19/19 14:13	
1,1-Dichloroethene	ug/L	ND	1.0	12/19/19 14:13	
1,1-Dichloropropene	ug/L	ND	1.0	12/19/19 14:13	
1,2-Dichlorobenzene	ug/L	ND	1.0	12/19/19 14:13	
1,2-Dichloroethane	ug/L	ND	1.0	12/19/19 14:13	
1,2-Dichloropropane	ug/L	ND	1.0	12/19/19 14:13	
1,3-Dichlorobenzene	ug/L	ND	1.0	12/19/19 14:13	
1,4-Dichlorobenzene	ug/L	ND	1.0	12/19/19 14:13	
2,2-Dichloropropane	ug/L	ND	1.0	12/19/19 14:13	
2-Butanone (MEK)	ug/L	ND	10.0	12/19/19 14:13	
2-Chloroethylvinyl ether	ug/L	ND	2.0	12/19/19 14:13	
2-Hexanone	ug/L	ND	10.0	12/19/19 14:13	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	12/19/19 14:13	
Acetone	ug/L	ND	10.0	12/19/19 14:13	
Acrolein	ug/L	ND	4.0	12/19/19 14:13	
Acrylonitrile	ug/L	ND	4.0	12/19/19 14:13	
Benzene	ug/L	ND	1.0	12/19/19 14:13	
Bromochloromethane	ug/L	ND	1.0	12/19/19 14:13	
Bromodichloromethane	ug/L	ND	1.0	12/19/19 14:13	
Bromoform	ug/L	ND	1.0	12/19/19 14:13	
Bromomethane	ug/L	ND	1.0	12/19/19 14:13	
Carbon disulfide	ug/L	ND	1.0	12/19/19 14:13	
Carbon tetrachloride	ug/L	ND	1.0	12/19/19 14:13	
Chlorobenzene	ug/L	ND	1.0	12/19/19 14:13	
Chloroethane	ug/L	ND	1.0	12/19/19 14:13	
Chloroform	ug/L	ND	1.0	12/19/19 14:13	
Chloromethane	ug/L	ND	1.0	12/19/19 14:13	
cis-1,2-Dichloroethene	ug/L	ND	1.0	12/19/19 14:13	
cis-1,3-Dichloropropene	ug/L	ND	1.0	12/19/19 14:13	N2
Dibromochloromethane	ug/L	ND	1.0	12/19/19 14:13	
Ethylbenzene	ug/L	ND	1.0	12/19/19 14:13	
m&p-Xylene	ug/L	ND	2.0	12/19/19 14:13	
Methyl-tert-butyl ether	ug/L	ND	1.0	12/19/19 14:13	
Methylene Chloride	ug/L	ND	1.0	12/19/19 14:13	
o-Xylene	ug/L	ND	1.0	12/19/19 14:13	
Styrene	ug/L	ND	1.0	12/19/19 14:13	
Tetrachloroethene	ug/L	ND	1.0	12/19/19 14:13	
Toluene	ug/L	ND	1.0	12/19/19 14:13	

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical®
www.pacelabs.com

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

QUALITY CONTROL DATA

Project: 1906681
Pace Project No.: 30340304

METHOD BLANK: 1825253 Matrix: Water
Associated Lab Samples: 30340304002, 30340304003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
trans-1,2-Dichloroethene	ug/L	ND	1.0	12/19/19 14:13	
trans-1,3-Dichloropropene	ug/L	ND	1.0	12/19/19 14:13	N2
Trichloroethene	ug/L	ND	1.0	12/19/19 14:13	
Trichlorofluoromethane	ug/L	ND	1.0	12/19/19 14:13	
Vinyl chloride	ug/L	ND	1.0	12/19/19 14:13	
Xylene (Total)	ug/L	ND	3.0	12/19/19 14:13	
1,2-Dichloroethane-d4 (S)	%.	91	80-120	12/19/19 14:13	
4-Bromofluorobenzene (S)	%.	98	80-120	12/19/19 14:13	
Dibromofluoromethane (S)	%.	98	80-120	12/19/19 14:13	
Toluene-d8 (S)	%.	95	80-120	12/19/19 14:13	
Preservation pH		7.0	2.0	12/19/19 14:13	

LABORATORY CONTROL SAMPLE: 1825254

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	17.4	87	70-130	
1,1,2,2-Tetrachloroethane	ug/L	20	19.0	95	60-140	
1,1,2-Trichloroethane	ug/L	20	18.1	91	70-130	
1,1-Dichloroethane	ug/L	20	18.5	92	70-130	
1,1-Dichloroethene	ug/L	20	15.9	80	50-150	
1,1-Dichloropropene	ug/L	20	17.7	89	77-120	
1,2-Dichlorobenzene	ug/L	20	18.4	92	65-135	
1,2-Dichloroethane	ug/L	20	16.9	85	70-130	
1,2-Dichloropropane	ug/L	20	20.4	102	35-165	
1,3-Dichlorobenzene	ug/L	20	18.6	93	70-130	
1,4-Dichlorobenzene	ug/L	20	17.5	88	65-135	
2,2-Dichloropropane	ug/L	20	17.6	88	54-130	
2-Butanone (MEK)	ug/L	20	19.9	100	59-128	
2-Chloroethylvinyl ether	ug/L	20	20.3	102	10-225	
2-Hexanone	ug/L	20	21.8	109	49-145	
4-Methyl-2-pentanone (MIBK)	ug/L	20	22.7	113	63-126	
Acetone	ug/L	20	31.7	159	37-150	L1
Acrolein	ug/L	20	10.6	53	60-140	L2
Acrylonitrile	ug/L	20	21.9	110	60-140	
Benzene	ug/L	20	17.0	85	65-135	
Bromochloromethane	ug/L	20	18.0	90	59-137	
Bromodichloromethane	ug/L	20	17.4	87	65-135	
Bromoform	ug/L	20	15.2	76	70-130	
Bromomethane	ug/L	20	11.5	57	15-185	
Carbon disulfide	ug/L	20	16.0	80	55-123	
Carbon tetrachloride	ug/L	20	16.2	81	70-130	
Chlorobenzene	ug/L	20	19.4	97	65-135	
Chloroethane	ug/L	20	17.7	88	40-160	
Chloroform	ug/L	20	16.8	84	70-135	

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical®
www.pacelabs.com

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

QUALITY CONTROL DATA

Project: 1906681
Pace Project No.: 30340304

LABORATORY CONTROL SAMPLE: 1825254

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloromethane	ug/L	20	15.6	78	10-205	
cis-1,2-Dichloroethene	ug/L	20	17.9	90	66-120	
cis-1,3-Dichloropropene	ug/L	20	18.4	92	25-175	N2
Dibromochloromethane	ug/L	20	16.7	83	70-135	
Ethylbenzene	ug/L	20	18.9	95	60-140	
m&p-Xylene	ug/L	40	37.3	93	80-120	
Methyl-tert-butyl ether	ug/L	20	17.3	86	74-120	
Methylene Chloride	ug/L	20	21.0	105	60-140	
o-Xylene	ug/L	20	18.2	91	78-120	
Styrene	ug/L	20	19.7	98	79-120	
Tetrachloroethene	ug/L	20	18.6	93	70-130	
Toluene	ug/L	20	18.6	93	70-130	
trans-1,2-Dichloroethene	ug/L	20	18.3	92	70-130	
trans-1,3-Dichloropropene	ug/L	20	18.3	91	50-150	N2
Trichloroethene	ug/L	20	18.6	93	65-135	
Trichlorofluoromethane	ug/L	20	17.3	86	50-150	
Vinyl chloride	ug/L	20	19.1	96	5-195	
Xylene (Total)	ug/L	60	55.5	93	80-120	
1,2-Dichloroethane-d4 (S)	%.			91	80-120	
4-Bromofluorobenzene (S)	%.			96	80-120	
Dibromofluoromethane (S)	%.			100	80-120	
Toluene-d8 (S)	%.			98	80-120	
Preservation pH			7.0			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1825255 1825256

Parameter	Units	30341428001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	40000	40000	28300	31300	71	78	52-162	10	36	
1,1,2,2-Tetrachloroethane	ug/L	ND	40000	40000	28000	31700	70	79	46-157	13	61	
1,1,2-Trichloroethane	ug/L	ND	40000	40000	28200	30300	70	76	52-150	7	45	
1,1-Dichloroethane	ug/L	ND	40000	40000	29200	31800	73	79	59-155	8	40	
1,1-Dichloroethene	ug/L	ND	40000	40000	26500	27300	66	68	10-234	3	32	
1,1-Dichloropropene	ug/L	ND	40000	40000	29100	31400	73	79	74-122	8	30	ML
1,2-Dichlorobenzene	ug/L	ND	40000	40000	28200	30100	71	75	18-190	6	57	
1,2-Dichloroethane	ug/L	ND	40000	40000	25900	28400	65	71	49-155	9	49	
1,2-Dichloropropane	ug/L	ND	40000	40000	31000	33300	77	83	10-210	7	55	
1,3-Dichlorobenzene	ug/L	ND	40000	40000	28900	31000	72	77	59-156	7	43	
1,4-Dichlorobenzene	ug/L	ND	40000	40000	27900	29700	70	74	18-190	6	57	
2,2-Dichloropropane	ug/L	ND	40000	40000	26400	28000	66	70	58-125	6	30	
2-Butanone (MEK)	ug/L	ND	40000	40000	34300	39300	60	73	44-125	14	30	
2-Chloroethylvinyl ether	ug/L	ND	40000	40000	29400	31100	73	78	10-305	6	71	
2-Hexanone	ug/L	ND	40000	40000	29400	32400	74	81	49-124	10	30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	40000	40000	31600	35500	79	89	60-118	12	30	

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical®
www.pacelabs.com

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

QUALITY CONTROL DATA

Project: 1906681
Pace Project No.: 30340304

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1825255 1825256

Parameter	Units	30341428001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acetone	ug/L	32500	40000	40000	60300	72300	69	99	11-168	18	30	
Acrolein	ug/L	ND	40000	40000	20300	22600	51	56	40-160	11	60	AC
Acrylonitrile	ug/L	ND	40000	40000	30500	35800	76	89	40-160	16	60	AC
Benzene	ug/L	ND	40000	40000	28100	29900	70	75	37-151	6	61	
Bromochloromethane	ug/L	ND	40000	40000	29000	31200	73	78	72-134	7	30	
Bromodichloromethane	ug/L	ND	40000	40000	26400	28000	66	70	35-155	6	56	
Bromoform	ug/L	ND	40000	40000	22200	24100	55	60	45-169	8	42	
Bromomethane	ug/L	ND	40000	40000	20000	26800	50	67	10-242	29	61	
Carbon disulfide	ug/L	ND	40000	40000	23800	26900	60	67	39-113	12	30	
Carbon tetrachloride	ug/L	ND	40000	40000	26500	28600	66	72	70-140	8	41	ML
Chlorobenzene	ug/L	ND	40000	40000	30800	32400	77	81	37-160	5	53	
Chloroethane	ug/L	ND	40000	40000	37900	38400	95	96	14-230	1	78	
Chloroform	ug/L	ND	40000	40000	26400	27800	66	70	51-138	5	54	
Chloromethane	ug/L	ND	40000	40000	29000	30700	72	77	10-273	6	60	
cis-1,2-Dichloroethene	ug/L	ND	40000	40000	28300	31800	71	79	50-150	11	30	
cis-1,3-Dichloropropene	ug/L	ND	40000	40000	27200	30100	68	75	10-227	10	58	N2
Dibromochloromethane	ug/L	ND	40000	40000	24500	26600	61	67	53-149	9	50	
Ethylbenzene	ug/L	ND	40000	40000	30900	31500	77	79	37-162	2	63	
m&p-Xylene	ug/L	ND	80000	80000	61500	64700	75	79	65-129	5	30	
Methyl-tert-butyl ether	ug/L	ND	40000	40000	25200	28100	63	70	65-109	11	30	ML
Methylene Chloride	ug/L	4520	40000	40000	36200	37800	79	83	10-221	4	28	
o-Xylene	ug/L	ND	40000	40000	28300	30500	71	76	65-126	7	30	
Styrene	ug/L	ND	40000	40000	31300	32600	78	81	69-120	4	30	
Tetrachloroethene	ug/L	ND	40000	40000	30100	31900	75	80	64-148	6	39	
Toluene	ug/L	ND	40000	40000	29700	31200	72	76	47-150	5	41	
trans-1,2-Dichloroethene	ug/L	ND	40000	40000	29200	31800	73	79	54-156	8	45	
trans-1,3-Dichloropropene	ug/L	ND	40000	40000	27500	29500	69	74	17-183	7	86	N2
Trichloroethene	ug/L	ND	40000	40000	29900	32800	75	82	70-157	9	48	
Trichlorofluoromethane	ug/L	ND	40000	40000	32300	32600	81	82	17-181	1	84	
Vinyl chloride	ug/L	ND	40000	40000	36200	37600	90	94	10-251	4	66	
Xylene (Total)	ug/L	ND	120000	120000	89800	95200	74	78	65-128	6	30	
1,2-Dichloroethane-d4 (S)	%.						87	91	80-120			
4-Bromofluorobenzene (S)	%.						98	98	80-120			
Dibromofluoromethane (S)	%.						96	100	80-120			
Toluene-d8 (S)	%.						97	97	80-120			
Preservation pH		14.0			14.0	14.0				0		

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical®
www.pacelabs.com

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

QUALITY CONTROL DATA

Project: 1906681
Pace Project No.: 30340304

QC Batch: 375978
QC Batch Method: EPA 608.3 DEC 2016
Analysis Method: EPA 608.3 Dec 2016
Analysis Description: 6083 GCS PCB
Associated Lab Samples: 30340304001

METHOD BLANK: 1823825
Matrix: Water
Associated Lab Samples: 30340304001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	ND	0.25	12/19/19 15:50	
PCB-1221 (Aroclor 1221)	ug/L	ND	0.25	12/19/19 15:50	
PCB-1232 (Aroclor 1232)	ug/L	ND	0.25	12/19/19 15:50	
PCB-1242 (Aroclor 1242)	ug/L	ND	0.25	12/19/19 15:50	
PCB-1248 (Aroclor 1248)	ug/L	ND	0.25	12/19/19 15:50	
PCB-1254 (Aroclor 1254)	ug/L	ND	0.25	12/19/19 15:50	
PCB-1260 (Aroclor 1260)	ug/L	ND	0.25	12/19/19 15:50	
Decachlorobiphenyl (S)	%.	43	10-146	12/19/19 15:50	
Tetrachloro-m-xylene (S)	%.	73	16-117	12/19/19 15:50	

LABORATORY CONTROL SAMPLE: 1823826

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	2.5	1.7	70	61-103	
PCB-1260 (Aroclor 1260)	ug/L	2.5	1.8	71	37-130	
Decachlorobiphenyl (S)	%.			37	10-146	
Tetrachloro-m-xylene (S)	%.			69	16-117	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1823827 1823828

Parameter	Units	30340558002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/L	ND	2.4	3.6	1.4	1.3	58	36	50-140	8	36	ML
PCB-1260 (Aroclor 1260)	ug/L	ND	2.4	3.6	29.5	49.3	1210	1370	8-140	50	38	E,MH, R1
Decachlorobiphenyl (S)	%.						11	12	10-146			
Tetrachloro-m-xylene (S)	%.						38	39	16-117			

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical®
www.pacelabs.com

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

QUALITY CONTROL DATA

Project: 1906681
Pace Project No.: 30340304

QC Batch: 375977
QC Batch Method: EPA 608.3 DEC 2016
Analysis Method: EPA 608.3 Dec 2016
Analysis Description: 608.3 GCS Pesticide
Associated Lab Samples: 30340304001

METHOD BLANK: 1823821
Matrix: Water
Associated Lab Samples: 30340304001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
4,4'-DDD	ug/L	ND	0.050	12/24/19 10:18	
4,4'-DDE	ug/L	ND	0.050	12/24/19 10:18	
4,4'-DDT	ug/L	ND	0.050	12/24/19 10:18	
Aldrin	ug/L	ND	0.025	12/24/19 10:18	
alpha-BHC	ug/L	ND	0.025	12/24/19 10:18	
beta-BHC	ug/L	ND	0.025	12/24/19 10:18	
Chlordane (Technical)	ug/L	ND	0.25	12/24/19 10:18	
delta-BHC	ug/L	ND	0.025	12/24/19 10:18	
Dieldrin	ug/L	ND	0.050	12/24/19 10:18	
Endosulfan I	ug/L	ND	0.025	12/24/19 10:18	
Endosulfan II	ug/L	ND	0.050	12/24/19 10:18	
Endosulfan sulfate	ug/L	ND	0.050	12/24/19 10:18	
Endrin	ug/L	ND	0.050	12/24/19 10:18	
Endrin aldehyde	ug/L	ND	0.050	12/24/19 10:18	
gamma-BHC (Lindane)	ug/L	ND	0.025	12/24/19 10:18	
Heptachlor	ug/L	ND	0.025	12/24/19 10:18	
Heptachlor epoxide	ug/L	ND	0.025	12/24/19 10:18	
Toxaphene	ug/L	ND	0.50	12/24/19 10:18	
Decachlorobiphenyl (S)	%.	42	10-113	12/24/19 10:18	
Tetrachloro-m-xylene (S)	%.	67	21-100	12/24/19 10:18	

LABORATORY CONTROL SAMPLE: 1823822

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4,4'-DDD	ug/L	0.4	0.31	77	48-130	
4,4'-DDE	ug/L	0.4	0.29	73	54-130	
4,4'-DDT	ug/L	0.4	0.28	71	46-137	
Aldrin	ug/L	0.2	0.13	65	54-130	
alpha-BHC	ug/L	0.2	0.14	70	49-130	
beta-BHC	ug/L	0.2	0.14	68	39-130	
delta-BHC	ug/L	0.2	0.16	80	51-130	
Dieldrin	ug/L	0.4	0.30	75	58-130	
Endosulfan I	ug/L	0.2	0.14	71	57-141	
Endosulfan II	ug/L	0.4	0.29	72	22-171	
Endosulfan sulfate	ug/L	0.4	0.32	80	38-132	
Endrin	ug/L	0.4	0.31	77	51-130	
Endrin aldehyde	ug/L	0.4	0.29	73	54-117	
gamma-BHC (Lindane)	ug/L	0.2	0.14	71	43-130	
Heptachlor	ug/L	0.2	0.13	65	43-130	
Heptachlor epoxide	ug/L	0.2	0.14	70	57-132	

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical®
www.pacelabs.com

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

QUALITY CONTROL DATA

Project: 1906681
Pace Project No.: 30340304

LABORATORY CONTROL SAMPLE: 1823822

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Decachlorobiphenyl (S)	%.			57	10-113	
Tetrachloro-m-xylene (S)	%.			69	21-100	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1823823 1823824

Parameter	Units	30340558001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
4,4'-DDD	ug/L	ND	0.39	0.39	.17J	.2J	44	52	31-141		39	
4,4'-DDE	ug/L	ND	0.39	0.39	.17J	.24J	43	63	30-145		35	
4,4'-DDT	ug/L	ND	0.39	0.39	.12J	.16J	31	41	25-160		42	
Aldrin	ug/L	ND	0.2	0.19	.13J	.17J	66	87	42-140		35	
alpha-BHC	ug/L	ND	0.2	0.19	.24J	.12J	122	62	37-140		36	
beta-BHC	ug/L	ND	0.2	0.19	0.37	0.40	190	206	17-147	7	44	M6
delta-BHC	ug/L	ND	0.2	0.19	0.25	0.26	127	136	19-140	5	52	
Dieldrin	ug/L	ND	0.39	0.39	.21J	.27J	54	69	36-146		49	
Endosulfan I	ug/L	ND	0.2	0.19	.074J	.19J	38	96	45-153		28	M6
Endosulfan II	ug/L	ND	0.39	0.39	.17J	.2J	43	52	10-202		53	
Endosulfan sulfate	ug/L	ND	0.39	0.39	.3J	.33J	75	86	26-144		38	
Endrin	ug/L	ND	0.39	0.39	.2J	.24J	52	61	30-147		48	
Endrin aldehyde	ug/L	ND	0.39	0.39	.27J	.35J	69	91	13-139		25	
gamma-BHC (Lindane)	ug/L	ND	0.2	0.19	.2J	.2J	102	102	32-140		39	
Heptachlor	ug/L	ND	0.2	0.19	.13J	.13J	64	65	34-140		43	
Heptachlor epoxide	ug/L	ND	0.2	0.19	.081J	.14J	41	71	37-142		26	
Decachlorobiphenyl (S)	%.						22	30	10-113			
Tetrachloro-m-xylene (S)	%.						121	87	21-100			S4

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical®
www.pacelabs.com

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

QUALITY CONTROL DATA

Project: 1906681
Pace Project No.: 30340304

QC Batch: 375560
QC Batch Method: EPA 420.1
Analysis Method: EPA 420.1
Analysis Description: 420.1 Phenolics
Associated Lab Samples: 30340304001

METHOD BLANK: 1822069
Matrix: Water
Associated Lab Samples: 30340304001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phenolics, Total Recoverable	mg/L	ND	0.050	12/16/19 16:20	

LABORATORY CONTROL SAMPLE: 1822070

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenolics, Total Recoverable	mg/L	0.25	0.23	92	85-115	

MATRIX SPIKE SAMPLE: 1822072

Parameter	Units	30340324001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Phenolics, Total Recoverable	mg/L	ND	0.25	0.22	87	85-115	

SAMPLE DUPLICATE: 1822071

Parameter	Units	30340324001 Result	Dup Result	RPD	Max RPD	Qualifiers
Phenolics, Total Recoverable	mg/L	ND	ND		20	

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical®
www.pacelabs.com

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

QUALITY CONTROL DATA

Project: 1906681
Pace Project No.: 30340304

QC Batch: 375331
QC Batch Method: SM 4500CNC-2011
Associated Lab Samples: 30340304001

Analysis Method: SM 4500CNE-2011
Analysis Description: 4500CNE Cyanide, Total

METHOD BLANK: 1820770
Associated Lab Samples: 30340304001

Matrix: Water

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.010	12/13/19 11:49	

LABORATORY CONTROL SAMPLE: 1820771

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	0.2	0.21	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1820772 1820773

Parameter	Units	30339930001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	ND	0.1	0.1	0.080	0.065	76	61	90-110	21	20	ML,R1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1820774 1820775

Parameter	Units	30339866005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	ND	0.1	0.1	0.11	0.11	106	106	90-110	1	20	

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical®
www.pacelabs.com

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

QUALITY CONTROL DATA

Project: 1906681
Pace Project No.: 30340304

QC Batch: 375218
QC Batch Method: SM3500-CrB
Associated Lab Samples: 30340304001

Analysis Method: SM3500-CrB
Analysis Description: Chromium, Hexavalent by 3500

METHOD BLANK: 1820034
Matrix: Water
Associated Lab Samples: 30340304001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	ND	0.010	12/12/19 14:30	

LABORATORY CONTROL SAMPLE & LCSD: 1820035 1820036

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Chromium, Hexavalent	mg/L	0.05	0.051	0.048	101	96	88-114	5	11.5	

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical®
www.pacelabs.com

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

QUALIFIERS

Project: 1906681
Pace Project No.: 30340304

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.

TNTC - Too Numerous To Count

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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.

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
PASI-WP	Pace Analytical Services - Williamsport

SAMPLE QUALIFIERS

Sample: 30340304002

[1] The pH of the VOA vial used for analysis was 3.

Sample: 1825255

[1] 624.1: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

[2] The pH of the VOA vial used for analysis was 14.

Sample: 1825256

[1] 624.1: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

[2] The pH of the VOA vial used for analysis was 14.

BATCH QUALIFIERS

Batch: 375977

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

1c A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical®
www.pacelabs.com

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

QUALIFIERS

Project: 1906681
Pace Project No.: 30340304

ANALYTE QUALIFIERS

AC	Analysis of acrolein and/or acrylonitrile was performed from a sample that was field preserved to pH < 2, which is less than the pH range of 4-5 specified in the test method and required for NPDES compliance per 40CFR Part 136.
B	Analyte was detected in the associated method blank.
E	Analyte concentration exceeded the calibration range. The reported result is estimated.
ED	Due to the extract's physical characteristics, the analysis was performed at dilution.
H3	Sample was received or analysis requested beyond the recognized method holding time.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.
M6	Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.
MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.
R1	RPD value was outside control limits.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.
c3	Analysis of 2-chloroethyl vinyl ether was performed from a sample that was field preserved to pH < 2 with HCl. Acid preservation is not allowed for this parameter by the test method or for NPDES compliance per 40CFR Part 136.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical®
www.pacelabs.com

2829 Reach Road
Williamsport, PA 17701
(570)326-4001

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 1906681
Pace Project No.: 30340304

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30340304001	1906681-01	EPA 608.3 DEC 2016	375978	EPA 608.3 Dec 2016	376092
30340304001	1906681-01	EPA 608.3 DEC 2016	375977	EPA 608.3 Dec 2016	376097
30340304001	1906681-01	245.1 Rev. 3.0, 1994	376305	245.1 Rev. 3.0, 1994	376390
30340304002	1906681-02	624.1 Dec 2016	376297		
30340304003	Trip Blank	624.1 Dec 2016	376297		
30340304001	1906681-01	EPA 420.1	375560	EPA 420.1	375696
30340304001	1906681-01	SM 4500CNC-2011	375331	SM 4500CNE-2011	375377
30340304001	1906681-01	SM3500-CrB	375218		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

WO# : 30340304

30340304

SUBCONTRACT OR

1906681

35 YEARS

Sending Laboratory:

Envirocorp
51 Clark Street
Harrington, DE 19952
Phone: 302-398-4313
Fax: 302-398-4312
Email Results to:
rachael@envirocorplabs.com, ashley@envirocorplabs.com, & erin@envircorplabs.com
Email Invoice to Shelly Bloom:
shelly@envirocorplabs.com

Subcontract Laboratory:

Pace Analytical Services
2829 Reach Rd.
Williamsport, PA 17701
Phone: (724) 850-5600
Fax:

3.6°C

Sample ID: 1906681-01 *Waste Water* *Sampled: 12/11/2019 07:30*

Analysis	Method	Report Due Date	Hold Time Expires	Comments
Sub_Cn	SM-4500CNE-2011	12/25/2019	12/25/2019 07:30	
Sub_Hex-Cr	SM 3500	12/25/2019	12/12/2019 07:30	
Sub_Hg	EPA 245.1	12/25/2019	01/08/2020 07:30	-001
Sub_PCB/Pesticides	EPA 505	12/25/2019	01/10/2020 07:30	
Sub_Phenolics	EPA 420.1	12/25/2019	01/10/2020 07:30	
Sub_SVOC	EPA 625	12/25/2019	12/18/2019 07:30	w/ Dioxin Screen

Container(s):

Sample ID: 1906681-02 *Waste Water* *Sampled: 12/11/2019 07:20*

Analysis	Method	Report Due Date	Hold Time Expires	Comments
Sub_VOC	EPA 624	12/24/2019	12/25/2019 07:20	

Container(s):

-002
-003

Subcontract Shipping Checklist

Method of Shipment (circle one): FedEx / UPS / Field Service Vehicle / Other

Tracking Number: _____

LIMS #(s) match on container(s) and COC(s)	Yes ☐	No ☐	NA ☐
Does the container(s) match the analysis	Yes ☐	No ☐	NA ☐
Containers(s) and COC(s) properly packed	Yes ☐	No ☐	NA ☐
Sample containers on ice or ice pack(s)	Yes ☐	No ☐	NA ☐
Container(s) properly sealed and secure	Yes ☐	No ☐	NA ☐

Sample delivery verified? ☐ Yes

Checked by: _____ Date: _____ Received Date _____ Initials: _____

Released By	Date	Time	Received By	Date	Time
[illegible]	12/11/19	1600	UPS		
UPS	12/12/19	10:45am	Kendra Clymer	12/12/19	10:45 am
			Marian L Clay	12-12-19	2:345

WO#: 30340304

PM: SLM Due Date: 12/27/19
CLIENT: WP-ENVIROCOR

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Enviocorp Labs

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

Label _____
LIMS Login

Tracking #: na

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

Thermometer Used #6 Type of Ice: Wet Blue None

Cooler Temperature Observed Temp 3.6 °C Correction Factor: 0 °C Final Temp: 3.6 °C

Temp should be above freezing to 6°C

pH paper Lot# | Date and Initials of person examining contents: KMC 12/12/19

Comments:	Yes	No	N/A	
Chain of Custody Present:	—			1. 19016081
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 Matrix:	—			5.
Samples Arrived within Hold Time:		—		6. Hex-Cr out of hold time
Short Hold Time Analysis (<72hr remaining):	—			7.
Rush Turn Around Time Requested:		—		8.
Sufficient Volume:	—			9.
Correct Containers Used:	—			10.
-Pace Containers Used:	—			
Containers Intact:	—			11.
Orthophosphate field filtered		—		12.
Hex Cr Aqueous sample field filtered		—		13.
Organic Samples checked for dechlorination:		—		14.
Filtered volume received for Dissolved tests		—		15.
All containers have been checked for preservation. exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix		—		16.
All containers meet method preservation requirements.		—		Initial when completed / Date/time of preservation / Lot # of added preservative
Headspace in VOA Vials (>6mm):		—		17.
Trip Blank Present:		—		18.
Trip Blank Custody Seals Present		—		
Rad Samples Screened < 0.5 mrem/hr		—		Initial when completed: / Date:

Client Notification/ Resolution:

Person Contacted: Ashley Burns Date/Time: 12/12/19@11:00 AM Contacted By: SLM

Comments/ Resolution: Client indicated to run the Hex-Cr out of hold time.

☐ **A check in this box indicates that additional information has been stored in ereports.**

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.

SUBURBAN
TESTING LABS

Client: Pace Analytical Services

Project: 30340304

Attn: Don Pearson

Date: 12/23/2019

Submitted by:
Suburban Testing Labs, Inc.
1037F MacArthur Road, Reading, PA 19605
1.800.433.6595

NELAP ACCREDITED
TNI
LABORATORY
PA DEP # 06-00208
NJDEP# PA081

SUBURBAN
TESTING LABS

12/23/2019

Don Pearson
Pace Analytical Services
1638 Roseytown Rd, Suite 2, 3, 4
Greensburg, PA 15601

Enclosed are the results of analyses for samples received by the laboratory on 12/13/2019 10:06. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Arianna Horonzy

Arianna Horonzy
Project Manager

SUBURBAN TESTING LABS

1037F MacArthur Road
Reading, PA 19605
610-375-8378 Phone
610-375-4090 Fax

Pace Analytical Services 1638 Roseytown Rd, Suite 2, 3, 4 Greensburg PA, 15601	Project Name: 30340304 Project Number: 30340304 Project Manager: Don Pearson	Reported: 12/23/2019 16:28

ANALYTICAL REPORT FOR SAMPLES

Laboratory ID	Sample ID	Matrix	Date Sampled	Date Received
9123080-01	30340304 001	Non-potable	12/11/2019 07:30	12/13/2019 10:06

Chain of C

Pace Analytical™
www.pacelabs.com

Sample Condition upon Receipt: (Please record the following information)		
Temp in C		
Received on Ice	Yes	No
Sealed Cooler	Yes	No
Samples Intact	Yes	No

9123080
Arianna Horonzy

ject No.:
lo: ASR- 30340304

Pace Analytical Services, Inc.
2829 Reach Road
Williamsport, PA 17701
Phone: (570) 326-4001
FAX: (570) 326-0339

Request Date: 12/12/19
Shipped By: FedEx

Analysis Due Date: 12/27/2019

Certification Required: Pennsylvania

Page 1 of 1

Pace Project No.: 30340304
Report/Invoice to: Samantha Merrill

	Pace Sample ID:	Matrix:	Collection Date:	Time:	Analysis Requested:	Analytical Method:	Preservative Type:
1	30340304 001	WW	12/11/19	7:30	625 w/ Dioxin Screen	EPA 625	Unpre.
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							

Special Requirements: (1) 1LGA w/ Na2S2O3 Cl ✓ SMH ****Please supply a method blank and LCS QC information on the final report****

Subcontract Lab: Suburban Testing
Address: 1037F MacArthur Rd.
Reading PA 19605
Phone: 800-433-6595

Analysis Authoriz

Acceptance of T

Relinquished By: RF 12/12/19 1540 R
(Signature & Affiliation) (Date) (Time)

Relinquished By: R
(Signature & Affiliation) (Date) (Time)

Comments:

In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature of custody is considered complete as is since this information is available in the owner laboratory.

Suburban Testing Labs

Lab Date/Time: 12/13/19 10:06 **Lab Temp:** 3.3°C on ice

Number of containers/coolers match number on COC? Y / N
Sample labels and COC are free of discrepancies? Y / N
All containers in tact? Y / N
Received in lab within acceptable temperature limits? Y / N
40mL VOA vials free of headspace? Y / N

Relinquished by:

Received in Lab by : SMH ① 3.3 ice

SUBURBAN TESTING LABS

1037F MacArthur Road
Reading, PA 19605
610-375-8378 Phone
610-375-4090 Fax

Pace Analytical Services	Project Name: 30340304	
1638 Roseytown Rd, Suite 2, 3, 4	Project Number: 30340304	Reported:
Greensburg PA, 15601	Project Manager: Don Pearson	12/23/2019 16:28

Sample Number: 912308O-01	Site: 30340304 001	Sample ID: 30340304
Collector: client	Collect Date: 12/11/2019 7:30 am	Sample Type: Grab

Department / Test / Parameter	Result		Units	Method	R.L.	DF	Prep Date	By	Analysis Date	By
Semivolatiles										
Dioxin	Absent	A	N/A	EPA 625.1		5	12/16/19	KMH	12/19/19 5:26	MAG
SVOA, 625, PPL										
Acenaphthene	< 4.85		µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
Acenaphthylene	< 4.85		µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
Anthracene	< 4.85		µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
Benzidine	< 24.3		µg/L	EPA 625.1	24.3	5	12/16/19	KMH	12/19/19 2:02	MAG
Benzo(a)anthracene	< 4.85		µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
Benzo(a)pyrene	< 4.85		µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
Benzo(b)fluoranthene	< 4.85		µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
Benzo(g,h,i)perylene	< 4.85		µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
Benzo(k)fluoranthene	< 4.85		µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
4-Bromophenyl phenyl ether	< 4.85		µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
Butyl benzyl phthalate	< 4.85		µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
4-Chloro-3-methylphenol	< 4.85		µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
bis(2-Chloroethoxy) methane	< 4.85		µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
bis(2-Chloroethyl) ether	< 4.85		µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
bis(2-Chloroisopropyl) ether	< 4.85	L1	µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
2-Chloronaphthalene	< 4.85	L1	µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
2-Chlorophenol	< 4.85		µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
4-Chlorophenyl phenyl ether	< 4.85		µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
Chrysene	< 4.85		µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
Dibenz(a,h)anthracene	< 4.85		µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
Di-n-butyl phthalate	< 14.6		µg/L	EPA 625.1	14.6	5	12/16/19	KMH	12/19/19 2:02	MAG
3,3'-Dichlorobenzidine	< 48.5		µg/L	EPA 625.1	48.5	5	12/16/19	KMH	12/19/19 2:02	MAG
2,4-Dichlorophenol	< 4.85		µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
Diethyl phthalate	< 4.85		µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
2,4-Dimethylphenol	< 4.85		µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
Dimethyl phthalate	< 4.85		µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
4,6-Dinitro-2-methylphenol	< 4.85		µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
2,4-Dinitrophenol	< 14.6		µg/L	EPA 625.1	14.6	5	12/16/19	KMH	12/19/19 2:02	MAG
2,6-Dinitrotoluene	< 4.85	L1	µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
2,4-Dinitrotoluene	< 4.85		µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
Di-n-octyl phthalate	< 4.85		µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
1,2-Diphenylhydrazine	< 4.85		µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
bis(2-Ethylhexyl) phthalate	< 14.6		µg/L	EPA 625.1	14.6	5	12/16/19	KMH	12/19/19 2:02	MAG
Fluoranthene	< 4.85		µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
Fluorene	< 4.85	L1	µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
Hexachlorobenzene	< 4.85		µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
Hexachlorobutadiene	< 4.85		µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
Hexachlorocyclopentadiene	< 4.85		µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
Hexachloroethane	< 48.5		µg/L	EPA 625.1	48.5	5	12/16/19	KMH	12/19/19 2:02	MAG
Indeno(1,2,3-cd)pyrene	< 4.85		µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
Isophorone	< 4.85		µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
Naphthalene	< 4.85		µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
Nitrobenzene	< 4.85		µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
4-Nitrophenol	< 4.85		µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
2-Nitrophenol	< 4.85		µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
N-Nitrosodimethylamine	< 4.85		µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG

SUBURBAN TESTING LABS

1037F MacArthur Road
Reading, PA 19605
610-375-8378 Phone
610-375-4090 Fax

Pace Analytical Services 1638 Roseytown Rd, Suite 2, 3, 4 Greensburg PA, 15601	Project Name: 30340304 Project Number: 30340304 Project Manager: Don Pearson	Reported: 12/23/2019 16:28

Sample Number: 9123080-01	Site: 30340304 001	Sample ID: 30340304
Collector: client	Collect Date: 12/11/2019 7:30 am	Sample Type: Grab

Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	By	Analysis Date	By
Semivolatiles (Continued)									
SVOA, 625, PPL (Continued)									
n-Nitrosodiphenylamine	< 4.85	µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
N-Nitrosodi-n-propylamine	< 4.85	µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
Pentachlorophenol	< 4.85	µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
Phenanthrene	< 4.85	µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
Phenol	< 24.3	µg/L	EPA 625.1	24.3	5	12/16/19	KMH	12/19/19 2:02	MAG
Pyrene	< 4.85	µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
1,2,4-Trichlorobenzene	< 4.85	µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG
2,4,6-Trichlorophenol	< 4.85	µg/L	EPA 625.1	4.85	5	12/16/19	KMH	12/19/19 2:02	MAG

Surrogate Recoveries	*Results*	*Units*	*Method*	*%Recovery*	*DF*	*Limits (%Recovery)*	*Analysis Date*
Surrogate: 2-Fluorophenol	70.7	µg/L	EPA 625.1	36%	5	10-79	12/19/19 2:02
Surrogate: Nitrobenzene-d5	66.7	µg/L	EPA 625.1	69%	5	24-119	12/19/19 2:02
Surrogate: 2-Fluorobiphenyl	62.0	µg/L	EPA 625.1	64%	5	29-115	12/19/19 2:02
Surrogate: 2,4,6-Tribromophenol	136	µg/L	EPA 625.1	70%	5	10-141	12/19/19 2:02
Surrogate: p-Terphenyl-d14	62.8	µg/L	EPA 625.1	65%	5	44-124	12/19/19 2:02

Work Order Memo

Data Qualifiers:

A	This parameter is not included in STLs NELAC Scope of Accreditation and should not be used for regulatory compliance ; however, the analysis has been completed in accordance with STLs NELAC Quality System requirements.
L1	The Laboratory Control Sample for the analysis batch associated with this sample was below acceptance criteria. Results may have greater uncertainty.

Sample Receipt Conditions:

All samples met the sample receipt requirements for the relevant analyses.

SUBURBAN TESTING LABS

1037F MacArthur Road
Reading, PA 19605
610-375-8378 Phone
610-375-4090 Fax

Pace Analytical Services	Project Name: 30340304	
1638 Roseytown Rd, Suite 2, 3, 4	Project Number: 30340304	**Reported:**
Greensburg PA, 15601	Project Manager: Don Pearson	12/23/2019 16:28

The test *pH, Lab* is performed in the Laboratory as soon as possible. These results are not appropriate for compliance with NPDES, SDWA, or other regulatory programs that require analysis within 15 minutes of sample collection and should be considered for informational purposes only.

All results meet the requirements of STL's TNI (NELAC) Accredited Quality System unless otherwise noted. If your results contain any data qualifiers or comments, you should evaluate useability relative to your needs.

If collectors initials include "STL", samples have been collected in accordance with STL SOP SL0015.

All results reported on an As Received (Wet Weight) basis unless otherwise noted.

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

Results are considered Preliminary unless report is signed by authorized representative of STL.

Reviewed and Released By:
Arianna Horonzy
Project Manager

Arianna Horonzy