QUARTERLY GROUNDWATER MONITORING REPORT

South Island Apartments Site

Starbuck Drive,

Town of Green Island, Albany County, New York

BCP Site # C401074

February 2021

Prepared for:
South Island Apartments, LLC
c/o Couch White, LLP
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Albany, New York 12201-2222

Prepared by:

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Envirospec Engineering Project E17-1600

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1.0 INTRODUCTION

This Quarterly Groundwater Monitoring Report has been prepared by Envirospec Engineering, PLLC (Envirospec) on behalf of South Island Apartments, LLC (SIA) for the South Island Apartments (Site) located at Starbuck Drive in the Town of Green Island (and Village), Albany County, New York (see Figure 1).

SIA is submitting this Quarterly Groundwater Monitoring Report under the New York State Brownfield Cleanup Program (BCP) as a Volunteer in accordance with the requirements of the Interim Site Management Plan (SMP) for the site. The Site is being redeveloped as a mixed housing and commercial use consisting of apartments, retail, and recreation areas. The South Island Apartments site commenced work under the December 2019 Interim Site Management Plan (SMP) on January 7, 2020.

1.1 General Site Description

The site is located in Green Island, Albany County, New York and is identified as Section 33.09 Block 1 and Lots 3, 5, and 6 on the Village of Green Island 2019 Tax Map (see Appendix A). The site is an approximately 11.495-acre area and is bounded by the Troy/ Green Island Bridge to the north and the Hudson River to the south, east, and west (see Figure 1 – Site Layout Map). The boundaries of the site are more fully described in the Environmental Easement metes and bounds found in the Interim SMP.

2.0 SITE BACKGROUND AND REMEDIAL HISTORY

2.1 BACKGROUND

According to a 2008 Phase I Environmental Site Assessment (Shifrin 2008) conducted by Shifrin & Associates Inc. (Shifrin), the Site was operated as a petroleum terminal since 1918. Available historical maps show a terminal located on the property in 1925. Reportedly during its operation, the Site contained several aboveground storage tanks (ASTs), at least one (1) underground oil-water separator tanks, a truck loading rack, a barge dock, an office building, an electrical shed, storage sheds, earthen dikes, and internal roads. When in service, the terminal loaded and unloaded petroleum products that were transported to the Site by barge. Fuels stored at the former terminal included kerosene, diesel, gasoline, and No. 2 fuel oil. The terminal was not connected to a sewer line; wastewater was repeatedly discharged to a septic tank and leach field on-Site. According to the NYSDEC Spill Incidents Database, the Site has had thirteen (13) documented petroleum spills, with twelve (12) closed by the NYSDEC and one (1) spill (#8702376) remaining open.

According to the Supplemental Site Investigation in May 2016 conducted by SPEC Engineering (SPEC), the terminal was demolished sometime between 2008 and 2010 although the earthen dikes, at least one (1) underground oil-water separator, and a handful of small, vacant structures remained on the site. There were no other noted uses of this property.

Extensive investigation activities were undertaken at the Site during the Remedial Investigation (RI) in 2017 and 2018. Detailed results are available in the RI Report submitted to NYSDEC in November 2017 (Envirospec 2018a) and the RI Report Addendum submitted to NYSDEC in July 2018 (Envirospec 2018b).

2.2 INTERIM REMEDIAL MEASURES (IRM)

Based on the data obtained during the RI, it was determined that the following IRM activities would be completed at the site prior to initiating the activities addressed in the RAWP:

- Removal of underground oil-water separator;
- Excavation of SVOC-impacted soils that exceed Commercial Soil Cleanup Objectives (CSCOs) in shallow soils at SB-26 and SB-37;
- Excavation of LNAPL-impacted area in former loading rack and MW-5 areas.

The former loading rack area was excavated to an elevation of -3.5 to 3 feet, with sheet piling installed to elevation -25 ft along the western bank. The MW-5 area was benched back and excavated to elevation -3 to -3.5 ft. The depth of the bottom of the excavations were based on

historical observations of LNAPL in monitoring wells and visual observations in the field. The former loading rack excavation and MW-5 excavation remained open during oil extraction activities, which were completed from May 3, 2018 to June 25, 2018 and from May 14, 2018 to June 26, 2018, in the former loading rack and MW-5 areas, respectively.

A total of approximately 4,542 tons of non-hazardous soil were removed for off-site disposal during the IRM activities. A total of 77,717 gallons of oil/water mixture were extracted from the former loading rack and MW-5 areas, with approximately 39,170 gallons estimated to be oil. Further details on these activities can be found in the IRM Work Plan (Envirospec 2018) and the Construction Completion Report (Envirospec 2018c). The excavation of SB-37 was completed as a result of the RI Addendum completed in July 2018.

2.2 REMEDIAL ACTION WORKPLAN (RAWP)

The Remedial Action Work Plan (RAWP) was approved for the site in October 2018 (Envirospec 2018d) and is outlined in the Decision Document dated October 22, 2018 (NYSDEC 2018). The RAWP includes installation of an engineered cover system, consisting of building foundations, pavement, sidewalks, or 2’ of clean soil in open areas, across the site. The cover system along the banks consists of rip-rap and a block wall along the eastern bank and rip-rap and retaining walls along the western bank. Two (2) temporary monitoring wells were installed on the site to monitor for potential presence of remaining LNAPL for quarterly groundwater sampling during interim site management. The site entered interim site management on January 7, 2020.

3.0 GROUNDWATER SAMPLING – NOVEMBER 2020

The 4th quarter 2020 groundwater sampling event was completed on October 22, 2020. Well locations are shown in Drawing D-1. Gauging of both wells was completed prior to sampling to determine the static water level. An oil-water interface probe was used to determine if oil was present and, if so, the thickness of the oil. A summary of depths to oil and groundwater, oil layer thickness, and groundwater elevations is included as Table 1.

Table 1. Well Gauging Results.

Monitoring Well ID	Depth to Oil (ft bgs)	Depth to Groundwater (ft bgs)	Groundwater Elevation (ft, AMSL)	Oil layer thickness (ft)
MW-32	-	27.35	+8.6	0[a]
MW-33	27.15	27.8	+8.1	0.70

[a] = no oil was measured by the probe, but an oily residue was visually observed on the probe when it was removed from the well.

Wells were purged using a submersible pump, with only turbidity monitored during purging, due to an equipment malfunction with the water quality probe. Field sheets are provided in Appendix B. After purging, samples were collected using the submersible pump. A duplicate and MS/MSD samples were collected from MW-32 for laboratory and sampling quality assurance/ quality control purposes.

Purge water was collected and containerized in a 55-gallon drum and will be transported off-site for disposal at a regulated disposal facility.

Groundwater samples were placed in pre-cleaned laboratory provided sample bottles, cooled to 4°C in the field, and transported under chain-of-custody command to Pace Analytical Services in Greensburg, PA, which is a NYSDOH ELAP-certified lab. Samples were analyzed for the following:

- TCL SVOCs by EPA Method 8270
- Total TAL metals by EPA Method 6010 (EPA Method 7471 for mercury)
- Dissolved TAL metals by EPA Method 6010 (EPA Method 7471 for mercury)

4.0 GROUNDWATER QUALITY

A summary of the exceedances from this sampling round is included in Appendix C. Full laboratory analytical results are included as Appendix D.

No exceedances, other than iron, manganese, and sodium, were detected in MW-32, MW-33, and the duplicate for MW-33.

5.0 SUMMARY

There were no exceedances of contaminants of concern during this sampling round. Groundwater sampling will continue under the Interim SMP for the site on a quarterly basis, with the next sampling planned for Winter 2021.

6.0 REFERENCES

Envirospec. 2018. Interim Remedial Measures (IRM) Work Plan. South Island Apartments, BCP Site #C401074. March 2018.

Envirospec. 2018a. Remedial Investigation Report for South Island Apartments, BCP Site # C401074. August 2018.

Envirospec. 2018b. Remediation Investigation Report Addendum South Island Apartments Northern Parcel, BCP Site # C401074. August 2018.

Envirospec. 2018c. Interim Remedial Measures (IRM) Construction Completion Report (CCR) for South Island Apartments, BCP Site #C401074. October 2018.

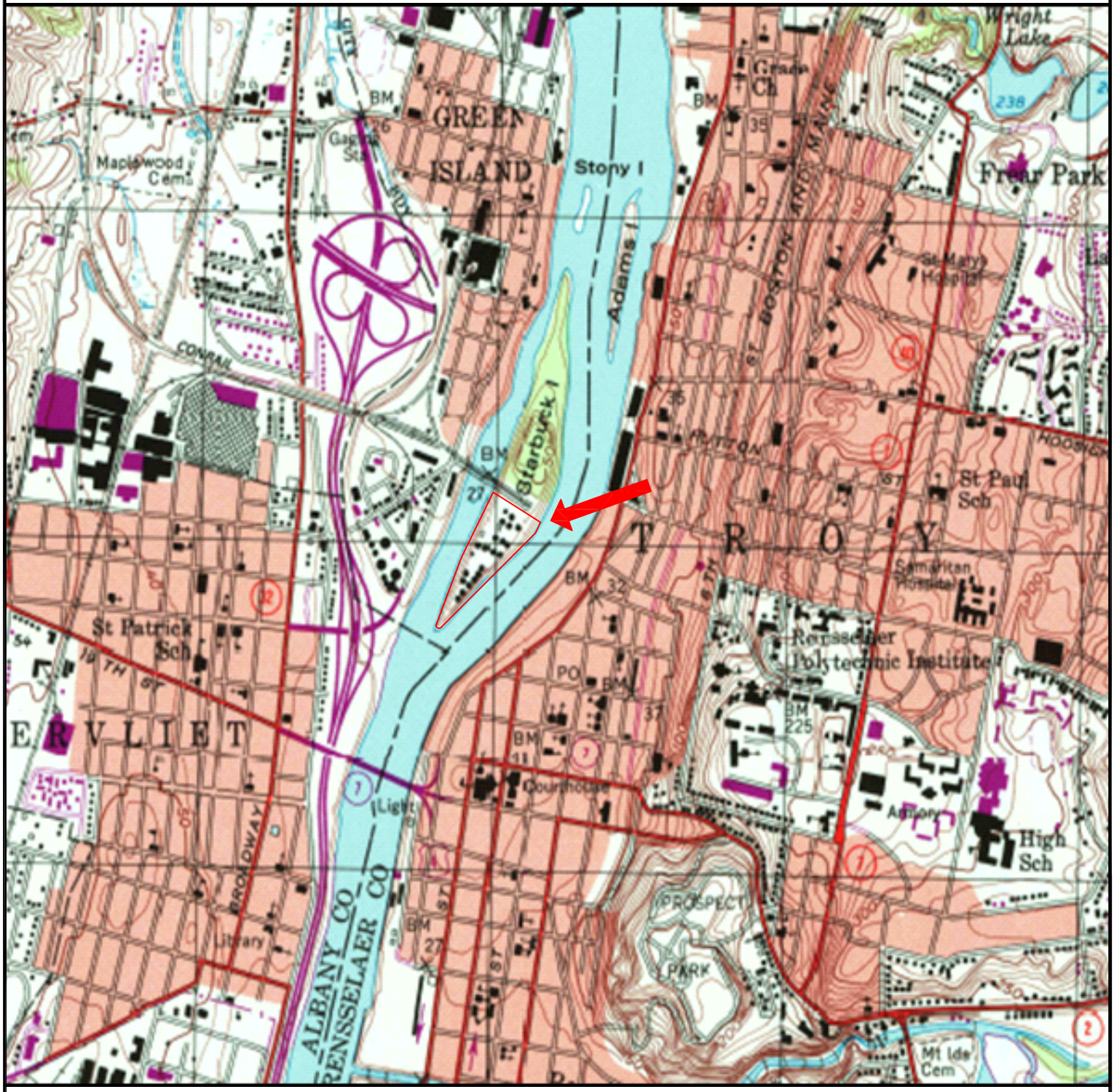
Envirospec. 2018d. Remedial Action Work Plan for South Island Apartments, BCP Site #C401074. October 2018.

NYSDEC. 2018. Decision Document. South Island Apartments, Brownfield Cleanup Program, Green Island, Albany County. Site No. C401074. October 2018.

Shifrin & Associates, Inc. 2008. Phase I Environmental Site Assessment for 1 Osgood Avenue, Green Island, New York 12183. June 3, 2008.

FIGURES

Figure 1 Site Location Map



APPROXIMATE SITE BOUNDARY

Scale: 1:1,000 ft

TITLE: FIGURE 1 – SITE LOCATION MAP

LOCATION: 1 STARBUCK DRIVE
GREEN ISLAND, NEW YORK

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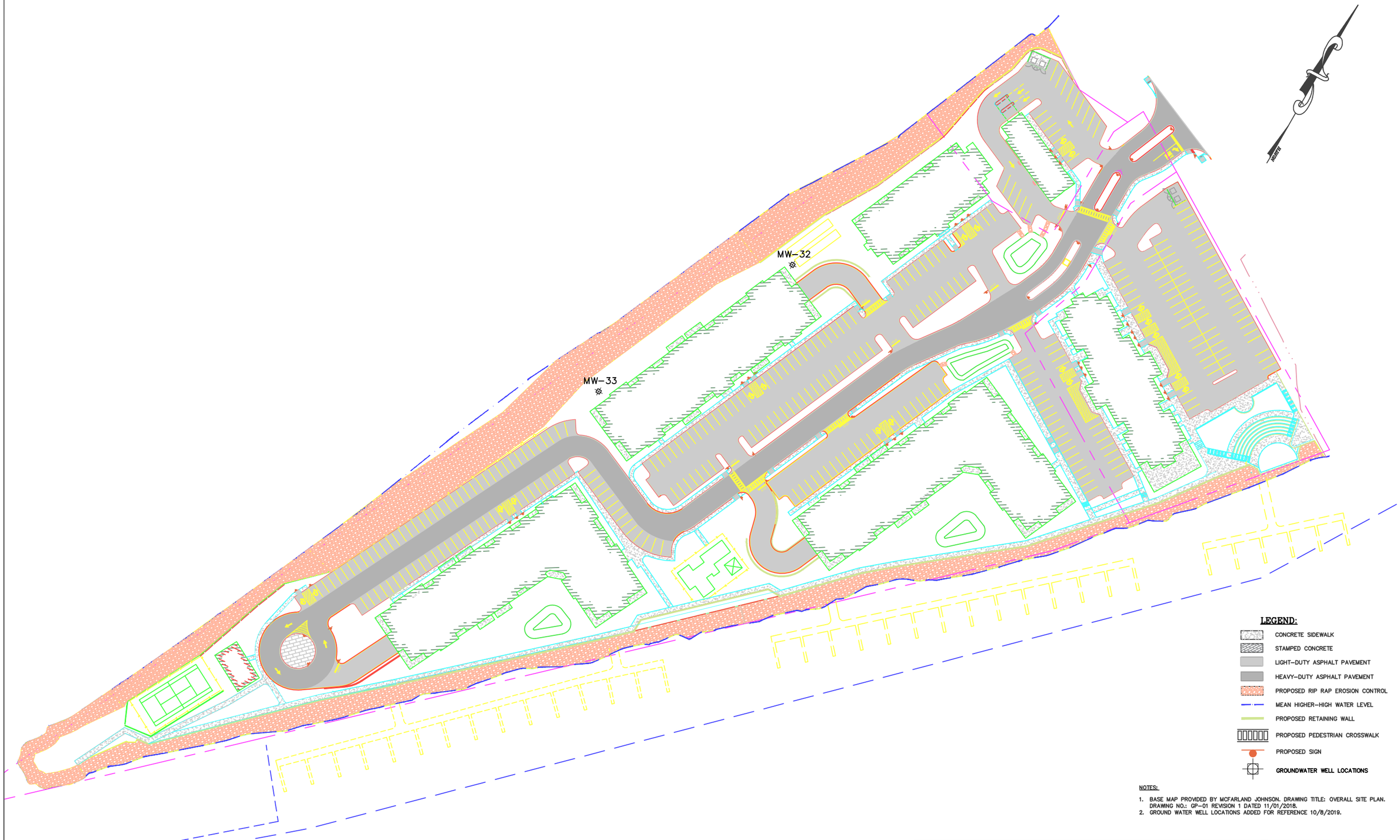
DRAWINGS

D-1 Well Locations



NOTES:

1. BASE MAP PROVIDED BY MCFARLAND JOHNSON. DRAWING TITLE: OVERALL SITE PLAN. DRAWING NO.: GP–01 REVISION 1 DATED 11/01/2018.
2. GROUND WATER WELL LOCATIONS ADDED FOR REFERENCE 10/8/2019.

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ENVIROSPEC PROJECT #E17–1600

W.O. No.	REVISION	DATE	APR.

DRAWING STATUS: FOR REFERENCE ONLY

SOUTH ISLAND APARTMENTS SITE
STARBUCK DRIVE
TOWN OF GREEN ISLAND, ALBANY COUNTY, NEW YORK

Well Locations

SCALE: NTS | DRAWING No.: D–1 | SHEET: 1 | REVISION No.: 0

APPENDIX A
TAX MAP

envirospec ENGINEERING, PLLC

349 Northern Boulevard Suite 3▪ Albany, NY 12204 ▪ Phone: 518.453.2203 ▪ Fax: 518.453.2204

A Woman Owned Business Enterprise (WBE)

THIS MAP PREPARED FOR ASSESSMENT PURPOSES ONLY AND
NOT TO BE USED FOR THE CONVEYANCE OF PROPERTY

NYS PLANE COORDINATE SYSTEM NAD27

PREPARED BY
SMITH & MAHONEY, ENGINEERS & SURVEYORS
ALBANY, NEW YORK
PREPARED FOR
REAL PROPERTY TAX SERVICE AGENCY
ALBANY COUNTY, NEW YORK

DIGITAL CONVERSION BY:
THE SANBORN MAP COMPANY INC.
PELHAM, NEW YORK

REVISION TABLE

DATE	BY	CHANGES OR ADDITIONS	DATE	BY	CHANGES OR ADDITIONS
11-21-06	JKD	SUBD 1-2 INTO 2.1 & 2.2 PER LIBER 2362-807,2863-13			
4/22/19	JKD	CREATED PARCEL 1-5 PER R2019-4897 & PARCEL 1-6 PER R2019-4898; REVISED PARCEL 1-3 PER R2019-4899; DELETED PARCELS 1-1, 2.1,2.2 & 4 PER THE AFOREMENTIONED DEEDS & R2019-4895; NO MAP FILED AS OF APRIL 19, 2019.			

SPECIAL DISTRICTS

TYPE	SYMBOL	DISTRICT NAME	TYPE	SYMBOL	DISTRICT NAME
Fire	—F—		Water	—W—	

LEGEND

PROPERTY LINE; ORIGINAL LOT LINE; RAIL ROAD; STREAM OR DITCH; ROAD OR RAIL ROAD BNDY.; STREET CENTERLINE; COUNTY LINE; CITY LINE; VILLAGE LINE; TOWN LINE; BLOCK LIMIT; GREAT LOT LINE; EASEMENT LINE; WATER DISTRICT LINE; TAX DISTRICT LINE; FIRE DISTRICT LINE; DENOTES COMMON OWNER; TAX MAP BLOCK NO.; TAX MAP PARCEL NO. 74.12-1-10; STREET NUMBER 14; FILED PLAN LOT NO. 17; GREAT LOT NO. 5; CALCULATED ACREAGE 7.1 A (C); DEED ACREAGE 11.2 A; SCALED DIMENSION 725'(S); DEED DIMENSION 53.67'; VISUAL CENTER OF PARCEL

SHEET INDEX: 32.36, 33.05, 32.44

TAX MAP
VILLAGE OF GREEN ISLAND
TOWN OF GREEN ISLAND
ALBANY COUNTY, NEW YORK
SCALE: 1"=100'

33.09

TAXABLE STATUS DATE: 3/1/2020

ISSUED BY RPTSA ON MONDAY, JUNE 3, 2019

APPENDIX B
GROUNDWATER SAMPLING LOGS

349 Northern Boulevard Suite 3▪ Albany, NY 12204 ▪ Phone: 518.453.2203 ▪ Fax: 518.453.2204
A Woman Owned Business Enterprise (WBE)

envirospec ENGINEERING, PLLC	349 Northern Blvd Albany, NY 12204 Phone: 518.453.2203	Well No:	MW-32	
		Date(s):	10/22/2020	
		Weather	Temperature	
		Sunny	High:	68
			Low:	53

Well Sampling Field Record

Project:	South Island Apartments	Project No.	E17-1600
Location:	Starbuck Drive, Green Island, NY		

Well Info

Well #:	MW-32	Well Location:	North of Building 25		
Well Diameter (in):	2	Well Condition:	Good		
A. Total Well Depth (ft bgs):	35.95	Depth to Bedrock (ft):	-		
B. TOC to Grade (ft):	0	TOC Elevation (ft):	-		
C. Depth to Water TOC (ft):	27.35	G. Well Volume Factors:	1" = 0.041	5" = 1.02	9" = 3.31
D. Water Column Height (ft):	8.6	= (A + B) - C	2" = 0.163	6" = 1.47	10" = 4.08
E. Total Well Volume (gal):	1.40	= D*G	3" = 0.367	7" = 1.99	11" = 4.93
F. Purge (3 volumes) (gal):	4.20	= E*3	4" = 0.653	8" = 2.61	12" = 5.88

Purge

Purge Date:	10/22/2020	Pump/Method:	Submersible
Purge Start Time:	10:10am	Approx Flow Rate:	1 gal/min
Purge Stop Time:	10:30am	Approx Volume Removed:	11 gallons
Did well dry out?	No		

Sampling

			I	II	III	IV	V
Date:	10/22/2020	pH:					
Time:	10:35am	Temp (ºC):					
Sample ID:	MW-32/MSD/MS/DUP	Conductivity (mS/cm):					
Sample Method:	-	TDS (g/L):					
		ORP (mV):					
		Turbidity (NTU):	31.1	65.2	46.9	31.4	20
		DO (mg/L):					
			(1.5 gal)	(3 gal)	(5 gal)	(6 gal)	(7.5 gal)

Appearance

Oil measurement:
No oil observed on probe

Comments

9:40 am water level collected
DUP, MS, MSD collected at MW-32
Water quality probe malfunctioned on site - no readings

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Well Sampling Field Record

Well No:	MW-33		
Date(s):	10/22/2020		
Weather		Temperature	
Sunny		High:	68F
		Low:	53F
Project:	South Island Apartments	Project No.	E17-1600
Location:	Starbuck Drive, Green Island, NY		

Well Info

Well #:	MW-33	Well Location:	South of Building 25		
Well Diameter (in):	2	Well Condition:	Good		
A. Total Well Depth (ft bgs):	35.9	Depth to Bedrock (ft):	-		
B. TOC to Grade (ft):	0	TOC Elevation (ft):	-		
C. Depth to Water TOC (ft):	27.8	G. Well Volume Factors:	1" = 0.041	5" = 1.02	9" = 3.31
D. Water Column Height (ft):	8.1	= (A + B) - C	2" = 0.163	6" = 1.47	10" = 4.08
E. Total Well Volume (gal):	1.32	= D*G	3" = 0.367	7" = 1.99	11" = 4.93
F. Purge (3 volumes) (gal):	3.96	= E*3	4" = 0.653	8" = 2.61	12" = 5.88

Purge

Purge Date:	10/22/2020	Pump/Method:	Submersible
Purge Start Time:	9:55am	Approx Flow Rate:	1 gal/min
Purge Stop Time:	10:15am	Approx Volume Removed:	8 gallons
Did well dry out?	No		

Sampling

			I	II	III	IV
Date:	10/22/2020	pH:				
Time:	10:15am	Temp (ºC):				
Sample ID:	MW-33	Conductivity (mS/cm):				
Sample Method:		TDS (g/L):				
		ORP (mV):				
		Turbidity (NTU):	28.8	6.4	3.96	
		DO (mg/L):				
			(3 gal)	(5 gal)	(7 gal)	

Appearance

Oil measurement:
27.15 ft

Comments

9:30 am water level collected
Water quality probe malfunctioned on site - no readings

APPENDIX C
TABLE OF SAMPLE RESULTS

envirospec ENGINEERING, PLLC

349 Northern Boulevard Suite 3▪ Albany, NY 12204 ▪ Phone: 518.453.2203 ▪ Fax: 518.453.2204

A Woman Owned Business Enterprise (WBE)

TABLE 3. Groundwater Analytical Results

Analyte	Part 703 Groundwater A Standard	MW-32 1/16/20	MW-32 5/11/20	MW-32 DUP 5/11/20	MW-32 8/7/20	MW- 32 DUP 10/22/20	MW 32 10/22/20
Total Metals							
Aluminum		3360	556	544	148	2310	1950
Antimony	3	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	6.3	7.7
Barium	1000	315	312	305	272	272	283
Beryllium		ND	ND	ND	ND	ND	ND
Boron		602	514	512	438	402	426
Cadmium	5	ND	ND	ND	ND	ND	ND
Calcium		230000	173000	169000	141000	142000	149000
Chromium	50	7	ND	ND	ND	ND	ND
Cobalt		ND	ND	ND	ND	ND	ND
Copper	200	11.5	ND	ND	ND	ND	ND
Iron	300	28500	23600	24000	19200	23800	24100
Lead	25	11.3	ND	ND	ND	ND	5.3
Magnesium		25400	26000	25400	21100	22600	23500
Manganese	300	4810	6060	5930	4910	4880	5140
Molybdenum		ND	ND	ND	ND	ND	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND
Nickel	100	ND	ND	ND	ND	ND	ND
Potassium		10400	9740	9470	8740	8700	9100
Selenium	10	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND
Sodium	20000	21800	20500	20000	19600	18300	19300
Thallium		ND	ND	ND	ND	ND	ND
Vanadium		ND	ND	ND	ND	ND	ND
Zinc		24.3	ND	ND	ND	13.3	12.6
Dissolved Metals							
Aluminum, Dissolved		ND	ND	ND	ND	ND	ND
Antimony, Dissolved	3	ND	ND	ND	ND	ND	ND
Arsenic, Dissolved	25	ND	ND	ND	ND	ND	ND
Barium, Dissolved	1000	215	205	193	216	219	216
Beryllium, Dissolved		ND	ND	ND	ND	ND	ND
Boron, Dissolved		609	456	479	446	432	430
Cadmium, Dissolved	5	ND	ND	ND	ND	ND	ND
Calcium, Dissolved		165000	157000	150000	146000	147000	145000
Chromium, Dissolved	50	ND	ND	ND	ND	ND	ND
Cobalt, Dissolved		ND	ND	ND	ND	ND	ND
Copper, Dissolved	200	ND	ND	ND	ND	ND	ND
Iron, Dissolved	300	546	1350	1200	1220	1890	1500
Lead, Dissolved	25	ND	ND	ND	ND	ND	ND
Magnesium, Dissolved		24600	23600	22500	22100	22700	22200
Manganese, Dissolved	300	4800	5500	5220	4990	4940	4890
Molybdenum, Dissolved		ND	ND	ND	ND	ND	ND
Mercury, Dissolved	0.7	ND	ND	ND	ND	ND	ND
Nickel, Dissolved	100	ND	ND	ND	ND	ND	ND
Potassium, Dissolved		9780	8790	8540	8910	8810	8660
Selenium, Dissolved	10	ND	ND	ND	ND	ND	ND
Silver, Dissolved	50	ND	ND	ND	ND	ND	ND
Sodium, Dissolved	20000	21900	19000	18200	19900	19000	19000
Thallium, Dissolved		ND	ND	ND	ND	ND	ND
Vanadium, Dissolved		ND	ND	ND	ND	ND	ND
Zinc, Dissolved		ND	ND	ND	ND	ND	ND

(1) Based on total phenols standard
(2) All results in ppb.
(3) Exceedances of Part 703 Groundwater A Standard in RED

TABLE 3. Groundwater Analytical Results

Analyte	Part 703 Groundwater A Standard	MW-32 1/16/20	MW-32 5/11/20	MW-32 DUP 5/11/20	MW-32 8/7/20	MW- 32 DUP 10/22/20	MW 32 10/22/20
SVOCs							
1,2,4-Trichlorobenzene		ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene		ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene		ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene		ND	ND	ND	ND	ND	ND
1-Methylnaphthalene		8.2	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol		ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol		ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol **(1)**	1	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol **(1)**	1	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol **(1)**	1	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	5	2.3	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	5	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene		ND	ND	ND	ND	ND	ND
2-Chlorophenol		ND	ND	ND	ND	ND	ND
2-Methylnaphthalene		ND	ND	ND	ND	ND	ND
2-Methylphenol(o-Cresol)		ND	ND	ND	ND	ND	ND
2-Nitroaniline	5	ND	ND	ND	ND	ND	ND
2-Nitrophenol		ND	ND	ND	ND	ND	ND
3&4-Methylphenol(m&p Cresol)		ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	5	ND	ND	ND	ND	ND	ND
3-Nitroaniline	5	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol		ND	ND	ND	ND	ND	ND
4-Bromophenylphenyl ether		ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol		ND	ND	ND	ND	ND	ND
4-Chloroaniline	5	ND	ND	ND	ND	ND	ND
4-Chlorophenylphenyl ether		ND	ND	ND	ND	ND	ND
4-Nitroaniline	5	ND	ND	ND	ND	ND	ND
4-Nitrophenol		ND	ND	ND	ND	ND	ND
Acenaphthene		2.6	ND	ND	ND	ND	ND
Acenaphthylene		ND	ND	ND	ND	ND	ND
Anthracene		1.4	ND	ND	ND	ND	ND
Azobenzene		ND	ND	ND	ND	ND	ND
Benzo(a)anthracene		ND	ND	ND	ND	ND	ND
Benzo(a)pyrene		ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene		ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene		ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene		ND	ND	ND	ND	ND	ND
Benzoic acid		ND	ND	ND	ND	ND	ND
Benzyl alcohol		ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	5	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl) ether	1	ND	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl) ether	5	ND	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	5	1.1	ND	ND	ND	ND	ND
Butylbenzylphthalate		ND	ND	ND	ND	ND	ND
Carbazole		ND	ND	ND	ND	ND	ND
Chrysene		ND	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	50	ND	ND	ND	ND	ND	ND
Dibenzofuran		1.2	ND	ND	ND	ND	ND
Diethylphthalate		ND	ND	ND	ND	ND	ND
Dimethylphthalate		ND	ND	ND	ND	ND	ND
Di-n-butylphthalate	50	ND	ND	ND	ND	ND	ND
Di-n-octylphthalate		ND	ND	ND	ND	ND	ND
Fluoranthene		ND	ND	ND	ND	ND	ND
Fluorene		4.1	ND	ND	ND	ND	ND
Hexachloro-1,3-butadiene		ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.04	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	5	ND	ND	ND	ND	ND	ND
Hexachloroethane	5	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene		ND	ND	ND	ND	ND	ND
Isophorone		ND	ND	ND	ND	ND	ND
Naphthalene		ND	ND	ND	ND	ND	ND
Nitrobenzene	0.4	1.3	ND	ND	ND	ND	ND
N-Nitrosodimethylamine		ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine		ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine		3.7	ND	ND	ND	ND	ND
Pentachlorophenol **(1)**	1	ND	ND	ND	ND	ND	ND
Phenanthrene		3.6	ND	ND	ND	ND	ND
Phenol **(1)**	1	ND	ND	ND	ND	ND	ND
Pyrene		ND	ND	ND	ND	ND	ND

(1) Based on total phenols standard
(2) All results in ppb.
(3) Exceedances of Part 703 Groundwater A Standard in RED

Table 3. Groundwater Analytical Results

Analyte	Part 703 Groundwater A Standard	MW-33 1/16/20	MW-33 DUP 1/16/20	MW-33 5/11/20	MW-33 8/7/20	MW-33 DUP 8/7/20	MW-33 10/22/20
Total Metals							
Aluminum		5980	5290	18400	1650	695	532
Antimony	3	ND	ND	ND	ND	ND	ND
Arsenic	25	7.4	ND	8.8	ND	ND	ND
Barium	1000	269	269	252	196	209	178
Beryllium		ND	ND	ND	ND	ND	ND
Boron		464	466	383	348	349	295
Cadmium	5	ND	ND	ND	ND	ND	ND
Calcium		167000	231000	189000	150000	158000	141000
Chromium	50	9.5	9	24.5	ND	ND	ND
Cobalt		ND	ND	10.9	ND	ND	ND
Copper	200	16.1	16.1	44.2	ND	ND	ND
Iron	300	24500	23300	44000	19200	18700	18500
Lead	25	19.8	16.9	59.2	9.0	ND	ND
Magnesium		27400	27300	26100	18100	18700	17500
Manganese	300	2140	2150	2130	2220	2450	2360
Molybdenum		ND	ND	ND	ND	ND	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND
Nickel	100	ND	ND	27.7	ND	ND	ND
Potassium		28700	28900	24500	16100	16500	13400
Selenium	10	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND
Sodium	20000	152000	153000	115000	58800	59100	42900
Thallium		ND	ND	ND	ND	ND	ND
Vanadium		9.8	9	33.9	ND	ND	ND
Zinc		32.1	27.8	104	12.1	ND	ND
Dissolved Metals							
Aluminum, Dissolved		ND	ND	ND	ND	ND	119
Antimony, Dissolved	3	ND	ND	ND	ND	ND	ND
Arsenic, Dissolved	25	ND	ND	ND	ND	ND	ND
Barium, Dissolved	1000	148	156	115	135	140	124
Beryllium, Dissolved		ND	ND	ND	ND	ND	ND
Boron, Dissolved		472	472	375	346	348	318
Cadmium, Dissolved	5	ND	ND	ND	ND	ND	ND
Calcium, Dissolved		229000	233000	181000	152000	158000	148000
Chromium, Dissolved	50	ND	ND	ND	ND	ND	ND
Cobalt, Dissolved		ND	ND	ND	ND	ND	ND
Copper, Dissolved	200	ND	ND	7.2	ND	ND	ND
Iron, Dissolved	300	321	ND	258	989	1140	1470
Lead, Dissolved	25	ND	ND	ND	ND	ND	ND
Magnesium, Dissolved		25700	26000	19900	18400	18800	18100
Manganese, Dissolved	300	1780	2010	1780	2350	2300	2380
Molybdenum, Dissolved		ND	ND	ND	ND	ND	ND
Mercury, Dissolved	0.7	ND	ND	ND	ND	ND	ND
Nickel, Dissolved	100	ND	ND	ND	ND	ND	ND
Potassium, Dissolved		28300	28800	21800	15700	16900	14300
Selenium, Dissolved	10	ND	ND	ND	ND	ND	ND
Silver, Dissolved	50	ND	ND	ND	ND	ND	ND
Sodium, Dissolved	20000	156000	157000	113000	57300	62000	46100
Thallium, Dissolved		ND	ND	ND	ND	ND	ND
Vanadium, Dissolved		ND	ND	ND	ND	ND	ND
Zinc, Dissolved		ND	ND	ND	ND	ND	ND

(1) Based on total phenols standard
(2) All results in ppb.
(3) Exceedances of Part 703 Groundwater A Standard in RED

TABLE 3. Groundwater Analytical Results

Analyte	Part 703 Groundwater A Standard	MW-33 1/16/20	MW-33 DUP 1/16/20	MW-33 5/11/20	MW-33 8/7/20	MW-33 DUP 8/7/20	MW-33 10/22/20
SVOCs							
1,2,4-Trichlorobenzene		ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene		ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene		ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene		ND	ND	ND	ND	ND	ND
1-Methylnaphthalene		ND	1.1	ND	ND	ND	ND
2,4,5-Trichlorophenol		ND	4.6	ND	ND	ND	ND
2,4,6-Trichlorophenol		ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol **(1)**	1	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol **(1)**	1	ND	2.7	34.2	ND	ND	ND
2,4-Dinitrophenol **(1)**	1	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	5	1.7	ND	50.4	ND	ND	ND
2,6-Dinitrotoluene	5	ND	11.8	ND	ND	ND	ND
2-Chloronaphthalene		ND	ND	ND	ND	ND	ND
2-Chlorophenol		ND	ND	ND	ND	ND	ND
2-Methylnaphthalene		ND	ND	ND	ND	ND	ND
2-Methylphenol(o-Cresol)		ND	ND	ND	ND	ND	ND
2-Nitroaniline	5	ND	ND	ND	ND	ND	ND
2-Nitrophenol		ND	ND	ND	ND	ND	ND
3&4-Methylphenol(m&p Cresol)		ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	5	ND	ND	ND	ND	ND	ND
3-Nitroaniline	5	ND	ND	35.8	ND	ND	ND
4,6-Dinitro-2-methylphenol		ND	ND	ND	ND	ND	ND
4-Bromophenylphenyl ether		ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol		ND	2.2	ND	ND	ND	ND
4-Chloroaniline	5	ND	1.9	16.5	ND	ND	ND
4-Chlorophenylphenyl ether		ND	ND	ND	ND	ND	ND
4-Nitroaniline	5	ND	ND	35.8	ND	ND	ND
4-Nitrophenol		ND	ND	ND	ND	ND	ND
Acenaphthene		2.7	ND	ND	ND	21.0	14.3
Acenaphthylene		ND	12.7	22.1	ND	ND	ND
Anthracene		ND	12.8	88.3	ND	13.5	11.5
Azobenzene		ND	ND	ND	ND	ND	ND
Benzo(a)anthracene		ND	ND	ND	ND	ND	ND
Benzo(a)pyrene		ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene		ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene		ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene		ND	ND	ND	ND	ND	ND
Benzoic acid		ND	ND	ND	ND	ND	ND
Benzyl alcohol		ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	5	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl) ether	1	ND	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl) ether	5	ND	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	5	2.4	1.9	ND	ND	ND	ND
Butylbenzylphthalate		ND	ND	ND	ND	ND	ND
Carbazole		ND	ND	ND	ND	ND	ND
Chrysene		ND	1.7	15.5	ND	ND	ND
Dibenz(a,h)anthracene	50	ND	ND	ND	ND	ND	ND
Dibenzofuran		2.0	7.6	ND	ND	15.0	10.9
Diethylphthalate		ND	ND	ND	ND	ND	ND
Dimethylphthalate		ND	ND	20	ND	ND	ND
Di-n-butylphthalate	50	ND	ND	ND	ND	ND	ND
Di-n-octylphthalate		ND	ND	ND	ND	ND	ND
Fluoranthene		ND	1.9	ND	ND	ND	ND
Fluorene		4.2	5.5	ND	ND	36.4	28.6
Hexachloro-1,3-butadiene		ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.04	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	5	ND	ND	ND	ND	ND	ND
Hexachloroethane	5	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene		ND	ND	ND	ND	ND	ND
Isophorone		ND	ND	ND	ND	ND	ND
Naphthalene		ND	1.7	ND	ND	ND	ND
Nitrobenzene	0.4	ND	3.2	31.4	ND	ND	ND
N-Nitrosodimethylamine		ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine		ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine		2.1	4.6	95.6	ND	ND	ND
Pentachlorophenol **(1)**	1	ND	ND	ND	ND	ND	ND
Phenanthrene		3.6	ND	ND	ND	20.8	15.9
Phenol **(1)**	1	ND	ND	ND	ND	ND	ND
Pyrene		ND	3.9	ND	ND	15.8	12.5

(1) Based on total phenols standard

(2) All results in ppb.

(3) Exceedances of Part 703 Groundwater A Standard in RED

APPENDIX D
LABORATORY ANALYTICAL RESULTS

349 Northern Boulevard Suite 3▪ Albany, NY 12204 ▪ Phone: 518.453.2203 ▪ Fax: 518.453.2204
A Woman Owned Business Enterprise (WBE)

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

October 30, 2020

Ms. Rachel Farnum
Envirospec Engineering
349 Northern Blvd #3
Albany, NY 12204

RE: Project: Green Island
Pace Project No.: 30389048

Dear Ms. Farnum:

Enclosed are the analytical results for sample(s) received by the laboratory on October 23, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,

Samantha Bayura

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

cc: Mr. Adam Schultz, Couch White

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

CERTIFICATIONS

Project: Green Island
Pace Project No.: 30389048

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, LLC
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Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: Green Island
Pace Project No.: 30389048

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30389048001	**MW-33**	Water	10/22/20 10:15	10/23/20 09:30
30389048002	**DUP**	Water	10/22/20 10:15	10/23/20 09:30
30389048003	**MW-32**	Water	10/22/20 10:15	10/23/20 09:30

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SAMPLE ANALYTE COUNT

Project: Green Island
Pace Project No.: 30389048

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30389048001	**MW-33**	EPA 6010C	CTS	24	PASI-PA
		EPA 6010C	CTS	24	PASI-PA
		EPA 7470A	KAS	1	PASI-PA
		EPA 7470A	KAS	1	PASI-PA
		EPA 8270D	CF1	75	PASI-PA
30389048002	**DUP**	EPA 6010C	CTS	24	PASI-PA
		EPA 6010C	CTS	24	PASI-PA
		EPA 7470A	KAS	1	PASI-PA
		EPA 7470A	KAS	1	PASI-PA
		EPA 8270D	CF1	75	PASI-PA
30389048003	**MW-32**	EPA 6010C	CTS	24	PASI-PA
		EPA 6010C	CTS	24	PASI-PA
		EPA 7470A	KAS	1	PASI-PA
		EPA 7470A	KAS	1	PASI-PA
		EPA 8270D	CF1	75	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

Pace Analytical Services, LLC
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PROJECT NARRATIVE

Project: Green Island
Pace Project No.: 30389048

Method: **EPA 6010C**
Description: 6010C MET ICP
Client: Envirospec Engineering
Date: October 30, 2020

General Information:
3 samples were analyzed for EPA 6010C by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

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

Sample Preparation:
The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

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

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

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

QC Batch: 420668

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30389048003

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MSD (Lab ID: 2033300)
  - Aluminum

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2033299)
  - Calcium
  - Iron
  - Magnesium
  - Manganese
- MSD (Lab ID: 2033300)
  - Calcium
  - Manganese

R1: RPD value was outside control limits.

- MSD (Lab ID: 2033300)
  - Aluminum

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PROJECT NARRATIVE

Project: Green Island
Pace Project No.: 30389048

Method: **EPA 6010C**
Description: 6010C MET ICP
Client: Envirospec Engineering
Date: October 30, 2020

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

QC Batch: 420668

D6: The precision between the sample and sample duplicate exceeded laboratory control limits.

- DUP (Lab ID: 2033298)
  - Arsenic

Additional Comments:

Analyte Comments:

QC Batch: 420668

2c: The PDS recovery was outside of the laboratory control limits. Result may be biased low.

- MW-32 (Lab ID: 30389048003)
  - Calcium
  - Iron
  - Magnesium
  - Manganese
  - Sodium

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PROJECT NARRATIVE

Project: Green Island
Pace Project No.: 30389048

Method: **EPA 6010C**
Description: 6010C MET ICP, Lab Filtered
Client: Envirospec Engineering
Date: October 30, 2020

General Information:
3 samples were analyzed for EPA 6010C by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

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

Sample Preparation:
The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

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

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

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

QC Batch: 420666

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30389048003

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2033261)
  - Calcium, Dissolved

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MSD (Lab ID: 2033262)
  - Calcium, Dissolved

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Green Island
Pace Project No.: 30389048

Method: **EPA 7470A**
Description: 7470 Mercury
Client: Envirospec Engineering
Date: October 30, 2020

General Information:
3 samples were analyzed for EPA 7470A by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

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

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

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

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

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

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 420682

1c: The PDS recovery was outside of the laboratory control limits. Result may be biased high

- MW-32 (Lab ID: 30389048003)
  - Mercury

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PROJECT NARRATIVE

Project: Green Island
Pace Project No.: 30389048

Method: **EPA 7470A**
Description: 7470 Mercury, Lab Filtered
Client: Envirospec Engineering
Date: October 30, 2020

General Information:
3 samples were analyzed for EPA 7470A by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

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

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

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

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

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

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 420673

1c: The PDS recovery was outside of the laboratory control limits. Result may be biased high

- MW-32 (Lab ID: 30389048003)
  - Mercury, Dissolved

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PROJECT NARRATIVE

Project: Green Island
Pace Project No.: 30389048

Method: **EPA 8270D**
Description: 8270D MSSV Organics
Client: Envirospec Engineering
Date: October 30, 2020

General Information:
3 samples were analyzed for EPA 8270D by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

ED: Due to the extract's physical characteristics, the analysis was performed at dilution.
- MW-33 (Lab ID: 30389048001)

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

Sample Preparation:
The samples were prepared in accordance with EPA 3510C with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

QC Batch: 420755

IS: The internal standard response is below criteria. Results may be biased high.
- MW-33 (Lab ID: 30389048001)
  - Benzo(a)pyrene
  - Benzo(b)fluoranthene
  - Benzo(g,h,i)perylene
  - Benzo(k)fluoranthene
  - Di-n-octylphthalate
  - Dibenz(a,h)anthracene
  - Indeno(1,2,3-cd)pyrene

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

QC Batch: 420755

S4: Surrogate recovery not evaluated against control limits due to sample dilution.
- MW-33 (Lab ID: 30389048001)
  - Nitrobenzene-d5 (S)

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

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Greensburg, PA 15601
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PROJECT NARRATIVE

Project: Green Island
Pace Project No.: 30389048

Method: **EPA 8270D**
Description: 8270D MSSV Organics
Client: Envirospec Engineering
Date: October 30, 2020

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

QC Batch: 420755

L1: Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.

- LCS (Lab ID: 2033699)
  - Benzoic acid
  - Pentachlorophenol

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.

- LCS (Lab ID: 2033699)
  - 3,3'-Dichlorobenzidine

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

QC Batch: 420755

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30389048003

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2033700)
  - 3,3'-Dichlorobenzidine

Additional Comments:

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

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

ANALYTICAL RESULTS

Project: Green Island
Pace Project No.: 30389048

Sample: MW-33 **Lab ID: 30389048001** Collected: 10/22/20 10:15 Received: 10/23/20 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Aluminum	**532**	ug/L	50.0	20.3	1	10/28/20 15:02	10/29/20 09:09	7429-90-5	
Antimony	ND	ug/L	6.0	3.3	1	10/28/20 15:02	10/29/20 09:09	7440-36-0	
Arsenic	ND	ug/L	5.0	2.0	1	10/28/20 15:02	10/29/20 09:09	7440-38-2	
Barium	**178**	ug/L	10.0	0.68	1	10/28/20 15:02	10/29/20 09:09	7440-39-3	
Beryllium	ND	ug/L	1.0	0.17	1	10/28/20 15:02	10/29/20 09:09	7440-41-7	
Boron	**295**	ug/L	50.0	2.3	1	10/28/20 15:02	10/29/20 09:09	7440-42-8	
Cadmium	ND	ug/L	3.0	0.34	1	10/28/20 15:02	10/29/20 09:09	7440-43-9	
Calcium	**141000**	ug/L	1000	99.9	1	10/28/20 15:02	10/29/20 09:09	7440-70-2	
Chromium	ND	ug/L	5.0	0.35	1	10/28/20 15:02	10/29/20 09:09	7440-47-3	
Cobalt	ND	ug/L	5.0	0.53	1	10/28/20 15:02	10/29/20 09:09	7440-48-4	
Copper	ND	ug/L	5.0	2.7	1	10/28/20 15:02	10/29/20 09:09	7440-50-8	
Iron	**18500**	ug/L	70.0	40.9	1	10/28/20 15:02	10/29/20 09:09	7439-89-6	
Lead	ND	ug/L	5.0	4.9	1	10/28/20 15:02	10/29/20 09:09	7439-92-1	
Magnesium	**17500**	ug/L	200	28.4	1	10/28/20 15:02	10/29/20 09:09	7439-95-4	
Manganese	**2360**	ug/L	5.0	1.2	1	10/28/20 15:02	10/29/20 09:09	7439-96-5	
Molybdenum	ND	ug/L	20.0	0.85	1	10/28/20 15:02	10/29/20 09:09	7439-98-7	
Nickel	ND	ug/L	10.0	1.5	1	10/28/20 15:02	10/29/20 09:09	7440-02-0	
Potassium	**13400**	ug/L	500	72.4	1	10/28/20 15:02	10/29/20 09:09	7440-09-7	
Selenium	ND	ug/L	8.0	5.5	1	10/28/20 15:02	10/29/20 09:09	7782-49-2	
Silver	ND	ug/L	6.0	1.4	1	10/28/20 15:02	10/29/20 09:09	7440-22-4	
Sodium	**42900**	ug/L	1000	423	1	10/28/20 15:02	10/29/20 09:09	7440-23-5	
Thallium	ND	ug/L	10.0	4.0	1	10/28/20 15:02	10/29/20 09:09	7440-28-0	
Vanadium	ND	ug/L	5.0	0.57	1	10/28/20 15:02	10/29/20 09:09	7440-62-2	
Zinc	ND	ug/L	10.0	2.4	1	10/28/20 15:02	10/29/20 09:09	7440-66-6	
6010C MET ICP, Lab Filtered	Analytical Method: EPA 6010C Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Aluminum, Dissolved	**119**	ug/L	50.0	20.3	1	10/28/20 14:54	10/29/20 08:43	7429-90-5	
Antimony, Dissolved	ND	ug/L	6.0	3.3	1	10/28/20 14:54	10/29/20 08:43	7440-36-0	
Arsenic, Dissolved	ND	ug/L	5.0	2.0	1	10/28/20 14:54	10/29/20 08:43	7440-38-2	
Barium, Dissolved	**124**	ug/L	10.0	0.68	1	10/28/20 14:54	10/29/20 08:43	7440-39-3	
Beryllium, Dissolved	ND	ug/L	1.0	0.17	1	10/28/20 14:54	10/29/20 08:43	7440-41-7	
Boron, Dissolved	**318**	ug/L	50.0	2.3	1	10/28/20 14:54	10/29/20 08:43	7440-42-8	
Cadmium, Dissolved	ND	ug/L	3.0	0.34	1	10/28/20 14:54	10/29/20 08:43	7440-43-9	
Calcium, Dissolved	**148000**	ug/L	1000	99.9	1	10/28/20 14:54	10/29/20 08:43	7440-70-2	
Chromium, Dissolved	ND	ug/L	5.0	0.35	1	10/28/20 14:54	10/29/20 08:43	7440-47-3	
Cobalt, Dissolved	ND	ug/L	5.0	0.53	1	10/28/20 14:54	10/29/20 08:43	7440-48-4	
Copper, Dissolved	ND	ug/L	5.0	2.7	1	10/28/20 14:54	10/29/20 08:43	7440-50-8	
Iron, Dissolved	**1470**	ug/L	70.0	40.9	1	10/28/20 14:54	10/29/20 08:43	7439-89-6	
Lead, Dissolved	ND	ug/L	5.0	4.9	1	10/28/20 14:54	10/29/20 08:43	7439-92-1	
Magnesium, Dissolved	**18100**	ug/L	200	28.4	1	10/28/20 14:54	10/29/20 08:43	7439-95-4	
Manganese, Dissolved	**2380**	ug/L	5.0	1.2	1	10/28/20 14:54	10/29/20 08:43	7439-96-5	
Molybdenum, Dissolved	ND	ug/L	20.0	0.85	1	10/28/20 14:54	10/29/20 08:43	7439-98-7	
Nickel, Dissolved	ND	ug/L	10.0	1.5	1	10/28/20 14:54	10/29/20 08:43	7440-02-0	
Potassium, Dissolved	**14300**	ug/L	500	72.4	1	10/28/20 14:54	10/29/20 08:43	7440-09-7	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Green Island
Pace Project No.: 30389048

Sample: MW-33 **Lab ID: 30389048001** Collected: 10/22/20 10:15 Received: 10/23/20 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP, Lab Filtered	Analytical Method: EPA 6010C Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Selenium, Dissolved	ND	ug/L	8.0	5.5	1	10/28/20 14:54	10/29/20 08:43	7782-49-2	
Silver, Dissolved	ND	ug/L	6.0	1.4	1	10/28/20 14:54	10/29/20 08:43	7440-22-4	
Sodium, Dissolved	**46100**	ug/L	1000	423	1	10/28/20 14:54	10/29/20 08:43	7440-23-5	
Thallium, Dissolved	ND	ug/L	10.0	4.0	1	10/28/20 14:54	10/29/20 08:43	7440-28-0	
Vanadium, Dissolved	ND	ug/L	5.0	0.57	1	10/28/20 14:54	10/29/20 08:43	7440-62-2	
Zinc, Dissolved	ND	ug/L	10.0	2.4	1	10/28/20 14:54	10/29/20 08:43	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	ND	ug/L	0.20	0.030	1	10/28/20 15:22	10/28/20 23:43	7439-97-6	
7470 Mercury, Lab Filtered	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury, Dissolved	ND	ug/L	0.20	0.030	1	10/28/20 15:13	10/28/20 23:11	7439-97-6	
8270D MSSV Organics	Analytical Method: EPA 8270D Preparation Method: EPA 3510C Pace Analytical Services - Greensburg								
Acenaphthene	**14.3**	ug/L	9.5	3.7	10	10/29/20 08:40	10/30/20 00:43	83-32-9	ED
Acenaphthylene	ND	ug/L	9.5	3.6	10	10/29/20 08:40	10/30/20 00:43	208-96-8	ED
Anthracene	**11.5**	ug/L	9.5	2.5	10	10/29/20 08:40	10/30/20 00:43	120-12-7	ED
Azobenzene	ND	ug/L	9.5	3.4	10	10/29/20 08:40	10/30/20 00:43	103-33-3	ED
Benzo(a)anthracene	ND	ug/L	9.5	1.9	10	10/29/20 08:40	10/30/20 00:43	56-55-3	ED
Benzo(a)pyrene	ND	ug/L	9.5	1.8	10	10/29/20 08:40	10/30/20 00:43	50-32-8	ED,IS
Benzo(b)fluoranthene	ND	ug/L	9.5	2.2	10	10/29/20 08:40	10/30/20 00:43	205-99-2	ED,IS
Benzo(g,h,i)perylene	ND	ug/L	9.5	2.8	10	10/29/20 08:40	10/30/20 00:43	191-24-2	ED,IS
Benzo(k)fluoranthene	ND	ug/L	9.5	2.4	10	10/29/20 08:40	10/30/20 00:43	207-08-9	ED,IS
Benzoic acid	ND	ug/L	143	26.8	10	10/29/20 08:40	10/30/20 00:43	65-85-0	ED,L1
Benzyl alcohol	ND	ug/L	9.5	6.7	10	10/29/20 08:40	10/30/20 00:43	100-51-6	ED
4-Bromophenylphenyl ether	ND	ug/L	9.5	3.7	10	10/29/20 08:40	10/30/20 00:43	101-55-3	ED
Butylbenzylphthalate	ND	ug/L	9.5	2.8	10	10/29/20 08:40	10/30/20 00:43	85-68-7	ED
Carbazole	ND	ug/L	9.5	2.2	10	10/29/20 08:40	10/30/20 00:43	86-74-8	ED
4-Chloro-3-methylphenol	ND	ug/L	9.5	4.2	10	10/29/20 08:40	10/30/20 00:43	59-50-7	ED
4-Chloroaniline	ND	ug/L	9.5	2.0	10	10/29/20 08:40	10/30/20 00:43	106-47-8	ED
bis(2-Chloroethoxy)methane	ND	ug/L	9.5	3.4	10	10/29/20 08:40	10/30/20 00:43	111-91-1	ED
bis(2-Chloroethyl) ether	ND	ug/L	9.5	3.9	10	10/29/20 08:40	10/30/20 00:43	111-44-4	ED
bis(2-Chloroisopropyl) ether	ND	ug/L	9.5	3.9	10	10/29/20 08:40	10/30/20 00:43	108-60-1	ED
2-Chloronaphthalene	ND	ug/L	9.5	3.2	10	10/29/20 08:40	10/30/20 00:43	91-58-7	ED
2-Chlorophenol	ND	ug/L	9.5	3.1	10	10/29/20 08:40	10/30/20 00:43	95-57-8	ED
4-Chlorophenylphenyl ether	ND	ug/L	9.5	3.5	10	10/29/20 08:40	10/30/20 00:43	7005-72-3	ED
Chrysene	ND	ug/L	9.5	2.0	10	10/29/20 08:40	10/30/20 00:43	218-01-9	ED
Dibenz(a,h)anthracene	ND	ug/L	9.5	3.0	10	10/29/20 08:40	10/30/20 00:43	53-70-3	ED,IS
Dibenzofuran	**10.9**	ug/L	9.5	3.5	10	10/29/20 08:40	10/30/20 00:43	132-64-9	ED
1,2-Dichlorobenzene	ND	ug/L	9.5	3.3	10	10/29/20 08:40	10/30/20 00:43	95-50-1	ED
1,3-Dichlorobenzene	ND	ug/L	9.5	2.8	10	10/29/20 08:40	10/30/20 00:43	541-73-1	ED
1,4-Dichlorobenzene	ND	ug/L	9.5	2.6	10	10/29/20 08:40	10/30/20 00:43	106-46-7	ED

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Green Island
Pace Project No.: 30389048

Sample: MW-33 **Lab ID: 30389048001** Collected: 10/22/20 10:15 Received: 10/23/20 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV Organics	Analytical Method: EPA 8270D Preparation Method: EPA 3510C Pace Analytical Services - Greensburg								
3,3'-Dichlorobenzidine	ND	ug/L	9.5	2.2	10	10/29/20 08:40	10/30/20 00:43	91-94-1	ED,L2
2,4-Dichlorophenol	ND	ug/L	9.5	3.2	10	10/29/20 08:40	10/30/20 00:43	120-83-2	ED
Diethylphthalate	ND	ug/L	9.5	3.5	10	10/29/20 08:40	10/30/20 00:43	84-66-2	ED
2,4-Dimethylphenol	ND	ug/L	9.5	3.4	10	10/29/20 08:40	10/30/20 00:43	105-67-9	ED
Dimethylphthalate	ND	ug/L	9.5	4.2	10	10/29/20 08:40	10/30/20 00:43	131-11-3	ED
Di-n-butylphthalate	ND	ug/L	9.5	3.1	10	10/29/20 08:40	10/30/20 00:43	84-74-2	ED
4,6-Dinitro-2-methylphenol	ND	ug/L	23.8	6.1	10	10/29/20 08:40	10/30/20 00:43	534-52-1	ED
2,4-Dinitrophenol	ND	ug/L	23.8	5.6	10	10/29/20 08:40	10/30/20 00:43	51-28-5	ED
2,4-Dinitrotoluene	ND	ug/L	9.5	3.4	10	10/29/20 08:40	10/30/20 00:43	121-14-2	ED
2,6-Dinitrotoluene	ND	ug/L	9.5	3.8	10	10/29/20 08:40	10/30/20 00:43	606-20-2	ED
Di-n-octylphthalate	ND	ug/L	9.5	2.6	10	10/29/20 08:40	10/30/20 00:43	117-84-0	ED,IS
bis(2-Ethylhexyl)phthalate	ND	ug/L	9.5	3.4	10	10/29/20 08:40	10/30/20 00:43	117-81-7	ED
Fluoranthene	ND	ug/L	9.5	2.2	10	10/29/20 08:40	10/30/20 00:43	206-44-0	ED
Fluorene	**28.6**	ug/L	9.5	3.5	10	10/29/20 08:40	10/30/20 00:43	86-73-7	ED
Hexachloro-1,3-butadiene	ND	ug/L	9.5	3.1	10	10/29/20 08:40	10/30/20 00:43	87-68-3	ED
Hexachlorobenzene	ND	ug/L	9.5	2.9	10	10/29/20 08:40	10/30/20 00:43	118-74-1	ED
Hexachlorocyclopentadiene	ND	ug/L	9.5	1.8	10	10/29/20 08:40	10/30/20 00:43	77-47-4	ED
Hexachloroethane	ND	ug/L	9.5	2.9	10	10/29/20 08:40	10/30/20 00:43	67-72-1	ED
Indeno(1,2,3-cd)pyrene	ND	ug/L	9.5	2.9	10	10/29/20 08:40	10/30/20 00:43	193-39-5	ED,IS
Isophorone	ND	ug/L	9.5	5.5	10	10/29/20 08:40	10/30/20 00:43	78-59-1	ED
1-Methylnaphthalene	ND	ug/L	9.5	3.4	10	10/29/20 08:40	10/30/20 00:43	90-12-0	ED
2-Methylnaphthalene	ND	ug/L	9.5	3.3	10	10/29/20 08:40	10/30/20 00:43	91-57-6	ED
2-Methylphenol(o-Cresol)	ND	ug/L	9.5	3.5	10	10/29/20 08:40	10/30/20 00:43	95-48-7	ED
3&4-Methylphenol(m&p Cresol)	ND	ug/L	19.0	18.1	10	10/29/20 08:40	10/30/20 00:43		ED
Naphthalene	ND	ug/L	9.5	3.3	10	10/29/20 08:40	10/30/20 00:43	91-20-3	ED
2-Nitroaniline	ND	ug/L	23.8	6.8	10	10/29/20 08:40	10/30/20 00:43	88-74-4	ED
3-Nitroaniline	ND	ug/L	23.8	9.2	10	10/29/20 08:40	10/30/20 00:43	99-09-2	ED
4-Nitroaniline	ND	ug/L	23.8	17.7	10	10/29/20 08:40	10/30/20 00:43	100-01-6	ED
Nitrobenzene	ND	ug/L	9.5	3.6	10	10/29/20 08:40	10/30/20 00:43	98-95-3	ED
2-Nitrophenol	ND	ug/L	9.5	3.3	10	10/29/20 08:40	10/30/20 00:43	88-75-5	ED
4-Nitrophenol	ND	ug/L	9.5	7.3	10	10/29/20 08:40	10/30/20 00:43	100-02-7	ED
N-Nitrosodimethylamine	ND	ug/L	9.5	2.5	10	10/29/20 08:40	10/30/20 00:43	62-75-9	ED
N-Nitroso-di-n-propylamine	ND	ug/L	9.5	5.1	10	10/29/20 08:40	10/30/20 00:43	621-64-7	ED
N-Nitrosodiphenylamine	ND	ug/L	9.5	2.4	10	10/29/20 08:40	10/30/20 00:43	86-30-6	ED
Pentachlorophenol	ND	ug/L	23.8	10.0	10	10/29/20 08:40	10/30/20 00:43	87-86-5	ED,L1
Phenanthrene	**15.9**	ug/L	9.5	3.2	10	10/29/20 08:40	10/30/20 00:43	85-01-8	ED
Phenol	ND	ug/L	9.5	2.1	10	10/29/20 08:40	10/30/20 00:43	108-95-2	ED
Pyrene	**12.5**	ug/L	9.5	2.9	10	10/29/20 08:40	10/30/20 00:43	129-00-0	ED
1,2,4-Trichlorobenzene	ND	ug/L	9.5	3.0	10	10/29/20 08:40	10/30/20 00:43	120-82-1	ED
2,4,5-Trichlorophenol	ND	ug/L	23.8	6.4	10	10/29/20 08:40	10/30/20 00:43	95-95-4	ED
2,4,6-Trichlorophenol	ND	ug/L	9.5	3.5	10	10/29/20 08:40	10/30/20 00:43	88-06-2	ED
Surrogates									
Nitrobenzene-d5 (S)	185	%.	10-140		10	10/29/20 08:40	10/30/20 00:43	4165-60-0	S4
2-Fluorobiphenyl (S)	109	%.	10-135		10	10/29/20 08:40	10/30/20 00:43	321-60-8	
Terphenyl-d14 (S)	106	%.	10-128		10	10/29/20 08:40	10/30/20 00:43	1718-51-0	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Green Island
Pace Project No.: 30389048

Sample: MW-33 **Lab ID: 30389048001** Collected: 10/22/20 10:15 Received: 10/23/20 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV Organics	Analytical Method: EPA 8270D Preparation Method: EPA 3510C Pace Analytical Services - Greensburg								
Surrogates									
Phenol-d6 (S)	33	%.	10-145		10	10/29/20 08:40	10/30/20 00:43	13127-88-3	
2-Fluorophenol (S)	32	%.	10-142		10	10/29/20 08:40	10/30/20 00:43	367-12-4	
2,4,6-Tribromophenol (S)	105	%.	10-140		10	10/29/20 08:40	10/30/20 00:43	118-79-6	

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

ANALYTICAL RESULTS

Project: Green Island
Pace Project No.: 30389048

Sample: DUP **Lab ID: 30389048002** Collected: 10/22/20 10:15 Received: 10/23/20 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Aluminum	**2310**	ug/L	50.0	20.3	1	10/28/20 15:02	10/29/20 09:11	7429-90-5	
Antimony	ND	ug/L	6.0	3.3	1	10/28/20 15:02	10/29/20 09:11	7440-36-0	
Arsenic	**6.3**	ug/L	5.0	2.0	1	10/28/20 15:02	10/29/20 09:11	7440-38-2	
Barium	**272**	ug/L	10.0	0.68	1	10/28/20 15:02	10/29/20 09:11	7440-39-3	
Beryllium	ND	ug/L	1.0	0.17	1	10/28/20 15:02	10/29/20 09:11	7440-41-7	
Boron	**402**	ug/L	50.0	2.3	1	10/28/20 15:02	10/29/20 09:11	7440-42-8	
Cadmium	ND	ug/L	3.0	0.34	1	10/28/20 15:02	10/29/20 09:11	7440-43-9	
Calcium	**142000**	ug/L	1000	99.9	1	10/28/20 15:02	10/29/20 09:11	7440-70-2	
Chromium	ND	ug/L	5.0	0.35	1	10/28/20 15:02	10/29/20 09:11	7440-47-3	
Cobalt	ND	ug/L	5.0	0.53	1	10/28/20 15:02	10/29/20 09:11	7440-48-4	
Copper	ND	ug/L	5.0	2.7	1	10/28/20 15:02	10/29/20 09:11	7440-50-8	
Iron	**23800**	ug/L	70.0	40.9	1	10/28/20 15:02	10/29/20 09:11	7439-89-6	
Lead	ND	ug/L	5.0	4.9	1	10/28/20 15:02	10/29/20 09:11	7439-92-1	
Magnesium	**22600**	ug/L	200	28.4	1	10/28/20 15:02	10/29/20 09:11	7439-95-4	
Manganese	**4880**	ug/L	5.0	1.2	1	10/28/20 15:02	10/29/20 09:11	7439-96-5	
Molybdenum	ND	ug/L	20.0	0.85	1	10/28/20 15:02	10/29/20 09:11	7439-98-7	
Nickel	ND	ug/L	10.0	1.5	1	10/28/20 15:02	10/29/20 09:11	7440-02-0	
Potassium	**8700**	ug/L	500	72.4	1	10/28/20 15:02	10/29/20 09:11	7440-09-7	
Selenium	ND	ug/L	8.0	5.5	1	10/28/20 15:02	10/29/20 09:11	7782-49-2	
Silver	ND	ug/L	6.0	1.4	1	10/28/20 15:02	10/29/20 09:11	7440-22-4	
Sodium	**18300**	ug/L	1000	423	1	10/28/20 15:02	10/29/20 09:11	7440-23-5	
Thallium	ND	ug/L	10.0	4.0	1	10/28/20 15:02	10/29/20 09:11	7440-28-0	
Vanadium	ND	ug/L	5.0	0.57	1	10/28/20 15:02	10/29/20 09:11	7440-62-2	
Zinc	**13.3**	ug/L	10.0	2.4	1	10/28/20 15:02	10/29/20 09:11	7440-66-6	
6010C MET ICP, Lab Filtered	Analytical Method: EPA 6010C Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Aluminum, Dissolved	ND	ug/L	50.0	20.3	1	10/28/20 14:54	10/29/20 08:45	7429-90-5	
Antimony, Dissolved	ND	ug/L	6.0	3.3	1	10/28/20 14:54	10/29/20 08:45	7440-36-0	
Arsenic, Dissolved	ND	ug/L	5.0	2.0	1	10/28/20 14:54	10/29/20 08:45	7440-38-2	
Barium, Dissolved	**219**	ug/L	10.0	0.68	1	10/28/20 14:54	10/29/20 08:45	7440-39-3	
Beryllium, Dissolved	ND	ug/L	1.0	0.17	1	10/28/20 14:54	10/29/20 08:45	7440-41-7	
Boron, Dissolved	**432**	ug/L	50.0	2.3	1	10/28/20 14:54	10/29/20 08:45	7440-42-8	
Cadmium, Dissolved	ND	ug/L	3.0	0.34	1	10/28/20 14:54	10/29/20 08:45	7440-43-9	
Calcium, Dissolved	**147000**	ug/L	1000	99.9	1	10/28/20 14:54	10/29/20 08:45	7440-70-2	
Chromium, Dissolved	ND	ug/L	5.0	0.35	1	10/28/20 14:54	10/29/20 08:45	7440-47-3	
Cobalt, Dissolved	ND	ug/L	5.0	0.53	1	10/28/20 14:54	10/29/20 08:45	7440-48-4	
Copper, Dissolved	ND	ug/L	5.0	2.7	1	10/28/20 14:54	10/29/20 08:45	7440-50-8	
Iron, Dissolved	**1890**	ug/L	70.0	40.9	1	10/28/20 14:54	10/29/20 08:45	7439-89-6	
Lead, Dissolved	ND	ug/L	5.0	4.9	1	10/28/20 14:54	10/29/20 08:45	7439-92-1	
Magnesium, Dissolved	**22700**	ug/L	200	28.4	1	10/28/20 14:54	10/29/20 08:45	7439-95-4	
Manganese, Dissolved	**4940**	ug/L	5.0	1.2	1	10/28/20 14:54	10/29/20 08:45	7439-96-5	
Molybdenum, Dissolved	ND	ug/L	20.0	0.85	1	10/28/20 14:54	10/29/20 08:45	7439-98-7	
Nickel, Dissolved	ND	ug/L	10.0	1.5	1	10/28/20 14:54	10/29/20 08:45	7440-02-0	
Potassium, Dissolved	**8810**	ug/L	500	72.4	1	10/28/20 14:54	10/29/20 08:45	7440-09-7	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Green Island
Pace Project No.: 30389048

Sample: DUP **Lab ID: 30389048002** Collected: 10/22/20 10:15 Received: 10/23/20 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP, Lab Filtered	Analytical Method: EPA 6010C Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Selenium, Dissolved	ND	ug/L	8.0	5.5	1	10/28/20 14:54	10/29/20 08:45	7782-49-2	
Silver, Dissolved	ND	ug/L	6.0	1.4	1	10/28/20 14:54	10/29/20 08:45	7440-22-4	
Sodium, Dissolved	**19000**	ug/L	1000	423	1	10/28/20 14:54	10/29/20 08:45	7440-23-5	
Thallium, Dissolved	ND	ug/L	10.0	4.0	1	10/28/20 14:54	10/29/20 08:45	7440-28-0	
Vanadium, Dissolved	ND	ug/L	5.0	0.57	1	10/28/20 14:54	10/29/20 08:45	7440-62-2	
Zinc, Dissolved	ND	ug/L	10.0	2.4	1	10/28/20 14:54	10/29/20 08:45	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	ND	ug/L	0.20	0.030	1	10/28/20 15:22	10/28/20 23:45	7439-97-6	
7470 Mercury, Lab Filtered	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury, Dissolved	ND	ug/L	0.20	0.030	1	10/28/20 15:13	10/28/20 23:12	7439-97-6	
8270D MSSV Organics	Analytical Method: EPA 8270D Preparation Method: EPA 3510C Pace Analytical Services - Greensburg								
Acenaphthene	ND	ug/L	0.96	0.38	1	10/29/20 08:40	10/30/20 01:05	83-32-9	
Acenaphthylene	ND	ug/L	0.96	0.37	1	10/29/20 08:40	10/30/20 01:05	208-96-8	
Anthracene	ND	ug/L	0.96	0.26	1	10/29/20 08:40	10/30/20 01:05	120-12-7	
Azobenzene	ND	ug/L	0.96	0.34	1	10/29/20 08:40	10/30/20 01:05	103-33-3	
Benzo(a)anthracene	ND	ug/L	0.96	0.20	1	10/29/20 08:40	10/30/20 01:05	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.96	0.18	1	10/29/20 08:40	10/30/20 01:05	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.96	0.23	1	10/29/20 08:40	10/30/20 01:05	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.96	0.29	1	10/29/20 08:40	10/30/20 01:05	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.96	0.25	1	10/29/20 08:40	10/30/20 01:05	207-08-9	
Benzoic acid	ND	ug/L	14.4	2.7	1	10/29/20 08:40	10/30/20 01:05	65-85-0	L1
Benzyl alcohol	ND	ug/L	0.96	0.67	1	10/29/20 08:40	10/30/20 01:05	100-51-6	
4-Bromophenylphenyl ether	ND	ug/L	0.96	0.38	1	10/29/20 08:40	10/30/20 01:05	101-55-3	
Butylbenzylphthalate	ND	ug/L	0.96	0.29	1	10/29/20 08:40	10/30/20 01:05	85-68-7	
Carbazole	ND	ug/L	0.96	0.22	1	10/29/20 08:40	10/30/20 01:05	86-74-8	
4-Chloro-3-methylphenol	ND	ug/L	0.96	0.42	1	10/29/20 08:40	10/30/20 01:05	59-50-7	
4-Chloroaniline	ND	ug/L	0.96	0.21	1	10/29/20 08:40	10/30/20 01:05	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	0.96	0.34	1	10/29/20 08:40	10/30/20 01:05	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	0.96	0.39	1	10/29/20 08:40	10/30/20 01:05	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/L	0.96	0.39	1	10/29/20 08:40	10/30/20 01:05	108-60-1	
2-Chloronaphthalene	ND	ug/L	0.96	0.32	1	10/29/20 08:40	10/30/20 01:05	91-58-7	
2-Chlorophenol	ND	ug/L	0.96	0.31	1	10/29/20 08:40	10/30/20 01:05	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	0.96	0.35	1	10/29/20 08:40	10/30/20 01:05	7005-72-3	
Chrysene	ND	ug/L	0.96	0.20	1	10/29/20 08:40	10/30/20 01:05	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.96	0.30	1	10/29/20 08:40	10/30/20 01:05	53-70-3	
Dibenzofuran	ND	ug/L	0.96	0.35	1	10/29/20 08:40	10/30/20 01:05	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	0.96	0.33	1	10/29/20 08:40	10/30/20 01:05	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	0.96	0.29	1	10/29/20 08:40	10/30/20 01:05	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.96	0.27	1	10/29/20 08:40	10/30/20 01:05	106-46-7	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Green Island
Pace Project No.: 30389048

Sample: DUP **Lab ID: 30389048002** Collected: 10/22/20 10:15 Received: 10/23/20 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV Organics	Analytical Method: EPA 8270D Preparation Method: EPA 3510C Pace Analytical Services - Greensburg								
3,3'-Dichlorobenzidine	ND	ug/L	0.96	0.22	1	10/29/20 08:40	10/30/20 01:05	91-94-1	L2
2,4-Dichlorophenol	ND	ug/L	0.96	0.32	1	10/29/20 08:40	10/30/20 01:05	120-83-2	
Diethylphthalate	ND	ug/L	0.96	0.35	1	10/29/20 08:40	10/30/20 01:05	84-66-2	
2,4-Dimethylphenol	ND	ug/L	0.96	0.35	1	10/29/20 08:40	10/30/20 01:05	105-67-9	
Dimethylphthalate	ND	ug/L	0.96	0.42	1	10/29/20 08:40	10/30/20 01:05	131-11-3	
Di-n-butylphthalate	ND	ug/L	0.96	0.31	1	10/29/20 08:40	10/30/20 01:05	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	2.4	0.61	1	10/29/20 08:40	10/30/20 01:05	534-52-1	
2,4-Dinitrophenol	ND	ug/L	2.4	0.56	1	10/29/20 08:40	10/30/20 01:05	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	0.96	0.34	1	10/29/20 08:40	10/30/20 01:05	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	0.96	0.39	1	10/29/20 08:40	10/30/20 01:05	606-20-2	
Di-n-octylphthalate	ND	ug/L	0.96	0.26	1	10/29/20 08:40	10/30/20 01:05	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/L	0.96	0.35	1	10/29/20 08:40	10/30/20 01:05	117-81-7	
Fluoranthene	ND	ug/L	0.96	0.22	1	10/29/20 08:40	10/30/20 01:05	206-44-0	
Fluorene	ND	ug/L	0.96	0.35	1	10/29/20 08:40	10/30/20 01:05	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/L	0.96	0.32	1	10/29/20 08:40	10/30/20 01:05	87-68-3	
Hexachlorobenzene	ND	ug/L	0.96	0.29	1	10/29/20 08:40	10/30/20 01:05	118-74-1	
Hexachlorocyclopentadiene	ND	ug/L	0.96	0.18	1	10/29/20 08:40	10/30/20 01:05	77-47-4	
Hexachloroethane	ND	ug/L	0.96	0.29	1	10/29/20 08:40	10/30/20 01:05	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.96	0.29	1	10/29/20 08:40	10/30/20 01:05	193-39-5	
Isophorone	ND	ug/L	0.96	0.55	1	10/29/20 08:40	10/30/20 01:05	78-59-1	
1-Methylnaphthalene	ND	ug/L	0.96	0.35	1	10/29/20 08:40	10/30/20 01:05	90-12-0	
2-Methylnaphthalene	ND	ug/L	0.96	0.33	1	10/29/20 08:40	10/30/20 01:05	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	0.96	0.35	1	10/29/20 08:40	10/30/20 01:05	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	1.9	1.8	1	10/29/20 08:40	10/30/20 01:05		
Naphthalene	ND	ug/L	0.96	0.34	1	10/29/20 08:40	10/30/20 01:05	91-20-3	
2-Nitroaniline	ND	ug/L	2.4	0.69	1	10/29/20 08:40	10/30/20 01:05	88-74-4	
3-Nitroaniline	ND	ug/L	2.4	0.92	1	10/29/20 08:40	10/30/20 01:05	99-09-2	
4-Nitroaniline	ND	ug/L	2.4	1.8	1	10/29/20 08:40	10/30/20 01:05	100-01-6	
Nitrobenzene	ND	ug/L	0.96	0.36	1	10/29/20 08:40	10/30/20 01:05	98-95-3	
2-Nitrophenol	ND	ug/L	0.96	0.34	1	10/29/20 08:40	10/30/20 01:05	88-75-5	
4-Nitrophenol	ND	ug/L	0.96	0.73	1	10/29/20 08:40	10/30/20 01:05	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	0.96	0.25	1	10/29/20 08:40	10/30/20 01:05	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	0.96	0.52	1	10/29/20 08:40	10/30/20 01:05	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	0.96	0.24	1	10/29/20 08:40	10/30/20 01:05	86-30-6	
Pentachlorophenol	ND	ug/L	2.4	1.0	1	10/29/20 08:40	10/30/20 01:05	87-86-5	L1
Phenanthrene	ND	ug/L	0.96	0.33	1	10/29/20 08:40	10/30/20 01:05	85-01-8	
Phenol	ND	ug/L	0.96	0.21	1	10/29/20 08:40	10/30/20 01:05	108-95-2	
Pyrene	ND	ug/L	0.96	0.29	1	10/29/20 08:40	10/30/20 01:05	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/L	0.96	0.30	1	10/29/20 08:40	10/30/20 01:05	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	2.4	0.64	1	10/29/20 08:40	10/30/20 01:05	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	0.96	0.35	1	10/29/20 08:40	10/30/20 01:05	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	52	%.	10-140		1	10/29/20 08:40	10/30/20 01:05	4165-60-0	
2-Fluorobiphenyl (S)	43	%.	10-135		1	10/29/20 08:40	10/30/20 01:05	321-60-8	
Terphenyl-d14 (S)	87	%.	10-128		1	10/29/20 08:40	10/30/20 01:05	1718-51-0	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Green Island
Pace Project No.: 30389048

Sample: DUP **Lab ID: 30389048002** Collected: 10/22/20 10:15 Received: 10/23/20 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV Organics	Analytical Method: EPA 8270D Preparation Method: EPA 3510C Pace Analytical Services - Greensburg								
Surrogates									
Phenol-d6 (S)	16	%.	10-145		1	10/29/20 08:40	10/30/20 01:05	13127-88-3	
2-Fluorophenol (S)	25	%.	10-142		1	10/29/20 08:40	10/30/20 01:05	367-12-4	
2,4,6-Tribromophenol (S)	80	%.	10-140		1	10/29/20 08:40	10/30/20 01:05	118-79-6	

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Green Island
Pace Project No.: 30389048

Sample: MW-32 **Lab ID: 30389048003** Collected: 10/22/20 10:15 Received: 10/23/20 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Aluminum	**1950**	ug/L	50.0	20.3	1	10/28/20 15:02	10/29/20 08:57	7429-90-5	MH,R1
Antimony	ND	ug/L	6.0	3.3	1	10/28/20 15:02	10/29/20 08:57	7440-36-0	
Arsenic	**7.7**	ug/L	5.0	2.0	1	10/28/20 15:02	10/29/20 08:57	7440-38-2	D6
Barium	**283**	ug/L	10.0	0.68	1	10/28/20 15:02	10/29/20 08:57	7440-39-3	
Beryllium	ND	ug/L	1.0	0.17	1	10/28/20 15:02	10/29/20 08:57	7440-41-7	
Boron	**426**	ug/L	50.0	2.3	1	10/28/20 15:02	10/29/20 08:57	7440-42-8	
Cadmium	ND	ug/L	3.0	0.34	1	10/28/20 15:02	10/29/20 08:57	7440-43-9	
Calcium	**149000**	ug/L	1000	99.9	1	10/28/20 15:02	10/29/20 08:57	7440-70-2	2c,ML
Chromium	ND	ug/L	5.0	0.35	1	10/28/20 15:02	10/29/20 08:57	7440-47-3	
Cobalt	ND	ug/L	5.0	0.53	1	10/28/20 15:02	10/29/20 08:57	7440-48-4	
Copper	ND	ug/L	5.0	2.7	1	10/28/20 15:02	10/29/20 08:57	7440-50-8	
Iron	**24100**	ug/L	70.0	40.9	1	10/28/20 15:02	10/29/20 08:57	7439-89-6	2c,ML
Lead	**5.3**	ug/L	5.0	4.9	1	10/28/20 15:02	10/29/20 08:57	7439-92-1	
Magnesium	**23500**	ug/L	200	28.4	1	10/28/20 15:02	10/29/20 08:57	7439-95-4	2c,ML
Manganese	**5140**	ug/L	5.0	1.2	1	10/28/20 15:02	10/29/20 08:57	7439-96-5	2c,ML
Molybdenum	ND	ug/L	20.0	0.85	1	10/28/20 15:02	10/29/20 08:57	7439-98-7	
Nickel	ND	ug/L	10.0	1.5	1	10/28/20 15:02	10/29/20 08:57	7440-02-0	
Potassium	**9100**	ug/L	500	72.4	1	10/28/20 15:02	10/29/20 08:57	7440-09-7	
Selenium	ND	ug/L	8.0	5.5	1	10/28/20 15:02	10/29/20 08:57	7782-49-2	
Silver	ND	ug/L	6.0	1.4	1	10/28/20 15:02	10/29/20 08:57	7440-22-4	
Sodium	**19300**	ug/L	1000	423	1	10/28/20 15:02	10/29/20 08:57	7440-23-5	2c
Thallium	ND	ug/L	10.0	4.0	1	10/28/20 15:02	10/29/20 08:57	7440-28-0	
Vanadium	ND	ug/L	5.0	0.57	1	10/28/20 15:02	10/29/20 08:57	7440-62-2	
Zinc	**12.6**	ug/L	10.0	2.4	1	10/28/20 15:02	10/29/20 08:57	7440-66-6	
6010C MET ICP, Lab Filtered	Analytical Method: EPA 6010C Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Aluminum, Dissolved	ND	ug/L	50.0	20.3	1	10/28/20 14:54	10/29/20 08:30	7429-90-5	
Antimony, Dissolved	ND	ug/L	6.0	3.3	1	10/28/20 14:54	10/29/20 08:30	7440-36-0	
Arsenic, Dissolved	ND	ug/L	5.0	2.0	1	10/28/20 14:54	10/29/20 08:30	7440-38-2	
Barium, Dissolved	**216**	ug/L	10.0	0.68	1	10/28/20 14:54	10/29/20 08:30	7440-39-3	
Beryllium, Dissolved	ND	ug/L	1.0	0.17	1	10/28/20 14:54	10/29/20 08:30	7440-41-7	
Boron, Dissolved	**430**	ug/L	50.0	2.3	1	10/28/20 14:54	10/29/20 08:30	7440-42-8	
Cadmium, Dissolved	ND	ug/L	3.0	0.34	1	10/28/20 14:54	10/29/20 08:30	7440-43-9	
Calcium, Dissolved	**145000**	ug/L	1000	99.9	1	10/28/20 14:54	10/29/20 08:30	7440-70-2	MH,ML
Chromium, Dissolved	ND	ug/L	5.0	0.35	1	10/28/20 14:54	10/29/20 08:30	7440-47-3	
Cobalt, Dissolved	ND	ug/L	5.0	0.53	1	10/28/20 14:54	10/29/20 08:30	7440-48-4	
Copper, Dissolved	ND	ug/L	5.0	2.7	1	10/28/20 14:54	10/29/20 08:30	7440-50-8	
Iron, Dissolved	**1500**	ug/L	70.0	40.9	1	10/28/20 14:54	10/29/20 08:30	7439-89-6	
Lead, Dissolved	ND	ug/L	5.0	4.9	1	10/28/20 14:54	10/29/20 08:30	7439-92-1	
Magnesium, Dissolved	**22200**	ug/L	200	28.4	1	10/28/20 14:54	10/29/20 08:30	7439-95-4	
Manganese, Dissolved	**4890**	ug/L	5.0	1.2	1	10/28/20 14:54	10/29/20 08:30	7439-96-5	
Molybdenum, Dissolved	ND	ug/L	20.0	0.85	1	10/28/20 14:54	10/29/20 08:30	7439-98-7	
Nickel, Dissolved	ND	ug/L	10.0	1.5	1	10/28/20 14:54	10/29/20 08:30	7440-02-0	
Potassium, Dissolved	**8660**	ug/L	500	72.4	1	10/28/20 14:54	10/29/20 08:30	7440-09-7	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Green Island
Pace Project No.: 30389048

Sample: MW-32 **Lab ID: 30389048003** Collected: 10/22/20 10:15 Received: 10/23/20 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010C MET ICP, Lab Filtered	Analytical Method: EPA 6010C Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Selenium, Dissolved	ND	ug/L	8.0	5.5	1	10/28/20 14:54	10/29/20 08:30	7782-49-2	
Silver, Dissolved	ND	ug/L	6.0	1.4	1	10/28/20 14:54	10/29/20 08:30	7440-22-4	
Sodium, Dissolved	**19000**	ug/L	1000	423	1	10/28/20 14:54	10/29/20 08:30	7440-23-5	
Thallium, Dissolved	ND	ug/L	10.0	4.0	1	10/28/20 14:54	10/29/20 08:30	7440-28-0	
Vanadium, Dissolved	ND	ug/L	5.0	0.57	1	10/28/20 14:54	10/29/20 08:30	7440-62-2	
Zinc, Dissolved	ND	ug/L	10.0	2.4	1	10/28/20 14:54	10/29/20 08:30	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	ND	ug/L	0.20	0.030	1	10/28/20 15:22	10/28/20 23:28	7439-97-6	1c
7470 Mercury, Lab Filtered	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury, Dissolved	ND	ug/L	0.20	0.030	1	10/28/20 15:13	10/28/20 23:01	7439-97-6	1c
8270D MSSV Organics	Analytical Method: EPA 8270D Preparation Method: EPA 3510C Pace Analytical Services - Greensburg								
Acenaphthene	ND	ug/L	0.95	0.37	1	10/29/20 08:40	10/30/20 01:27	83-32-9	
Acenaphthylene	ND	ug/L	0.95	0.36	1	10/29/20 08:40	10/30/20 01:27	208-96-8	
Anthracene	ND	ug/L	0.95	0.25	1	10/29/20 08:40	10/30/20 01:27	120-12-7	
Azobenzene	ND	ug/L	0.95	0.34	1	10/29/20 08:40	10/30/20 01:27	103-33-3	
Benzo(a)anthracene	ND	ug/L	0.95	0.19	1	10/29/20 08:40	10/30/20 01:27	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.95	0.18	1	10/29/20 08:40	10/30/20 01:27	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.95	0.22	1	10/29/20 08:40	10/30/20 01:27	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.95	0.28	1	10/29/20 08:40	10/30/20 01:27	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.95	0.24	1	10/29/20 08:40	10/30/20 01:27	207-08-9	
Benzoic acid	ND	ug/L	14.3	2.7	1	10/29/20 08:40	10/30/20 01:27	65-85-0	L1
Benzyl alcohol	ND	ug/L	0.95	0.67	1	10/29/20 08:40	10/30/20 01:27	100-51-6	
4-Bromophenylphenyl ether	ND	ug/L	0.95	0.37	1	10/29/20 08:40	10/30/20 01:27	101-55-3	
Butylbenzylphthalate	ND	ug/L	0.95	0.28	1	10/29/20 08:40	10/30/20 01:27	85-68-7	
Carbazole	ND	ug/L	0.95	0.22	1	10/29/20 08:40	10/30/20 01:27	86-74-8	
4-Chloro-3-methylphenol	ND	ug/L	0.95	0.42	1	10/29/20 08:40	10/30/20 01:27	59-50-7	
4-Chloroaniline	ND	ug/L	0.95	0.20	1	10/29/20 08:40	10/30/20 01:27	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	0.95	0.34	1	10/29/20 08:40	10/30/20 01:27	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	0.95	0.39	1	10/29/20 08:40	10/30/20 01:27	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/L	0.95	0.39	1	10/29/20 08:40	10/30/20 01:27	108-60-1	
2-Chloronaphthalene	ND	ug/L	0.95	0.32	1	10/29/20 08:40	10/30/20 01:27	91-58-7	
2-Chlorophenol	ND	ug/L	0.95	0.31	1	10/29/20 08:40	10/30/20 01:27	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	0.95	0.35	1	10/29/20 08:40	10/30/20 01:27	7005-72-3	
Chrysene	ND	ug/L	0.95	0.20	1	10/29/20 08:40	10/30/20 01:27	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.95	0.30	1	10/29/20 08:40	10/30/20 01:27	53-70-3	
Dibenzofuran	ND	ug/L	0.95	0.35	1	10/29/20 08:40	10/30/20 01:27	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	0.95	0.33	1	10/29/20 08:40	10/30/20 01:27	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	0.95	0.28	1	10/29/20 08:40	10/30/20 01:27	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.95	0.26	1	10/29/20 08:40	10/30/20 01:27	106-46-7	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Green Island
Pace Project No.: 30389048

Sample: MW-32 **Lab ID: 30389048003** Collected: 10/22/20 10:15 Received: 10/23/20 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV Organics	Analytical Method: EPA 8270D Preparation Method: EPA 3510C Pace Analytical Services - Greensburg								
3,3'-Dichlorobenzidine	ND	ug/L	0.95	0.22	1	10/29/20 08:40	10/30/20 01:27	91-94-1	L2,ML
2,4-Dichlorophenol	ND	ug/L	0.95	0.32	1	10/29/20 08:40	10/30/20 01:27	120-83-2	
Diethylphthalate	ND	ug/L	0.95	0.35	1	10/29/20 08:40	10/30/20 01:27	84-66-2	
2,4-Dimethylphenol	ND	ug/L	0.95	0.34	1	10/29/20 08:40	10/30/20 01:27	105-67-9	
Dimethylphthalate	ND	ug/L	0.95	0.42	1	10/29/20 08:40	10/30/20 01:27	131-11-3	
Di-n-butylphthalate	ND	ug/L	0.95	0.31	1	10/29/20 08:40	10/30/20 01:27	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	2.4	0.61	1	10/29/20 08:40	10/30/20 01:27	534-52-1	
2,4-Dinitrophenol	ND	ug/L	2.4	0.56	1	10/29/20 08:40	10/30/20 01:27	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	0.95	0.34	1	10/29/20 08:40	10/30/20 01:27	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	0.95	0.38	1	10/29/20 08:40	10/30/20 01:27	606-20-2	
Di-n-octylphthalate	ND	ug/L	0.95	0.26	1	10/29/20 08:40	10/30/20 01:27	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/L	0.95	0.34	1	10/29/20 08:40	10/30/20 01:27	117-81-7	
Fluoranthene	ND	ug/L	0.95	0.22	1	10/29/20 08:40	10/30/20 01:27	206-44-0	
Fluorene	ND	ug/L	0.95	0.35	1	10/29/20 08:40	10/30/20 01:27	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/L	0.95	0.31	1	10/29/20 08:40	10/30/20 01:27	87-68-3	
Hexachlorobenzene	ND	ug/L	0.95	0.29	1	10/29/20 08:40	10/30/20 01:27	118-74-1	
Hexachlorocyclopentadiene	ND	ug/L	0.95	0.18	1	10/29/20 08:40	10/30/20 01:27	77-47-4	
Hexachloroethane	ND	ug/L	0.95	0.29	1	10/29/20 08:40	10/30/20 01:27	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.95	0.29	1	10/29/20 08:40	10/30/20 01:27	193-39-5	
Isophorone	ND	ug/L	0.95	0.55	1	10/29/20 08:40	10/30/20 01:27	78-59-1	
1-Methylnaphthalene	ND	ug/L	0.95	0.34	1	10/29/20 08:40	10/30/20 01:27	90-12-0	
2-Methylnaphthalene	ND	ug/L	0.95	0.33	1	10/29/20 08:40	10/30/20 01:27	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	0.95	0.35	1	10/29/20 08:40	10/30/20 01:27	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	1.9	1.8	1	10/29/20 08:40	10/30/20 01:27		
Naphthalene	ND	ug/L	0.95	0.33	1	10/29/20 08:40	10/30/20 01:27	91-20-3	
2-Nitroaniline	ND	ug/L	2.4	0.68	1	10/29/20 08:40	10/30/20 01:27	88-74-4	
3-Nitroaniline	ND	ug/L	2.4	0.92	1	10/29/20 08:40	10/30/20 01:27	99-09-2	
4-Nitroaniline	ND	ug/L	2.4	1.8	1	10/29/20 08:40	10/30/20 01:27	100-01-6	
Nitrobenzene	ND	ug/L	0.95	0.36	1	10/29/20 08:40	10/30/20 01:27	98-95-3	
2-Nitrophenol	ND	ug/L	0.95	0.33	1	10/29/20 08:40	10/30/20 01:27	88-75-5	
4-Nitrophenol	ND	ug/L	0.95	0.73	1	10/29/20 08:40	10/30/20 01:27	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	0.95	0.25	1	10/29/20 08:40	10/30/20 01:27	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	0.95	0.51	1	10/29/20 08:40	10/30/20 01:27	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	0.95	0.24	1	10/29/20 08:40	10/30/20 01:27	86-30-6	
Pentachlorophenol	ND	ug/L	2.4	1.0	1	10/29/20 08:40	10/30/20 01:27	87-86-5	L1
Phenanthrene	ND	ug/L	0.95	0.32	1	10/29/20 08:40	10/30/20 01:27	85-01-8	
Phenol	ND	ug/L	0.95	0.21	1	10/29/20 08:40	10/30/20 01:27	108-95-2	
Pyrene	ND	ug/L	0.95	0.29	1	10/29/20 08:40	10/30/20 01:27	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/L	0.95	0.30	1	10/29/20 08:40	10/30/20 01:27	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	2.4	0.64	1	10/29/20 08:40	10/30/20 01:27	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	0.95	0.35	1	10/29/20 08:40	10/30/20 01:27	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	55	%.	10-140		1	10/29/20 08:40	10/30/20 01:27	4165-60-0	
2-Fluorobiphenyl (S)	46	%.	10-135		1	10/29/20 08:40	10/30/20 01:27	321-60-8	
Terphenyl-d14 (S)	74	%.	10-128		1	10/29/20 08:40	10/30/20 01:27	1718-51-0	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Green Island
Pace Project No.: 30389048

Sample: MW-32 **Lab ID: 30389048003** Collected: 10/22/20 10:15 Received: 10/23/20 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270D MSSV Organics	Analytical Method: EPA 8270D Preparation Method: EPA 3510C Pace Analytical Services - Greensburg								
Surrogates									
Phenol-d6 (S)	17	%.	10-145		1	10/29/20 08:40	10/30/20 01:27	13127-88-3	
2-Fluorophenol (S)	26	%.	10-142		1	10/29/20 08:40	10/30/20 01:27	367-12-4	
2,4,6-Tribromophenol (S)	73	%.	10-140		1	10/29/20 08:40	10/30/20 01:27	118-79-6	

Pace Analytical Services, LLC
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Greensburg, PA 15601
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QUALITY CONTROL DATA

Project: Green Island
Pace Project No.: 30389048

QC Batch: 420682
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30389048001, 30389048002, 30389048003

METHOD BLANK: 2033341 Matrix: Water
Associated Lab Samples: 30389048001, 30389048002, 30389048003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	0.030	10/28/20 23:25	

LABORATORY CONTROL SAMPLE: 2033342

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	1	1.0	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2033344 2033345

Parameter	Units	30389048003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	2.5	2.5	2.6	2.9	101	114	75-125	12	20	

SAMPLE DUPLICATE: 2033343

Parameter	Units	30389048003 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	ug/L	ND	.04J		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

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

QUALITY CONTROL DATA

Project: Green Island
Pace Project No.: 30389048

QC Batch: 420673
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury Dissolved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30389048001, 30389048002, 30389048003

METHOD BLANK: 2033323 Matrix: Water
Associated Lab Samples: 30389048001, 30389048002, 30389048003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury, Dissolved	ug/L	ND	0.20	0.030	10/28/20 22:50	

METHOD BLANK: 2033339 Matrix: Water
Associated Lab Samples: 30389048001, 30389048002, 30389048003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury, Dissolved	ug/L	ND	0.20	0.030	10/28/20 22:58	

LABORATORY CONTROL SAMPLE: 2033324

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury, Dissolved	ug/L	1	1.0	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2033326 2033327

Parameter	Units	30389048003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury, Dissolved	ug/L	ND	2.5	2.5	2.5	2.5	100	101	75-125	2	20	

SAMPLE DUPLICATE: 2033325

Parameter	Units	30389048003 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury, Dissolved	ug/L	ND	ND		20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Green Island
Pace Project No.: 30389048

QC Batch: 420668
QC Batch Method: EPA 3005A
Analysis Method: EPA 6010C
Analysis Description: 6010C MET
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30389048001, 30389048002, 30389048003

METHOD BLANK: 2033296 Matrix: Water
Associated Lab Samples: 30389048001, 30389048002, 30389048003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Aluminum	ug/L	ND	50.0	20.3	10/29/20 08:52	
Antimony	ug/L	ND	6.0	3.3	10/29/20 08:52	
Arsenic	ug/L	ND	5.0	2.0	10/29/20 08:52	
Barium	ug/L	ND	10.0	0.68	10/29/20 08:52	
Beryllium	ug/L	ND	1.0	0.17	10/29/20 08:52	
Boron	ug/L	ND	50.0	2.3	10/29/20 08:52	
Cadmium	ug/L	ND	3.0	0.34	10/29/20 08:52	
Calcium	ug/L	ND	1000	99.9	10/29/20 08:52	
Chromium	ug/L	ND	5.0	0.35	10/29/20 08:52	
Cobalt	ug/L	ND	5.0	0.53	10/29/20 08:52	
Copper	ug/L	ND	5.0	2.7	10/29/20 08:52	
Iron	ug/L	ND	70.0	40.9	10/29/20 08:52	
Lead	ug/L	ND	5.0	4.9	10/29/20 08:52	
Magnesium	ug/L	ND	200	28.4	10/29/20 08:52	
Manganese	ug/L	ND	5.0	1.2	10/29/20 08:52	
Molybdenum	ug/L	ND	20.0	0.85	10/29/20 08:52	
Nickel	ug/L	ND	10.0	1.5	10/29/20 08:52	
Potassium	ug/L	ND	500	72.4	10/29/20 08:52	
Selenium	ug/L	ND	8.0	5.5	10/29/20 08:52	
Silver	ug/L	ND	6.0	1.4	10/29/20 08:52	
Sodium	ug/L	ND	1000	423	10/29/20 08:52	
Thallium	ug/L	ND	10.0	4.0	10/29/20 08:52	
Vanadium	ug/L	ND	5.0	0.57	10/29/20 08:52	
Zinc	ug/L	ND	10.0	2.4	10/29/20 08:52	

LABORATORY CONTROL SAMPLE: 2033297

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	5000	4860	97	80-120	
Antimony	ug/L	500	506	101	80-120	
Arsenic	ug/L	500	484	97	80-120	
Barium	ug/L	500	473	95	80-120	
Beryllium	ug/L	500	476	95	80-120	
Boron	ug/L	500	506	101	80-120	
Cadmium	ug/L	500	492	98	80-120	
Calcium	ug/L	5000	4820	96	80-120	
Chromium	ug/L	500	460	92	80-120	
Cobalt	ug/L	500	467	93	80-120	
Copper	ug/L	500	480	96	80-120	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Green Island
Pace Project No.: 30389048

LABORATORY CONTROL SAMPLE: 2033297

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	5000	4930	99	80-120	
Lead	ug/L	500	475	95	80-120	
Magnesium	ug/L	5000	4880	98	80-120	
Manganese	ug/L	500	474	95	80-120	
Molybdenum	ug/L	500	475	95	80-120	
Nickel	ug/L	500	491	98	80-120	
Potassium	ug/L	5000	4740	95	80-120	
Selenium	ug/L	500	495	99	80-120	
Silver	ug/L	250	242	97	80-120	
Sodium	ug/L	5000	4840	97	80-120	
Thallium	ug/L	500	462	92	80-120	
Vanadium	ug/L	500	451	90	80-120	
Zinc	ug/L	500	485	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2033299 2033300

Parameter	Units	30389048003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum	ug/L	1950	5000	5000	7150	8810	104	137	75-125	21	20	MH,R1
Antimony	ug/L	ND	500	500	482	467	96	93	75-125	3	20	
Arsenic	ug/L	7.7	500	500	481	479	95	94	75-125	0	20	
Barium	ug/L	283	500	500	742	759	92	95	75-125	2	20	
Beryllium	ug/L	ND	500	500	473	479	95	96	75-125	1	20	
Boron	ug/L	426	500	500	893	888	93	92	75-125	1	20	
Cadmium	ug/L	ND	500	500	472	471	94	94	75-125	0	20	
Calcium	ug/L	149000	5000	5000	146000	149000	-60	-16	75-125	1	20	ML
Chromium	ug/L	ND	500	500	453	457	90	91	75-125	1	20	
Cobalt	ug/L	ND	500	500	472	473	94	94	75-125	0	20	
Copper	ug/L	ND	500	500	481	486	95	96	75-125	1	20	
Iron	ug/L	24100	5000	5000	26900	29600	55	111	75-125	10	20	ML
Lead	ug/L	5.3	500	500	474	479	94	95	75-125	1	20	
Magnesium	ug/L	23500	5000	5000	26900	27700	70	85	75-125	3	20	ML
Manganese	ug/L	5140	500	500	5300	5410	31	54	75-125	2	20	ML
Molybdenum	ug/L	ND	500	500	500	489	100	98	75-125	2	20	
Nickel	ug/L	ND	500	500	456	455	91	90	75-125	0	20	
Potassium	ug/L	9100	5000	5000	13800	14100	94	100	75-125	2	20	
Selenium	ug/L	ND	500	500	469	472	94	94	75-125	0	20	
Silver	ug/L	ND	250	250	236	232	95	93	75-125	2	20	
Sodium	ug/L	19300	5000	5000	23100	23300	76	79	75-125	1	20	
Thallium	ug/L	ND	500	500	439	438	88	87	75-125	0	20	
Vanadium	ug/L	ND	500	500	452	457	90	91	75-125	1	20	
Zinc	ug/L	12.6	500	500	465	472	90	92	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Green Island
Pace Project No.: 30389048

SAMPLE DUPLICATE: 2033298

Parameter	Units	30389048003 Result	Dup Result	RPD	Max RPD	Qualifiers
Aluminum	ug/L	1950	1710	13	20	
Antimony	ug/L	ND	ND		20	
Arsenic	ug/L	7.7	5.9	27	20	D6
Barium	ug/L	283	264	7	20	
Beryllium	ug/L	ND	ND		20	
Boron	ug/L	426	404	5	20	
Cadmium	ug/L	ND	ND		20	
Calcium	ug/L	149000	140000	7	20	
Chromium	ug/L	ND	2.9J		20	
Cobalt	ug/L	ND	1J		20	
Copper	ug/L	ND	3.4J		20	
Iron	ug/L	24100	22200	8	20	
Lead	ug/L	5.3	ND		20	
Magnesium	ug/L	23500	21900	7	20	
Manganese	ug/L	5140	4790	7	20	
Molybdenum	ug/L	ND	ND		20	
Nickel	ug/L	ND	2.5J		20	
Potassium	ug/L	9100	8560	6	20	
Selenium	ug/L	ND	ND		20	
Silver	ug/L	ND	ND		20	
Sodium	ug/L	19300	18000	7	20	
Thallium	ug/L	ND	ND		20	
Vanadium	ug/L	ND	2.5J		20	
Zinc	ug/L	12.6	11.0	13	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Green Island
Pace Project No.: 30389048

QC Batch: 420666
QC Batch Method: EPA 3005A
Analysis Method: EPA 6010C
Analysis Description: 6010C MET Dissolved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30389048001, 30389048002, 30389048003

METHOD BLANK: 2033258 Matrix: Water
Associated Lab Samples: 30389048001, 30389048002, 30389048003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Aluminum, Dissolved	ug/L	ND	50.0	20.3	10/29/20 08:26	
Antimony, Dissolved	ug/L	ND	6.0	3.3	10/29/20 08:26	
Arsenic, Dissolved	ug/L	ND	5.0	2.0	10/29/20 08:26	
Barium, Dissolved	ug/L	ND	10.0	0.68	10/29/20 08:26	
Beryllium, Dissolved	ug/L	ND	1.0	0.17	10/29/20 08:26	
Boron, Dissolved	ug/L	ND	50.0	2.3	10/29/20 08:26	
Cadmium, Dissolved	ug/L	ND	3.0	0.34	10/29/20 08:26	
Calcium, Dissolved	ug/L	ND	1000	99.9	10/29/20 08:26	
Chromium, Dissolved	ug/L	ND	5.0	0.35	10/29/20 08:26	
Cobalt, Dissolved	ug/L	ND	5.0	0.53	10/29/20 08:26	
Copper, Dissolved	ug/L	ND	5.0	2.7	10/29/20 08:26	
Iron, Dissolved	ug/L	ND	70.0	40.9	10/29/20 08:26	
Lead, Dissolved	ug/L	ND	5.0	4.9	10/29/20 08:26	
Magnesium, Dissolved	ug/L	ND	200	28.4	10/29/20 08:26	
Manganese, Dissolved	ug/L	ND	5.0	1.2	10/29/20 08:26	
Molybdenum, Dissolved	ug/L	ND	20.0	0.85	10/29/20 08:26	
Nickel, Dissolved	ug/L	ND	10.0	1.5	10/29/20 08:26	
Potassium, Dissolved	ug/L	ND	500	72.4	10/29/20 08:26	
Selenium, Dissolved	ug/L	ND	8.0	5.5	10/29/20 08:26	
Silver, Dissolved	ug/L	ND	6.0	1.4	10/29/20 08:26	
Sodium, Dissolved	ug/L	ND	1000	423	10/29/20 08:26	
Thallium, Dissolved	ug/L	ND	10.0	4.0	10/29/20 08:26	
Vanadium, Dissolved	ug/L	ND	5.0	0.57	10/29/20 08:26	
Zinc, Dissolved	ug/L	ND	10.0	2.4	10/29/20 08:26	

LABORATORY CONTROL SAMPLE: 2033259

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum, Dissolved	ug/L	5000	4590	92	80-120	
Antimony, Dissolved	ug/L	500	461	92	80-120	
Arsenic, Dissolved	ug/L	500	450	90	80-120	
Barium, Dissolved	ug/L	500	454	91	80-120	
Beryllium, Dissolved	ug/L	500	457	91	80-120	
Boron, Dissolved	ug/L	500	458	92	80-120	
Cadmium, Dissolved	ug/L	500	458	92	80-120	
Calcium, Dissolved	ug/L	5000	4570	91	80-120	
Chromium, Dissolved	ug/L	500	446	89	80-120	
Cobalt, Dissolved	ug/L	500	436	87	80-120	
Copper, Dissolved	ug/L	500	467	93	80-120	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Green Island
Pace Project No.: 30389048

LABORATORY CONTROL SAMPLE: 2033259

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron, Dissolved	ug/L	5000	4640	93	80-120	
Lead, Dissolved	ug/L	500	442	88	80-120	
Magnesium, Dissolved	ug/L	5000	4580	92	80-120	
Manganese, Dissolved	ug/L	500	455	91	80-120	
Molybdenum, Dissolved	ug/L	500	433	87	80-120	
Nickel, Dissolved	ug/L	500	460	92	80-120	
Potassium, Dissolved	ug/L	5000	4500	90	80-120	
Selenium, Dissolved	ug/L	500	459	92	80-120	
Silver, Dissolved	ug/L	250	229	92	80-120	
Sodium, Dissolved	ug/L	5000	4560	91	80-120	
Thallium, Dissolved	ug/L	500	433	87	80-120	
Vanadium, Dissolved	ug/L	500	438	88	80-120	
Zinc, Dissolved	ug/L	500	454	91	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2033261 2033262

Parameter	Units	30389048003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum, Dissolved	ug/L	ND	5000	5000	5040	4940	100	98	75-125	2	20	
Antimony, Dissolved	ug/L	ND	500	500	506	498	101	99	75-125	2	20	
Arsenic, Dissolved	ug/L	ND	500	500	506	495	101	99	75-125	2	20	
Barium, Dissolved	ug/L	216	500	500	711	693	99	95	75-125	3	20	
Beryllium, Dissolved	ug/L	ND	500	500	500	485	100	97	75-125	3	20	
Boron, Dissolved	ug/L	430	500	500	927	926	99	99	75-125	0	20	
Cadmium, Dissolved	ug/L	ND	500	500	501	489	100	98	75-125	2	20	
Calcium, Dissolved	ug/L	145000	5000	5000	151000	148000	126	72	75-125	2	20	MH,ML
Chromium, Dissolved	ug/L	ND	500	500	487	475	97	95	75-125	3	20	
Cobalt, Dissolved	ug/L	ND	500	500	498	485	100	97	75-125	3	20	
Copper, Dissolved	ug/L	ND	500	500	501	484	100	96	75-125	3	20	
Iron, Dissolved	ug/L	1500	5000	5000	6640	6720	103	104	75-125	1	20	
Lead, Dissolved	ug/L	ND	500	500	498	488	100	98	75-125	2	20	
Magnesium, Dissolved	ug/L	22200	5000	5000	27200	26900	100	93	75-125	1	20	
Manganese, Dissolved	ug/L	4890	500	500	5400	5320	101	85	75-125	2	20	
Molybdenum, Dissolved	ug/L	ND	500	500	518	514	104	103	75-125	1	20	
Nickel, Dissolved	ug/L	ND	500	500	484	469	97	94	75-125	3	20	
Potassium, Dissolved	ug/L	8660	5000	5000	13800	13400	104	95	75-125	3	20	
Selenium, Dissolved	ug/L	ND	500	500	497	489	99	98	75-125	2	20	
Silver, Dissolved	ug/L	ND	250	250	251	246	100	99	75-125	2	20	
Sodium, Dissolved	ug/L	19000	5000	5000	24000	23400	100	87	75-125	3	20	
Thallium, Dissolved	ug/L	ND	500	500	472	453	94	90	75-125	4	20	
Vanadium, Dissolved	ug/L	ND	500	500	488	474	98	95	75-125	3	20	
Zinc, Dissolved	ug/L	ND	500	500	482	473	96	94	75-125	2	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Green Island
Pace Project No.: 30389048

SAMPLE DUPLICATE: 2033260

Parameter	Units	30389048003 Result	Dup Result	RPD	Max RPD	Qualifiers
Aluminum, Dissolved	ug/L	ND	57.2		20	
Antimony, Dissolved	ug/L	ND	ND		20	
Arsenic, Dissolved	ug/L	ND	ND		20	
Barium, Dissolved	ug/L	216	215	0	20	
Beryllium, Dissolved	ug/L	ND	ND		20	
Boron, Dissolved	ug/L	430	428	0	20	
Cadmium, Dissolved	ug/L	ND	.36J		20	
Calcium, Dissolved	ug/L	145000	144000	0	20	
Chromium, Dissolved	ug/L	ND	.54J		20	
Cobalt, Dissolved	ug/L	ND	ND		20	
Copper, Dissolved	ug/L	ND	ND		20	
Iron, Dissolved	ug/L	1500	1500	0	20	
Lead, Dissolved	ug/L	ND	ND		20	
Magnesium, Dissolved	ug/L	22200	22200	0	20	
Manganese, Dissolved	ug/L	4890	4840	1	20	
Molybdenum, Dissolved	ug/L	ND	ND		20	
Nickel, Dissolved	ug/L	ND	ND		20	
Potassium, Dissolved	ug/L	8660	8620	0	20	
Selenium, Dissolved	ug/L	ND	ND		20	
Silver, Dissolved	ug/L	ND	ND		20	
Sodium, Dissolved	ug/L	19000	18700	1	20	
Thallium, Dissolved	ug/L	ND	ND		20	
Vanadium, Dissolved	ug/L	ND	ND		20	
Zinc, Dissolved	ug/L	ND	ND		20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Green Island
Pace Project No.: 30389048

QC Batch: 420755
QC Batch Method: EPA 3510C
Analysis Method: EPA 8270D
Analysis Description: 8270D Water MSSV
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30389048001, 30389048002, 30389048003

METHOD BLANK: 2033698 Matrix: Water
Associated Lab Samples: 30389048001, 30389048002, 30389048003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/L	ND	1.0	0.32	10/29/20 15:44	
1,2-Dichlorobenzene	ug/L	ND	1.0	0.34	10/29/20 15:44	
1,3-Dichlorobenzene	ug/L	ND	1.0	0.30	10/29/20 15:44	
1,4-Dichlorobenzene	ug/L	ND	1.0	0.28	10/29/20 15:44	
1-Methylnaphthalene	ug/L	ND	1.0	0.36	10/29/20 15:44	
2,4,5-Trichlorophenol	ug/L	ND	2.5	0.67	10/29/20 15:44	
2,4,6-Trichlorophenol	ug/L	ND	1.0	0.37	10/29/20 15:44	
2,4-Dichlorophenol	ug/L	ND	1.0	0.34	10/29/20 15:44	
2,4-Dimethylphenol	ug/L	ND	1.0	0.36	10/29/20 15:44	
2,4-Dinitrophenol	ug/L	ND	2.5	0.58	10/29/20 15:44	
2,4-Dinitrotoluene	ug/L	ND	1.0	0.36	10/29/20 15:44	
2,6-Dinitrotoluene	ug/L	ND	1.0	0.40	10/29/20 15:44	
2-Chloronaphthalene	ug/L	ND	1.0	0.33	10/29/20 15:44	
2-Chlorophenol	ug/L	ND	1.0	0.32	10/29/20 15:44	
2-Methylnaphthalene	ug/L	ND	1.0	0.34	10/29/20 15:44	
2-Methylphenol(o-Cresol)	ug/L	ND	1.0	0.37	10/29/20 15:44	
2-Nitroaniline	ug/L	ND	2.5	0.71	10/29/20 15:44	
2-Nitrophenol	ug/L	ND	1.0	0.35	10/29/20 15:44	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	2.0	1.9	10/29/20 15:44	
3,3'-Dichlorobenzidine	ug/L	ND	1.0	0.23	10/29/20 15:44	
3-Nitroaniline	ug/L	ND	2.5	0.96	10/29/20 15:44	
4,6-Dinitro-2-methylphenol	ug/L	ND	2.5	0.64	10/29/20 15:44	
4-Bromophenylphenyl ether	ug/L	ND	1.0	0.39	10/29/20 15:44	
4-Chloro-3-methylphenol	ug/L	ND	1.0	0.44	10/29/20 15:44	
4-Chloroaniline	ug/L	ND	1.0	0.21	10/29/20 15:44	
4-Chlorophenylphenyl ether	ug/L	ND	1.0	0.36	10/29/20 15:44	
4-Nitroaniline	ug/L	ND	2.5	1.9	10/29/20 15:44	
4-Nitrophenol	ug/L	ND	1.0	0.76	10/29/20 15:44	
Acenaphthene	ug/L	ND	1.0	0.39	10/29/20 15:44	
Acenaphthylene	ug/L	ND	1.0	0.38	10/29/20 15:44	
Anthracene	ug/L	ND	1.0	0.27	10/29/20 15:44	
Azobenzene	ug/L	ND	1.0	0.35	10/29/20 15:44	
Benzo(a)anthracene	ug/L	ND	1.0	0.20	10/29/20 15:44	
Benzo(a)pyrene	ug/L	ND	1.0	0.18	10/29/20 15:44	
Benzo(b)fluoranthene	ug/L	ND	1.0	0.24	10/29/20 15:44	
Benzo(g,h,i)perylene	ug/L	ND	1.0	0.30	10/29/20 15:44	
Benzo(k)fluoranthene	ug/L	ND	1.0	0.26	10/29/20 15:44	
Benzoic acid	ug/L	ND	15.0	2.8	10/29/20 15:44	
Benzyl alcohol	ug/L	ND	1.0	0.70	10/29/20 15:44	
bis(2-Chloroethoxy)methane	ug/L	ND	1.0	0.36	10/29/20 15:44	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Green Island
Pace Project No.: 30389048

METHOD BLANK: 2033698 Matrix: Water
Associated Lab Samples: 30389048001, 30389048002, 30389048003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
bis(2-Chloroethyl) ether	ug/L	ND	1.0	0.41	10/29/20 15:44	
bis(2-Chloroisopropyl) ether	ug/L	ND	1.0	0.40	10/29/20 15:44	
bis(2-Ethylhexyl)phthalate	ug/L	ND	1.0	0.36	10/29/20 15:44	
Butylbenzylphthalate	ug/L	ND	1.0	0.30	10/29/20 15:44	
Carbazole	ug/L	ND	1.0	0.23	10/29/20 15:44	
Chrysene	ug/L	ND	1.0	0.21	10/29/20 15:44	
Di-n-butylphthalate	ug/L	ND	1.0	0.32	10/29/20 15:44	
Di-n-octylphthalate	ug/L	ND	1.0	0.27	10/29/20 15:44	
Dibenz(a,h)anthracene	ug/L	ND	1.0	0.31	10/29/20 15:44	
Dibenzofuran	ug/L	ND	1.0	0.36	10/29/20 15:44	
Diethylphthalate	ug/L	ND	1.0	0.36	10/29/20 15:44	
Dimethylphthalate	ug/L	ND	1.0	0.44	10/29/20 15:44	
Fluoranthene	ug/L	ND	1.0	0.23	10/29/20 15:44	
Fluorene	ug/L	ND	1.0	0.37	10/29/20 15:44	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	0.33	10/29/20 15:44	
Hexachlorobenzene	ug/L	ND	1.0	0.30	10/29/20 15:44	
Hexachlorocyclopentadiene	ug/L	ND	1.0	0.19	10/29/20 15:44	
Hexachloroethane	ug/L	ND	1.0	0.30	10/29/20 15:44	
Indeno(1,2,3-cd)pyrene	ug/L	ND	1.0	0.30	10/29/20 15:44	
Isophorone	ug/L	ND	1.0	0.57	10/29/20 15:44	
N-Nitroso-di-n-propylamine	ug/L	ND	1.0	0.54	10/29/20 15:44	
N-Nitrosodimethylamine	ug/L	ND	1.0	0.26	10/29/20 15:44	
N-Nitrosodiphenylamine	ug/L	ND	1.0	0.25	10/29/20 15:44	
Naphthalene	ug/L	ND	1.0	0.35	10/29/20 15:44	
Nitrobenzene	ug/L	ND	1.0	0.38	10/29/20 15:44	
Pentachlorophenol	ug/L	ND	2.5	1.0	10/29/20 15:44	
Phenanthrene	ug/L	ND	1.0	0.34	10/29/20 15:44	
Phenol	ug/L	ND	1.0	0.22	10/29/20 15:44	
Pyrene	ug/L	ND	1.0	0.30	10/29/20 15:44	
2,4,6-Tribromophenol (S)	%.	65	10-140		10/29/20 15:44	
2-Fluorobiphenyl (S)	%.	54	10-135		10/29/20 15:44	
2-Fluorophenol (S)	%.	36	10-142		10/29/20 15:44	
Nitrobenzene-d5 (S)	%.	53	10-140		10/29/20 15:44	
Phenol-d6 (S)	%.	27	10-145		10/29/20 15:44	
Terphenyl-d14 (S)	%.	74	10-128		10/29/20 15:44	

LABORATORY CONTROL SAMPLE: 2033699

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/L	10	5.5	55	21-84	
1,2-Dichlorobenzene	ug/L	10	5.1	51	18-89	
1,3-Dichlorobenzene	ug/L	10	4.9	49	18-87	
1,4-Dichlorobenzene	ug/L	10	5.0	50	15-105	
1-Methylnaphthalene	ug/L	10	6.3	63	26-88	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Green Island
Pace Project No.: 30389048

LABORATORY CONTROL SAMPLE: 2033699

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4,5-Trichlorophenol	ug/L	10	8.6	86	57-113	
2,4,6-Trichlorophenol	ug/L	10	8.3	83	45-122	
2,4-Dichlorophenol	ug/L	10	7.1	71	33-96	
2,4-Dimethylphenol	ug/L	10	6.9	69	19-87	
2,4-Dinitrophenol	ug/L	10	10.6	106	15-119	
2,4-Dinitrotoluene	ug/L	10	9.0	90	40-119	
2,6-Dinitrotoluene	ug/L	10	7.8	78	50-116	
2-Chloronaphthalene	ug/L	10	5.9	59	30-101	
2-Chlorophenol	ug/L	10	6.1	61	27-97	
2-Methylnaphthalene	ug/L	10	6.2	62	24-91	
2-Methylphenol(o-Cresol)	ug/L	10	5.7	57	10-175	
2-Nitroaniline	ug/L	10	8.0	80	48-120	
2-Nitrophenol	ug/L	10	6.8	68	29-96	
3&4-Methylphenol(m&p Cresol)	ug/L	20	11.0	55	21-131	
3,3'-Dichlorobenzidine	ug/L	10	2.7	27	49-117	L2
3-Nitroaniline	ug/L	10	6.5	65	52-114	
4,6-Dinitro-2-methylphenol	ug/L	10	11.1	111	40-140	
4-Bromophenylphenyl ether	ug/L	10	8.1	81	47-120	
4-Chloro-3-methylphenol	ug/L	10	7.8	78	41-102	
4-Chloroaniline	ug/L	10	5.8	58	22-79	
4-Chlorophenylphenyl ether	ug/L	10	7.5	75	42-112	
4-Nitroaniline	ug/L	10	8.6	86	46-136	
4-Nitrophenol	ug/L	10	4.8	48	17-76	
Acenaphthene	ug/L	10	7.0	70	36-106	
Acenaphthylene	ug/L	10	7.3	73	35-103	
Anthracene	ug/L	10	8.4	84	56-106	
Azobenzene	ug/L	10	6.6	66	43-119	
Benzo(a)anthracene	ug/L	10	9.7	97	64-124	
Benzo(a)pyrene	ug/L	10	9.2	92	61-115	
Benzo(b)fluoranthene	ug/L	10	9.1	91	58-133	
Benzo(g,h,i)perylene	ug/L	10	10.2	102	40-142	
Benzo(k)fluoranthene	ug/L	10	9.1	91	61-121	
Benzoic acid	ug/L	10	6.9J	69	10-43	L1
Benzyl alcohol	ug/L	10	6.3	63	29-106	
bis(2-Chloroethoxy)methane	ug/L	10	6.2	62	33-96	
bis(2-Chloroethyl) ether	ug/L	10	6.0	60	25-98	
bis(2-Chloroisopropyl) ether	ug/L	10	6.6	66	23-104	
bis(2-Ethylhexyl)phthalate	ug/L	10	10.2	102	65-141	
Butylbenzylphthalate	ug/L	10	10.3	103	64-142	
Carbazole	ug/L	10	8.8	88	59-112	
Chrysene	ug/L	10	9.7	97	63-120	
Di-n-butylphthalate	ug/L	10	9.9	99	69-126	
Di-n-octylphthalate	ug/L	10	10.0	100	61-145	
Dibenz(a,h)anthracene	ug/L	10	10.4	104	52-138	
Dibenzofuran	ug/L	10	7.0	70	39-107	
Diethylphthalate	ug/L	10	8.6	86	61-117	
Dimethylphthalate	ug/L	10	7.7	77	54-114	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Green Island
Pace Project No.: 30389048

LABORATORY CONTROL SAMPLE: 2033699

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoranthene	ug/L	10	9.7	97	65-119	
Fluorene	ug/L	10	7.4	74	44-110	
Hexachloro-1,3-butadiene	ug/L	10	5.5	55	13-112	
Hexachlorobenzene	ug/L	10	7.7	77	17-121	
Hexachlorocyclopentadiene	ug/L	10	6.1	61	10-83	
Hexachloroethane	ug/L	10	4.8	48	13-108	
Indeno(1,2,3-cd)pyrene	ug/L	10	10.3	103	48-140	
Isophorone	ug/L	10	6.5	65	34-93	
N-Nitroso-di-n-propylamine	ug/L	10	6.4	64	34-106	
N-Nitrosodimethylamine	ug/L	10	4.0	40	17-82	
N-Nitrosodiphenylamine	ug/L	10	7.0	70	34-97	
Naphthalene	ug/L	10	5.9	59	23-90	
Nitrobenzene	ug/L	10	5.9	59	26-128	
Pentachlorophenol	ug/L	10	14.8	148	37-125	L1
Phenanthrene	ug/L	10	8.5	85	56-112	
Phenol	ug/L	10	2.9	29	10-58	
Pyrene	ug/L	10	9.5	95	56-128	
2,4,6-Tribromophenol (S)	%.			84	10-140	
2-Fluorobiphenyl (S)	%.			59	10-135	
2-Fluorophenol (S)	%.			36	10-142	
Nitrobenzene-d5 (S)	%.			59	10-140	
Phenol-d6 (S)	%.			26	10-145	
Terphenyl-d14 (S)	%.			92	10-128	

MATRIX SPIKE SAMPLE: 2033700

Parameter	Units	30389048003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/L	ND	9.6	3.7	38	10-77	
1,2-Dichlorobenzene	ug/L	ND	9.6	3.3	35	10-87	
1,3-Dichlorobenzene	ug/L	ND	9.6	3.0	32	10-77	
1,4-Dichlorobenzene	ug/L	ND	9.6	3.3	34	10-92	
1-Methylnaphthalene	ug/L	ND	9.6	4.4	43	10-83	
2,4,5-Trichlorophenol	ug/L	ND	9.6	6.6	69	32-129	
2,4,6-Trichlorophenol	ug/L	ND	9.6	5.4	57	25-130	
2,4-Dichlorophenol	ug/L	ND	9.6	5.2	54	19-100	
2,4-Dimethylphenol	ug/L	ND	9.6	4.9	52	10-93	
2,4-Dinitrophenol	ug/L	ND	9.6	6.8	71	10-165	
2,4-Dinitrotoluene	ug/L	ND	9.6	7.4	78	37-123	
2,6-Dinitrotoluene	ug/L	ND	9.6	5.3	55	30-118	
2-Chloronaphthalene	ug/L	ND	9.6	3.8	40	14-98	
2-Chlorophenol	ug/L	ND	9.6	4.7	49	10-99	
2-Methylnaphthalene	ug/L	ND	9.6	4.3	45	10-89	
2-Methylphenol(o-Cresol)	ug/L	ND	9.6	3.9	41	10-120	
2-Nitroaniline	ug/L	ND	9.6	5.3	55	31-120	
2-Nitrophenol	ug/L	ND	9.6	5.1	53	14-97	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Green Island
Pace Project No.: 30389048

MATRIX SPIKE SAMPLE: 2033700

Parameter	Units	30389048003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
3&4-Methylphenol(m&p Cresol)	ug/L	ND	19.1	7.3	38	10-132	
3,3'-Dichlorobenzidine	ug/L	ND	9.6	ND	0	10-112	ML
3-Nitroaniline	ug/L	ND	9.6	2.7	29	10-138	
4,6-Dinitro-2-methylphenol	ug/L	ND	9.6	7.5	79	14-154	
4-Bromophenylphenyl ether	ug/L	ND	9.6	6.2	64	32-114	
4-Chloro-3-methylphenol	ug/L	ND	9.6	5.3	56	11-127	
4-Chloroaniline	ug/L	ND	9.6	2.7	28	10-90	
4-Chlorophenylphenyl ether	ug/L	ND	9.6	5.2	55	24-110	
4-Nitroaniline	ug/L	ND	9.6	4.1	42	10-168	
4-Nitrophenol	ug/L	ND	9.6	2.4	25	10-82	
Acenaphthene	ug/L	ND	9.6	5.2	47	19-104	
Acenaphthylene	ug/L	ND	9.6	4.8	51	15-102	
Anthracene	ug/L	ND	9.6	7.0	69	34-108	
Azobenzene	ug/L	ND	9.6	4.2	41	15-113	
Benzo(a)anthracene	ug/L	ND	9.6	7.8	82	46-122	
Benzo(a)pyrene	ug/L	ND	9.6	7.9	83	39-117	
Benzo(b)fluoranthene	ug/L	ND	9.6	9.5	99	33-147	
Benzo(g,h,i)perylene	ug/L	ND	9.6	2.8	29	10-124	
Benzo(k)fluoranthene	ug/L	ND	9.6	9.0	94	44-130	
Benzoic acid	ug/L	ND	9.6	5.6J	58	10-99	
Benzyl alcohol	ug/L	ND	9.6	4.5	47	10-136	
bis(2-Chloroethoxy)methane	ug/L	ND	9.6	4.5	47	10-99	
bis(2-Chloroethyl) ether	ug/L	ND	9.6	4.4	46	10-108	
bis(2-Chloroisopropyl) ether	ug/L	ND	9.6	4.7	49	10-110	
bis(2-Ethylhexyl)phthalate	ug/L	ND	9.6	8.1	82	43-136	
Butylbenzylphthalate	ug/L	ND	9.6	8.0	84	51-134	
Carbazole	ug/L	ND	9.6	7.0	73	50-114	
Chrysene	ug/L	ND	9.6	7.6	79	44-121	
Di-n-butylphthalate	ug/L	ND	9.6	7.5	76	50-123	
Di-n-octylphthalate	ug/L	ND	9.6	13.3	139	27-164	
Dibenz(a,h)anthracene	ug/L	ND	9.6	3.2	33	11-127	
Dibenzofuran	ug/L	ND	9.6	4.9	49	22-105	
Diethylphthalate	ug/L	ND	9.6	6.6	69	38-122	
Dimethylphthalate	ug/L	ND	9.6	5.3	55	30-121	
Fluoranthene	ug/L	ND	9.6	7.6	78	39-124	
Fluorene	ug/L	ND	9.6	5.8	52	23-111	
Hexachloro-1,3-butadiene	ug/L	ND	9.6	3.4	36	10-99	
Hexachlorobenzene	ug/L	ND	9.6	6.3	66	34-114	
Hexachlorocyclopentadiene	ug/L	ND	9.6	2.2	23	10-65	
Hexachloroethane	ug/L	ND	9.6	2.9	30	10-128	
Indeno(1,2,3-cd)pyrene	ug/L	ND	9.6	3.3	35	11-126	
Isophorone	ug/L	ND	9.6	4.7	50	10-102	
N-Nitroso-di-n-propylamine	ug/L	ND	9.6	4.6	48	10-124	
N-Nitrosodimethylamine	ug/L	ND	9.6	2.9	31	10-72	
N-Nitrosodiphenylamine	ug/L	ND	9.6	5.7	60	10-110	
Naphthalene	ug/L	ND	9.6	4.2	41	10-84	
Nitrobenzene	ug/L	ND	9.6	4.2	44	11-114	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Green Island
Pace Project No.: 30389048

MATRIX SPIKE SAMPLE: 2033700

Parameter	Units	30389048003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Pentachlorophenol	ug/L	ND	9.6	13.0	136	10-175	
Phenanthrene	ug/L	ND	9.6	6.9	69	34-117	
Phenol	ug/L	ND	9.6	1.7	18	10-46	
Pyrene	ug/L	ND	9.6	8.3	83	35-127	
2,4,6-Tribromophenol (S)	%.				81	10-140	
2-Fluorobiphenyl (S)	%.				44	10-135	
2-Fluorophenol (S)	%.				24	10-142	
Nitrobenzene-d5 (S)	%.				53	10-140	
Phenol-d6 (S)	%.				16	10-145	
Terphenyl-d14 (S)	%.				85	10-128	

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REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Green Island
Pace Project No.: 30389048

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.

ANALYTE QUALIFIERS

1c	The PDS recovery was outside of the laboratory control limits. Result may be biased high
2c	The PDS recovery was outside of the laboratory control limits. Result may be biased low.
D6	The precision between the sample and sample duplicate exceeded laboratory control limits.
ED	Due to the extract's physical characteristics, the analysis was performed at dilution.
IS	The internal standard response is below criteria. Results may be biased high.
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.
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.
R1	RPD value was outside control limits.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Green Island
Pace Project No.: 30389048

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30389048001	**MW-33**	EPA 3005A	420668	EPA 6010C	420732
30389048002	**DUP**	EPA 3005A	420668	EPA 6010C	420732
30389048003	**MW-32**	EPA 3005A	420668	EPA 6010C	420732
30389048001	**MW-33**	EPA 3005A	420666	EPA 6010C	420731
30389048002	**DUP**	EPA 3005A	420666	EPA 6010C	420731
30389048003	**MW-32**	EPA 3005A	420666	EPA 6010C	420731
30389048001	**MW-33**	EPA 7470A	420682	EPA 7470A	420714
30389048002	**DUP**	EPA 7470A	420682	EPA 7470A	420714
30389048003	**MW-32**	EPA 7470A	420682	EPA 7470A	420714
30389048001	**MW-33**	EPA 7470A	420673	EPA 7470A	420713
30389048002	**DUP**	EPA 7470A	420673	EPA 7470A	420713
30389048003	**MW-32**	EPA 7470A	420673	EPA 7470A	420713
30389048001	**MW-33**	EPA 3510C	420755	EPA 8270D	420820
30389048002	**DUP**	EPA 3510C	420755	EPA 8270D	420820
30389048003	**MW-32**	EPA 3510C	420755	EPA 8270D	420820

To Pittsburgh

Pace Analytical
WWW.PACELABS.COM

CHAIN-OF-CUSTODY / Analytical Request Docume

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be com

WO# : 30389048

30389048

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Envirospec Engineering	Report To:	Rachel Farnum	Attention:	Adam Schultz
Address:	349 Northern Blvd, Suite 3	Copy To:		Company Name:	Couch White
	Albany, NY 12204			Address:	P.O. Box 22222 Albany, NY
Email:	rfarnum@envirospeceng.com	Purchase Order #:		Pace Quote:	
Phone:	518453-2203 Fax:	Project Name:	~~New Baltimore~~ Glen Island	Pace Project Manager:	haccount@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	0

Regulatory Agency

State / Location: NY

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	PCBs by 8082	Pesticides by 8081	VOCs by 8260	Total Metals by 6010	Dissolved Metals by 6010 (L	SVOCs by 8270	PCBs, Pesticides, Metals, SV	VOC 8260, THP GRO	TPH DRO by 8015	TPH GRO by 8015	Residual Chlorine (Y/N)	
1	MW-33					10/22/20	1015															X	X	X						001
2	DUP					10/22/20	1015															X	X	X						002
3	MW-32					10/22/20	1015															X	X	X						003
4	MS					10/22/20	1015															X	X	X						004
5	MSD					10/22/20	1015															X	X	X						005
6																															
7																															
8																															
9																															
10																															
11																															
12																															

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Lab filtration required for dissolved metals. To Pittsburgh	Ellie P PACE	10/22/20	1405	PACE	10/22/20	14:05				
	PACE	10/22/20	1630	via fedex →	10/23/20	0930	4.7	Y	N	Y
							TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ellie Petraccione

SIGNATURE of SAMPLER: Ellie P

DATE Signed: 10/22/2020

Pittsburgh Lab Sample Condition Upon Receipt

WO# : 30389048

PM: SMB **Due Date: 10/30/20**

CLIENT: ENVIROSPEC

Pace Analytical

Client Name: Envirospec Pr

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

Label KM

LIMS Login KM

Tracking #: 9099 9901 0426

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

Thermometer Used 9 **Type of Ice:** Wet Blue None

Cooler Temperature **Observed Temp** 4.8 °C Correction Factor: -1 °C Final Temp: 4.7 °C

Temp should be above freezing to 6°C

pH paper Lot# 100401 **Date and Initials of person examining contents:** KM 10-23-20

Comments:	Yes	No	N/A	
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:	✓			3.
Sampler Name & Signature on COC:	✓			4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used: -Pace Containers Used:	✓			10.
Containers Intact:	✓			11.
Orthophosphate field filtered			✓	12.
Hex Cr Aqueous sample field filtered			✓	13.
Organic Samples checked for dechlorination:	✓		✓	14. KM 10/23/20
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 KM 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: Date/Time: Contacted By:

Comments/ Resolution:

☐ **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.