Rhode Island Airport Corporation

Second Quarter 2019

Outfall Sampling

T.F. Green Airport

Prepared by:
Rhode Island Airport Corporation

July 2019

Background

The RIPDES permit identifies a total of 16 perimeter outfalls at PVD. Outfalls 001A, 002A, 003A, 004A and 013A discharge to tributaries of Warwick Pond. Outfalls, 006A, 006B, 006C, 006D, 007A, 007B, 008A and 009A discharge to tributaries of Buckeye Brook downstream of Warwick Pond. Outfalls 010A, 011A, and 012A discharge to Tuscatucket Brook. Major outfalls, 002A, 003A, 008A, and 010A, are those outfalls which receive or may receive drainage from areas where aircraft deicing fluid is applied. Sampling for these major outfalls is defined at Part I.A.1 of the permit. Minor outfalls drain taxiways, runways and other paved services. Outfall 005A was combined with Outfall 006A during construction of Runway 34 Safety Area Improvements. Sampling for these minor outfalls is defined at Part I.A.2. of the permit. Additional sampling requirements are defined at Part I.A.5. and Parts I.C. and I.D. Table 1 lists parameters sampled. Figure 1 identifies outfall and in-stream sampling locations.

Industrial activities at PVD with the potential to impact stormwater quality include the use of glycol-based Aircraft Deicing and Anti-icing Fluids (ADFs/AAFs) and pavement deicers. Only propylene glycol (PG)-based ADFs/AAFs are used at PVD. Pavement deicers used at PVD include solid sodium formate, and liquid potassium acetate. No aircraft or pavement deicing material was applied during this event.

Summary of Storm

Second Quarter (April 1 through June 30) sampling includes the major outfalls (002A, 003A, 008A and 010A) hourly for twelve hours, and minor outfalls (001A, 004A, 006A, 007A, 009A, 011A, 012A and 013A) for the first three hours. The sampling began upon a precipitation event of sufficient magnitude as specified in the RIPDES permit.

Light rain began falling around 8:00 PM on June 10, 2019. Sampling commenced at 10:00 PM subsequent to measurable accumulation and continued until approximately 9:20 AM June 11, 2019.

A total of 1.39 inches of precipitation (as water equivalent) was measured at PVD during this event. Precipitation data is summarized in Table 2.

Summary of Flow

Flow meters are installed at three of the major outfalls: OF-002A, OF-003A, and OF-008A. Continuous flow measurements during the 12 hours of sampling were made using these Isco 2150 area velocity meters programmed to measure level and velocity and produce flow rate (GPM) at 15 minute increments. No flow meters are installed at minor outfalls or at outfall 010A, as it is off airport property.

Maximum daily and average monthly flows for the major outfalls were calculated and are presented in Table 3. Maximum daily and average monthly flows for the minor outfalls were calculated and are presented in Table 5. Estimated runoff volumes calculated using drainage area and depth of precipitation for all outfalls are presented in Table 7.

Sample Collection

The laboratory analytical parameters for each sample for this event are listed in Table 2. For the Second Quarter sampling event the major outfalls (002A, 003A, 008A, and 010A) were sampled hourly for twelve hours. There was no observed flow at Outfall 010A. The major outfall sampling results can be found in Tables 3 and 4.

The minor outfalls (001A, 004A, 006A, 007A, 009A, 011A, 012A, and 013A) were also sampled for the first three hours of the event. There was no observed flow at Outfalls 006A, 007A, 009A 011A, and 013A. Outfall 001A did not have measurable flow during the third hour of the sampling event. The minor outfall sampling results can be found in Tables 5 and 6.

Samples were collected and decanted into sample bottles based on the analysis necessary. The bottles were then placed on ice in a cooler for transport to RIAL. Because of the short sample holding time (six hours) for some of the analytical parameters, all samples collected in the first three hours were delivered to the laboratory immediately. Samples collected in hours four through 12 were delivered at the completion of sampling.

RIAC also collected and recorded field measurements at each outfall for temperature, pH, specific conductance, and dissolved oxygen (DO).

Sampling Results

Tables 3-6 present a summary of field measurements and analytical results expressed as monthly average and maximum daily concentrations for both the major and minor outfalls. Table values presented as zero reflect data that was non-detect. Temperature and Oil and Grease are expressed as maximum daily only. pH is expressed as minimum daily and maximum daily.

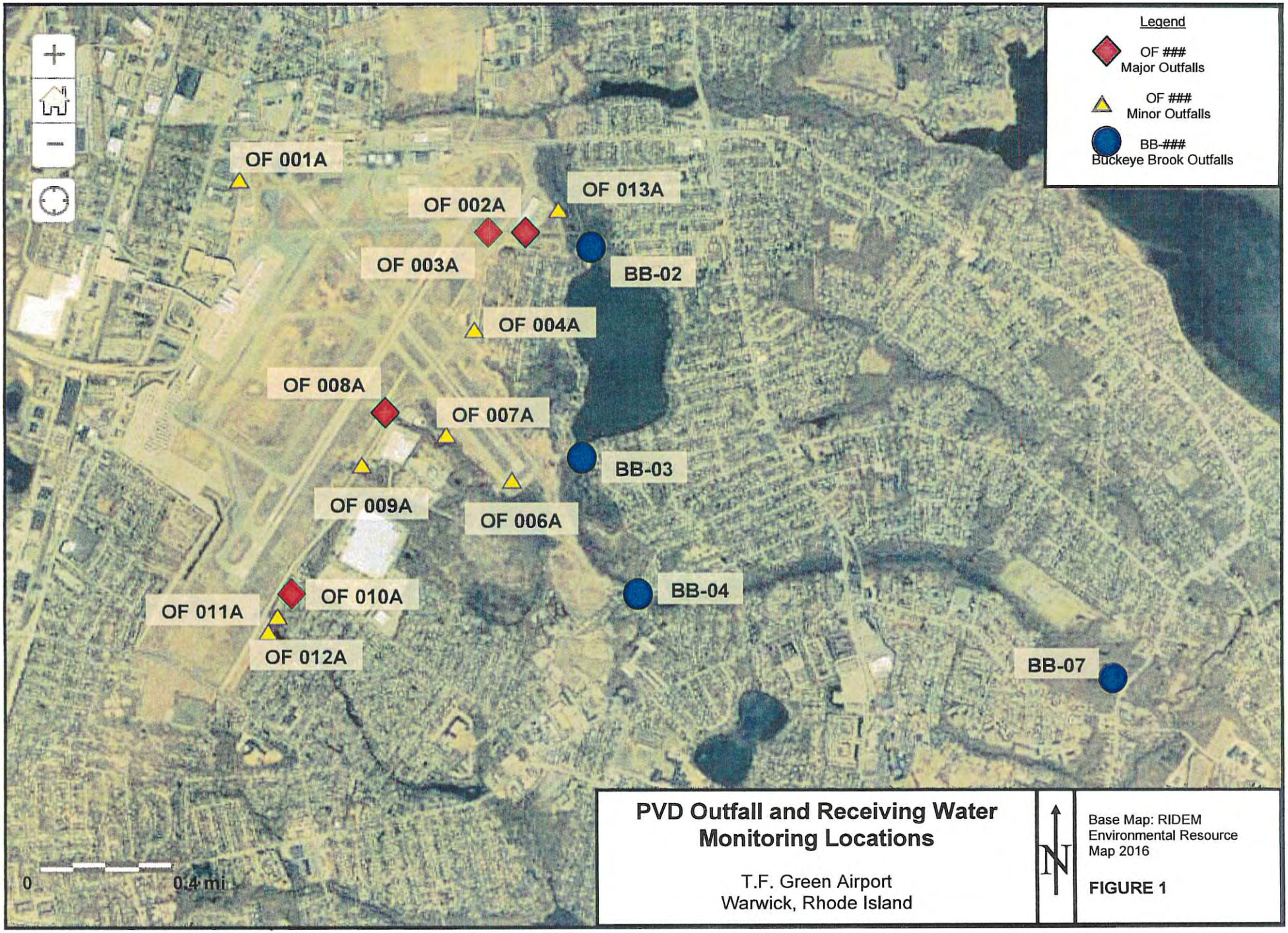
Legend
OF ### Major Outfalls
OF ### Minor Outfalls
BB-### Buckeye Brook Outfalls
OF 001A
OF 002A
OF 013A
OF 003A
BB-02
OF 004A
OF 008A
OF 007A
BB-03
OF 009A
OF 006A
OF 010A
BB-04
OF 011A
OF 012A
BB-07
0
0.4 mi
PVD Outfall and Receiving Water Monitoring Locations
T.F. Green Airport
Warwick, Rhode Island
N
Base Map: RIDEM Environmental Resource Map 2016
FIGURE 1

TABLE 1
LABRATORY ANALYTICAL PARAMETERS
T.F. GREEN AIRPORT
WARWICK, RHODE ISLAND
SECOND QUARTER 2019

Sample Identification	Hours 1-3	Hours 4-12
OF-001A, OF-004A, OF-006A, OF-007A, OF-009A, OF-011A, OF-012A, OF-013A	• TSS, Dissolved Oxygen • Fecal coliform • Dissolved Potassium and Sodium • Oil & grease - 1664 • BOD, pH, and Temperature	
OF-002A, OF-003A, OF-008A, OF-010A	• Fecal coliform • BOD, Surfactants, Dissolved Oxygen • pH and Temperature • COD, TOC • Oil & grease -1664, TSS • Propylene glycol • Dissolved Potassium and Sodium • Total Metals (aluminum, chromium, copper, iron, lead, and zinc)	• BOD,Surfactants, Dissolved Oxygen • pH and Temperature • COD, TOC • Propylene glycol • Dissolved Potassium and Sodium • Total Metals (aluminum, chromium, copper, iron, lead, and zinc)

BOD -Biological oxygen demand
COD -Chemical oxygen demand
TOC -Total organic carbon
TSS -Total suspended solids

TABLE 2
PRECIPITATION AMOUNTS
T.F. GREEN AIRPORT
WARWICK, RHODE ISLAND
SECOND QUARTER 2019
June 10 - 11, 2019

Date	Total Precipitation (water equivalent,in inches)
June 7, 2019	0
June 8, 2019	0
June 9, 2019	0
June 10, 2019	0.69
June 11, 2019	0.70

TABLE 3
ANALYTICAL RESULTS
MAJOR OUTFALLS
T.F. GREEN AIRPORT
WARWICK, RHODE ISLAND
SECOND QUARTER 2019

Parameter	Major Outfalls							
	Outfall 002A		Outfall 003A		Outfall 008A		Outfall 010A	
	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily
Flow (gpd) [1, 8]	816,667	2,162,196	1,061,667	2,810,855	5,349,809	19,056,082	981,288	981,288
Oil & Grease (mg/l) [5]		0.9		4.2		1		1
TSS (mg/l) [4, 5]	55.2	93	41	79	37.0	51	46.7	130
Fecal Coliform (MPN/100ml) [7, 5]	383	1,600	220	1,600	575	1,600	802	1600
BOD_5 (mg/l) [2, 6]	1.3	9.4	1.2	5.3	3	6.4	7.2	18
Propylene Glycol (mg/l) [2, 6]	0	0	0	0	0	0	0	0
COD (mg/l) [2, 6]	9	44	9	17	18	52	35.0	79
Dissolved Potassium (mg/l) [2, 6]	1.90	4.45	1.69	3.68	1.93	11.10	4.01	4.88
Dissolved Sodium (mg/l) [2, 6]	3.87	15.80	3.40	9.11	11.87	149.00	3.8	5.39
Surfactants (ug/l) [2, 6]	101	410	108	260	19.8	120	120	360
Dissolved Oxygen (mg/l) [2, 3]	6.42	7.40	6.19	6.97	5.77	6.52	5.27	5.68
TOC (mg/l) [2, 6]	4.1	10	4.1	5.6	3.7	5.4	7.7	15
Total Aluminum (ug/l) [2, 6]	20	272.6	13.0	219.3	213	747	134	402
Total Chromium (ug/l) [2, 6]	0.2	1.1	0	0	1.2	2.7	0.6	1.9
Total Copper (ug/l) [2, 6]	2.7	23.06	2.7	13.7	4.5	17.64	5.9	17.56
Total Iron (ug/l) [2, 6]	2,139	6,500	3,577.00	15,850.00	3,746.00	17,740.00	12,231	35,480
Total Lead (ug/l) [2, 6]	0.6	3.4	0.4	3.3	0.9	3.4	1.7	3.9
Total Zinc (ug/l) [2, 6]	0	0	0	0	47	149.9	0.0	0.0

[1] Results reported as average monthly were determined using the arithmetic average of measurement made every 15 minutes during the 12 hours of sampling. Results reported as maximum daily was the maximum flow measurements over the 12 hours of sampling. Both reported values were converted from GPM to GPD reflecting a 24 hour day

[2] Results reported as maximum daily were the maximum of the 12 samples collected during the 12 hours of sampling.

[3] Results reported as average monthly were determined using the arithmetic average of the 12 samples collected during the 12 hours of sampling.

[4] Results reported as average monthly were determined using the arithmetic average of the 3 samples collected (when available) during the first 3 hours of sampling.

[5] Results reported as maximum daily were the maximum of the 3 samples collected (when available) during the first 3 hours of sampling

[6] Results reported as average monthly were determined by using a flow-weighted average of the 12 samples collected during the 12 hours of sampling.

[7] Results reported as average monthly were determined by using a geometric mean of the 3 samples collected (when available) during the 3 hours of sampling

[8] Outfall 010A: Results reported as average monthly were determined using the arithmetic average of rainfall amount during the entire storm for the outfall drainage area. Results reported as maximum daily was determiend from maximum rainfall measurement for the duration of the storm for each outfall drainage area.

BOD_5 - Biological oxygen demand 5-day test
COD - Chemical oxygen demand
gpd - Gallons per day
mg/l - Milligrams per liter
TOC - Total organic carbon
TSS - Total suspended solids
ug/l - Micrograms per liter

TABLE 4
FIELD ANALYTICAL RESULTS
MAJOR OUTFALLS
T.F. GREEN AIRPORT
WARWICK, RHODE ISLAND
SECOND QUARTER 2019

Parameter	Major Outfalls							
	Outfall 002A		Outfall 003A		Outfall 008A		Outfall 010A	
	Minimum Daily[1]	Maximum Daily[2]	Minimum Daily[1]	Maximum Daily[2]	Minimum Daily[1]	Maximum Daily[2]	Minimum Daily[1]	Maximum Daily[2]
pH	**5.79**	6.68	**6.13**	6.55	**5.84**	6.72	**5.90**	6.49
Temperature (°F)		68.5		69.3		70.1		66.7

Bold text indicates exceedance of permit standards

[1] Results reported as minimum daily were the minimum of the samples collected during the 12 hours of sampling.

[2] Results reported as maximum daily were the maximum of the samples collected during the 12 hours of sampling.

TABLE 5
ANALYTICAL RESULTS
MINOR OUTFALLS
T.F. GREEN AIRPORT
WARWICK, RHODE ISLAND
SECOND QUARTER 2019

Parameter	Minor Outfalls															
	Outfall 001A		Outfall 004A		Outfall 006A		Outfall 007A		Outfall 009A		Outfall 011A		Outfall 012A		Outfall 013A	
	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily
Flow (gpd)[1]	222,677	222,677	1,136,029	1,136,029	NO FLOW	NO FLOW	NO FLOW	NO FLOW	NO FLOW	NO FLOW	NO FLOW	NO FLOW	1,751,221	1,751,221	NO FLOW	NO FLOW
Oil & Grease (mg/l)[3]		0.0		1.7										0.0		
TSS (mg/l)[2, 3]	79.0	79.0	3.7	6.3									3.7	4.3		
Fecal Coliform (MPN/100ml)[2, 3]	22	22	165	540									0.0	0.0		
BOD_5 (mg/l)[2, 3]	12.0	12.0	6.2	9.6									0.0	0.0		
Dissolved Potassium (mg/l)[2, 3]	1.00	1.00	3.20	4.72									4.02	4.09		
Dissolved Sodium (mg/l)[2, 3]	3.00	3.00	3.00	3.00									10.50	10.80		

[1] Results reported as average monthly were determined using the arithmetic average of rainfall amount during the entire storm for the outfall drainage area. Results reported as maximum daily was determiend from maximum rainfall measurement for the duration of the storm for each outfall drainage area.

[2] Results reported as average monthly were determined using the arithmetic average of the 3 samples collected (when available) during the first 3 hours of sampling.

[3] Results reported as maximum daily were the maximum of the 3 samples collected (when available) during the first 3 hours of sampling

gpd - Gallons per day

mg/l - Milligrams per liter

TSS - Total suspended solids

TABLE 6
FIELD ANALYTICAL RESULTS
MINOR OUTFALLS
T.F. GREEN AIRPORT
WARWICK, RHODE ISLAND
SECOND QUARTER 2019

Parameter	Minor Outfalls															
	Outfall 001A		Outfall 004A		Outfall 006A		Outfall 007A		Outfall 009A		Outfall 011A		Outfall 012A		Outfall 013A	
	Minimum Daily[1]	Maximum Daily[2]	Minimum Daily[1]	Maximum Daily[2]	Minimum Daily[1]	Maximum Daily[2]	Minimum Daily[1]	Maximum Daily[2]	Minimum Daily[1]	Maximum Daily[2]	Minimum Daily[1]	Maximum Daily[2]	Minimum Daily[1]	Maximum Daily[2]	Minimum Daily[1]	Maximum Daily[2]
pH	**4.1**	**4.1**	6.18	6.45	NO FLOW		NO FLOW		NO FLOW		NO FLOW		**5.99**	**6.15**	NO FLOW	
Temperature (°F)		70.9		69.5										58.3		

Bold text indicates exceedance of permit standards

[1] Results reported as minimum daily were the minimum of the samples collected during the 3 hours of sampling.

[2] Results reported as maximum daily were the maximum of the samples collected during the 3 hours of sampling.

TABLE 7
PVD RUNOFF VOLUME CALCULATION
T.F. GREEN AIRPORT
WARWICK, RHODE ISLAND
SECOND QUARTER 2019

June 10 - 11, 2019 Precip (inches): 1.39

Drainage Basin ID	PVD Storm Water Discharge	Receiving Water	Drainage Area (ac)	cu ft precip	gal precip
1	Outfall 001A	Warwick Pond	5.9	29,769.6	222,677
2	Outfall 002A	Warwick Pond	93.4	471,268.4	3,525,087
3	Outfall 003A	Warwick Pond	119.8	604,474.9	4,521,472
4	Outfall 004A	Warwick Pond	30.1	151,875.6	1,136,029
4B	Outfall 004B	Buckeye Brook	2	10,091.4	75,484
4C	Outfall 004C	Buckeye Brook	3	15,137.1	113,226
6	Outfall 006A	Buckeye Brook	10.7	53,989.0	403,838
6B	Outfall 006B	Buckeye Brook	1.5	7,568.6	56,613
6C	Outfall 006C	Buckeye Brook	0.8	4,036.6	30,193
6D	Outfall 006D	Buckeye Brook	0.7	3,532.0	26,419
7	Outfall 007A	Buckeye Brook	9.6	48,438.7	362,322
7B	Outfall 007B	Buckeye Brook	1.2	6,054.8	45,290
8	Outfall 008A	Buckeye Brook	240.6	1,213,995.4	9,080,686
9	Outfall 009A	Buckeye Brook	38.4	193,754.9	1,449,287
10	Outfall 010A	Tuscatucket Brook	26	131,188.2	981,288
11	Outfall 011A	Tuscatucket Brook	14	70,639.8	528,386
12	Outfall 012A	Tuscatucket Brook	46.4	234,120.5	1,751,221
13	Outfall 013A	Warwick Pond	28	141,279.6	1,056,771
		TOTAL AREA	**672.1**	3,391,215.0	**25,366,288**

R.I. ANALYTICAL
Specialists in Environmental Services

LABORATORY REPORT

Rhode Island Airport Corp.
Attn: Mr. Jay Brolin
2000 Post Road
Warwick, RI 02886

Date Received: 6/11/2019
Date Reported: 7/2/2019
P.O. Number 27599

Work Order #: 1906-10652

Project Name: T.F. GREEN RIPDES MONITORING

Enclosed are the analytical results and Chain of Custody for your project referenced above. The sample(s) were analyzed by our Warwick, RI laboratory unless noted otherwise. When applicable, indication of sample analysis at our Hudson, MA laboratory and/or subcontracted results are noted and subcontracted reports are enclosed in their entirety.

All samples were analyzed within the established guidelines of US EPA approved methods with all requirements met, unless otherwise noted at the end of a given sample's analytical results or in a case narrative.

The Detection Limit is defined as the lowest level that can be reliably achieved during routine laboratory conditions.

These results only pertain to the samples submitted for this Work Order # and this report shall not be reproduced except in its entirety.

We certify that the following results are true and accurate to the best of our knowledge. If you have questions or need further assistance, please contact our Customer Service Department.

Approved by:

Paul Perrotti
President

Laboratory Certification Numbers (as applicable to sample's origin state):
Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508 Hudson MA * M-MA1117, RI LAO00319

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.
Work Order #: 1906-10652
Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 001
Sample Description: OUTFALL 002A-01
Sample Type : GRAB
Sample Date / Time : 6/10/2019 @ 22:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
pH	6.49		SU	SM4500H+B	6/11/2019	15:00	SAS
Fecal Coliform (MPN)	22	1.8	MPN/100 ml	SM9221E2 19-21ed	6/11/2019	3:50	DMC
BOD 5	9.0	3.0	mg/l	SM5210B 21ed	6/11/2019	22:20	AOO
Total Suspended Solids	93	2.0	mg/l	SM2540D 2011	6/14/2019	7:50	SNI
COD	44	10	mg/l	SM5220D 18-21ed	6/13/2019	7:30	SNI
Surfactants (MBAS)	410	100	ug/l	SM5540C 18-21ed	6/11/2019	16:45	SAS
TOC	10	0.5	mg/l	SM5310C 21 ed.	6/12/2019	14:04	SAS
Oil & Grease Gravimetric	0.7	0.5	mg/l	EPA 1664A	6/19/2019	8:15	RMS
Total Metals							
Chromium	<1.0	1.0	ug/l	EPA 200.8	6/15/2019	0:20	AJD
Lead	2.1	1.0	ug/l	EPA 200.8	6/15/2019	0:20	AJD
Total Metals							
Aluminum	200.3	100	ug/l	EPA 200.7	6/13/2019	17:17	DDP
Copper	17.86	10	ug/l	EPA 200.7	6/13/2019	17:17	DDP
Iron	5195	100	ug/l	EPA 200.7	6/13/2019	17:17	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/14/2019	14:31	DDP
Dissolved Metals							
Potassium	4450	1000	ug/l	EPA 200.7	6/18/2019	15:59	DDP
Sodium	15800	3000	ug/l	EPA 200.7	6/18/2019	15:59	DDP
Propylene Glycol	See Attached				6/18/2019	17:58	*PA
ICPMS Digestion				EPA 200.8	6/14/2019	13:06	RB
ICP Digestion				EPA 200.7	6/13/2019	12:57	RB
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019	13:23	MEM

*PA Propylene Glycol analyzed by Pace Analytical Services.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.
Work Order #: 1906-10652
Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 002
Sample Description: OUTFALL 003A-01
Sample Type : GRAB
Sample Date / Time : 6/10/2019 @ 22:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
pH	6.55		SU	SM4500H+B	6/11/2019	15:00	SAS
Fecal Coliform (MPN)	2.0	1.8	MPN/100 ml	SM9221E2 19-21ed	6/11/2019	3:50	DMC
BOD 5	4.1	3.0	mg/l	SM5210B 21ed	6/11/2019	22:22	AOO
Total Suspended Solids	21	2.0	mg/l	SM2540D 2011	6/14/2019	7:50	SNI
COD	10	10	mg/l	SM5220D 18-21ed	6/13/2019	7:30	SNI
Surfactants (MBAS)	<100	100	ug/l	SM5540C 18-21ed	6/11/2019	16:45	SAS
TOC	2.3	0.5	mg/l	SM5310C 21 ed.	6/12/2019	14:04	SAS
Oil & Grease Gravimetric	<4.2	4.2	mg/l	EPA 1664A	6/19/2019	8:15	RMS
Total Metals							
Chromium	<1.0	1.0	ug/l	EPA 200.8	6/15/2019	0:25	AJD
Lead	<1.0	1.0	ug/l	EPA 200.8	6/15/2019	0:25	AJD
Total Metals							
Aluminum	<100	100	ug/l	EPA 200.7	6/13/2019	17:18	DDP
Copper	<10	10	ug/l	EPA 200.7	6/13/2019	17:18	DDP
Iron	8282	100	ug/l	EPA 200.7	6/13/2019	17:18	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/14/2019	14:33	DDP
Dissolved Metals							
Potassium	3660	1000	ug/l	EPA 200.7	6/18/2019	16:01	DDP
Sodium	4720	3000	ug/l	EPA 200.7	6/18/2019	16:01	DDP
Propylene Glycol	See Attached				6/18/2019	19:29	*PA
ICPMS Digestion				EPA 200.8	6/14/2019	13:06	RB
ICP Digestion				EPA 200.7	6/13/2019	12:57	RB
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019	13:23	MEM

*PA Propylene Glycol analyzed by Pace Analytical Services.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

Oil & Grease - One amber glass jar was broken upon receipt at the laboratory; limited sample available in the remaining jar for analysis. Detection limit raise to 4.2 mg/L.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.
Work Order #: 1906-10652
Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 003
Sample Description: OUTFALL 008A-01
Sample Type : GRAB
Sample Date / Time : 6/10/2019 @ 22:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
pH	6.72		SU	SM4500H+B	6/11/2019	15:00	SAS
Fecal Coliform (MPN)	220	1.8	MPN/100 ml	SM9221E2 19-21ed	6/11/2019	3:50	DMC
BOD 5	<3.0	3.0	mg/l	SM5210B 21ed	6/11/2019	22:22	AOO
Total Suspended Solids	35	2.0	mg/l	SM2540D 2011	6/14/2019	7:50	SNI
COD	22	10	mg/l	SM5220D 18-21ed	6/13/2019	7:30	SNI
Surfactants (MBAS)	<100	100	ug/l	SM5540C 18-21ed	6/11/2019	16:45	SAS
TOC	5.4	0.5	mg/l	SM5310C 21 ed.	6/12/2019	14:04	SAS
Oil & Grease Gravimetric	0.9	0.5	mg/l	EPA 1664A	6/19/2019	8:15	RMS
Total Metals							
Chromium	<1.0	1.0	ug/l	EPA 200.8	6/15/2019	0:29	AJD
Lead	2.7	1.0	ug/l	EPA 200.8	6/15/2019	0:29	AJD
Total Metals							
Aluminum	232.5	100	ug/l	EPA 200.7	6/13/2019	17:20	DDP
Copper	13.82	10	ug/l	EPA 200.7	6/13/2019	17:20	DDP
Iron	17740	100	ug/l	EPA 200.7	6/13/2019	17:20	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/14/2019	14:34	DDP
Dissolved Metals							
Potassium	11100	1000	ug/l	EPA 200.7	6/18/2019	16:03	DDP
Sodium	149000	3000	ug/l	EPA 200.7	6/18/2019	16:03	DDP
Propylene Glycol	See Attached				6/18/2019	19:38	*PA
ICPMS Digestion				EPA 200.8	6/14/2019	13:06	RB
ICP Digestion				EPA 200.7	6/13/2019	12:57	RB
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019	13:23	MEM

*PA Propylene Glycol analyzed by Pace Analytical Services.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.
Work Order #: 1906-10652
Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 004
Sample Description: OUTFALL 010A-01
Sample Type : GRAB
Sample Date / Time : 6/10/2019 @ 22:35

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
pH	6.49		SU	SM4500H+B	6/11/2019	15:00	SAS
Fecal Coliform (MPN)	>1600	1.8	MPN/100 ml	SM9221E2 19-21ed	6/11/2019	3:50	DMC
BOD 5	18	8.0	mg/l	SM5210B 21ed	6/11/2019	22:22	AOO
Total Suspended Solids	130	2.0	mg/l	SM2540D 2011	6/14/2019	18:15	SAS
COD	79	10	mg/l	SM5220D 18-21ed	6/13/2019	7:30	SNI
Surfactants (MBAS)	360	100	ug/l	SM5540C 18-21ed	6/11/2019	16:45	SAS
TOC	15	0.5	mg/l	SM5310C 21 ed.	6/12/2019	14:04	SAS
Oil & Grease Gravimetric	1.0	0.5	mg/l	EPA 1664A	6/19/2019	8:15	RMS
Total Metals							
Chromium	1.9	1.0	ug/l	EPA 200.8	6/15/2019	0:34	AJD
Lead	3.9	1.0	ug/l	EPA 200.8	6/15/2019	0:34	AJD
Total Metals							
Aluminum	402.2	100	ug/l	EPA 200.7	6/13/2019	17:22	DDP
Copper	17.56	10	ug/l	EPA 200.7	6/13/2019	17:22	DDP
Iron	35480	100	ug/l	EPA 200.7	6/13/2019	17:22	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/14/2019	14:36	DDP
Dissolved Metals							
Potassium	4100	1000	ug/l	EPA 200.7	6/18/2019	16:04	DDP
Sodium	5390	3000	ug/l	EPA 200.7	6/18/2019	16:04	DDP
Propylene Glycol	See Attached				6/18/2019	19:47	*PA
ICPMS Digestion				EPA 200.8	6/14/2019	13:06	RB
ICP Digestion				EPA 200.7	6/13/2019	12:57	RB
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019	13:23	MEM

*PA Propylene Glycol analyzed by Pace Analytical Services.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.
Work Order #: 1906-10652
Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 005
Sample Description: OUTFALL 002A-02
Sample Type : GRAB
Sample Date / Time : 6/10/2019 @ 23:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
pH	6.55		SU	SM4500H+B	6/11/2019	15:00	SAS
Fecal Coliform (MPN)	1600	1.8	MPN/100 ml	SM9221E2 19-21ed	6/11/2019	3:50	DMC
BOD 5	9.4	3.0	mg/l	SM5210B 21ed	6/11/2019	22:24	AOO
Total Suspended Solids	64	2.0	mg/l	SM2540D 2011	6/14/2019	18:50	SAS
COD	30	10	mg/l	SM5220D 18-21ed	6/13/2019	7:30	SNI
Surfactants (MBAS)	270	100	ug/l	SM5540C 18-21ed	6/11/2019	16:45	SAS
TOC	6.7	0.5	mg/l	SM5310C 21 ed.	6/12/2019	14:04	SAS
Oil & Grease Gravimetric	0.9	0.5	mg/l	EPA 1664A	6/19/2019	8:15	RMS
Total Metals							
Chromium	1.1	1.0	ug/l	EPA 200.8	6/15/2019	0:43	AJD
Lead	3.4	1.0	ug/l	EPA 200.8	6/15/2019	0:43	AJD
Total Metals							
Aluminum	272.6	100	ug/l	EPA 200.7	6/18/2019	13:45	DDP
Copper	23.06	10	ug/l	EPA 200.7	6/18/2019	13:45	DDP
Iron	5959	100	ug/l	EPA 200.7	6/18/2019	13:45	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/18/2019	13:45	DDP
Dissolved Metals							
Potassium	2410	1000	ug/l	EPA 200.7	6/18/2019	16:06	DDP
Sodium	7110	3000	ug/l	EPA 200.7	6/18/2019	16:06	DDP
Propylene Glycol	See Attached				6/18/2019	19:56	*PA
ICPMS Digestion				EPA 200.8	6/14/2019	13:06	RB
ICP Digestion				EPA 200.7	6/14/2019	17:31	MEM
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019	13:23	MEM

*PA Propylene Glycol analyzed by Pace Analytical Services.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.
Work Order #: 1906-10652
Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 006
Sample Description: OUTFALL 003A-02
Sample Type : GRAB
Sample Date / Time : 6/10/2019 @ 23:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
pH	6.25		SU	SM4500H+B	6/11/2019	15:00	SAS
Fecal Coliform (MPN)	70	1.8	MPN/100 ml	SM9221E2 19-21ed	6/11/2019	3:50	DMC
BOD 5	5.3	3.0	mg/l	SM5210B 21ed	6/11/2019	22:24	AOO
Total Suspended Solids	79	2.0	mg/l	SM2540D 2011	6/14/2019	18:50	SAS
COD	17	10	mg/l	SM5220D 18-21ed	6/13/2019	7:30	SNI
Surfactants (MBAS)	130	100	ug/l	SM5540C 18-21ed	6/11/2019	16:45	SAS
TOC	4.0	0.5	mg/l	SM5310C 21 ed.	6/12/2019	14:04	SAS
Oil & Grease Gravimetric	0.8	0.5	mg/l	EPA 1664A	6/19/2019	8:15	RMS
Total Metals							
Chromium	<1.0	1.0	ug/l	EPA 200.8	6/14/2019	20:16	AJD
Lead	3.3	1.0	ug/l	EPA 200.8	6/14/2019	20:16	AJD
Total Metals							
Aluminum	219.3	100	ug/l	EPA 200.7	6/18/2019	13:56	DDP
Copper	<10	10	ug/l	EPA 200.7	6/18/2019	13:56	DDP
Iron	15850	100	ug/l	EPA 200.7	6/18/2019	13:56	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/18/2019	13:56	DDP
Dissolved Metals							
Potassium	1120	1000	ug/l	EPA 200.7	6/18/2019	16:07	DDP
Sodium	<3000	3000	ug/l	EPA 200.7	6/18/2019	16:07	DDP
Propylene Glycol	See Attached				6/18/2019	20:06	*PA
ICPMS Digestion				EPA 200.8	6/13/2019	17:21	RB
ICP Digestion				EPA 200.7	6/14/2019	17:31	MEM
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019	13:23	MEM

*PA Propylene Glycol analyzed by Pace Analytical Services.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.
Work Order #: 1906-10652
Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 007
Sample Description: OUTFALL 008A-02
Sample Type : GRAB
Sample Date / Time : 6/10/2019 @ 23:14

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
pH	6.64		SU	SM4500H+B	6/11/2019	15:00	SAS
Fecal Coliform (MPN)	>1600	1.8	MPN/100 ml	SM9221E2 19-21ed	6/11/2019	3:50	DMC
BOD 5	6.3	3.0	mg/l	SM5210B 21ed	6/11/2019	22:25	AOO
Total Suspended Solids	51	2.0	mg/l	SM2540D 2011	6/14/2019	18:50	SAS
COD	52	10	mg/l	SM5220D 18-21ed	6/13/2019	7:30	SNI
Surfactants (MBAS)	120	100	ug/l	SM5540C 18-21ed	6/11/2019	16:45	SAS
TOC	4.1	0.5	mg/l	SM5310C 21 ed.	6/12/2019	14:04	SAS
Oil & Grease Gravimetric	0.8	0.5	mg/l	EPA 1664A	6/19/2019	8:15	RMS
Total Metals							
Chromium	2.7	1.0	ug/l	EPA 200.8	6/14/2019	20:25	AJD
Lead	3.4	1.0	ug/l	EPA 200.8	6/14/2019	20:25	AJD
Total Metals							
Aluminum	747.0	100	ug/l	EPA 200.7	6/18/2019	13:59	DDP
Copper	17.64	10	ug/l	EPA 200.7	6/18/2019	13:59	DDP
Iron	7184	100	ug/l	EPA 200.7	6/18/2019	13:59	DDP
Zinc	149.9	100	ug/l	EPA 200.7	6/18/2019	13:59	DDP
Dissolved Metals							
Potassium	1330	1000	ug/l	EPA 200.7	6/18/2019	16:09	DDP
Sodium	3400	3000	ug/l	EPA 200.7	6/18/2019	16:09	DDP
Propylene Glycol	See Attached				6/18/2019	20:04	*PA
ICPMS Digestion				EPA 200.8	6/13/2019	17:21	RB
ICP Digestion				EPA 200.7	6/14/2019	17:31	MEM
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019	13:23	MEM

*PA Propylene Glycol analyzed by Pace Analytical Services.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.
Work Order #: 1906-10652
Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 008
Sample Description: OUTFALL 010A-02
Sample Type : GRAB
Sample Date / Time : 6/10/2019 @ 23:42

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
pH	5.90		SU	SM4500H+B	6/11/2019	15:31	SAS
Fecal Coliform (MPN)	920	1.8	MPN/100 ml	SM9221E2 19-21ed	6/11/2019	3:50	DMC
BOD 5	<3.0	3.0	mg/l	SM5210B 21ed	6/11/2019	22:29	AOO
Total Suspended Solids	4.7	2.0	mg/l	SM2540D 2011	6/14/2019	18:50	SAS
COD	10	10	mg/l	SM5220D 18-21ed	6/13/2019	7:30	SNI
Surfactants (MBAS)	<100	100	ug/l	SM5540C 18-21ed	6/11/2019	16:45	SAS
TOC	2.5	0.5	mg/l	SM5310C 21 ed.	6/12/2019	14:04	SAS
Oil & Grease Gravimetric	0.5	0.5	mg/l	EPA 1664A	6/20/2019	15:00	RMS
Total Metals							
Chromium	<1.0	1.0	ug/l	EPA 200.8	6/14/2019	20:29	AJD
Lead	<1.0	1.0	ug/l	EPA 200.8	6/14/2019	20:29	AJD
Total Metals							
Aluminum	<100	100	ug/l	EPA 200.7	6/18/2019	14:02	DDP
Copper	<10	10	ug/l	EPA 200.7	6/18/2019	14:02	DDP
Iron	513.8	100	ug/l	EPA 200.7	6/18/2019	14:02	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/18/2019	14:02	DDP
Dissolved Metals							
Potassium	3060	1000	ug/l	EPA 200.7	6/18/2019	16:11	DDP
Sodium	<3000	3000	ug/l	EPA 200.7	6/18/2019	16:11	DDP
Propylene Glycol	See Attached				6/18/2019	20:03	*PA
ICPMS Digestion				EPA 200.8	6/13/2019	17:21	RB
ICP Digestion				EPA 200.7	6/14/2019	17:31	MEM
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019	13:23	MEM

*PA Propylene Glycol analyzed by Pace Analytical Services.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.

Work Order #: 1906-10652

Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 009
Sample Description: OUTFALL 002A-03
Sample Type : GRAB
Sample Date / Time : 6/11/2019

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
pH	6.19		SU	SM4500H+B	6/11/2019	15:31	SAS
Fecal Coliform (MPN)	>1600	1.8	MPN/100 ml	SM9221E2 19-21ed	6/11/2019	3:50	DMC
BOD 5	<3.0	3.0	mg/l	SM5210B 21ed	6/11/2019	22:29	AOO
Total Suspended Solids	8.7	2.0	mg/l	SM2540D 2011	6/14/2019	18:50	SAS
COD	12	10	mg/l	SM5220D 18-21ed	6/13/2019	7:30	SNI
Surfactants (MBAS)	140	100	ug/l	SM5540C 18-21ed	6/11/2019	16:45	SAS
TOC	4.4	0.5	mg/l	SM5310C 21 ed.	6/12/2019	14:04	SAS
Oil & Grease Gravimetric	0.9	0.5	mg/l	EPA 1664A	6/20/2019	15:00	RMS
Total Metals							
Chromium	<1.0	1.0	ug/l	EPA 200.8	6/14/2019	20:43	AJD
Lead	<1.0	1.0	ug/l	EPA 200.8	6/14/2019	20:43	AJD
Total Metals							
Aluminum	<100	100	ug/l	EPA 200.7	6/18/2019	14:05	DDP
Copper	<10	10	ug/l	EPA 200.7	6/18/2019	14:05	DDP
Iron	532.1	100	ug/l	EPA 200.7	6/18/2019	14:05	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/18/2019	14:05	DDP
Dissolved Metals							
Potassium	1690	1000	ug/l	EPA 200.7	6/18/2019	16:19	DDP
Sodium	<3000	3000	ug/l	EPA 200.7	6/18/2019	16:19	DDP
Propylene Glycol	See Attached				6/18/2019	20:42	*PA
ICPMS Digestion				EPA 200.8	6/13/2019	17:21	RB
ICP Digestion				EPA 200.7	6/14/2019	17:31	MEM
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019	13:23	MEM

*PA Propylene Glycol analyzed by Pace Analytical Services.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.
Work Order #: 1906-10652
Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 010
Sample Description: OUTFALL 003A-03
Sample Type : GRAB
Sample Date / Time : 6/11/2019

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
pH	6.14		SU	SM4500H+B	6/11/2019	15:31	SAS
Fecal Coliform (MPN)	1600	1.8	MPN/100 ml	SM9221E2 19-21ed	6/11/2019	3:50	DMC
BOD 5	3.6	3.0	mg/l	SM5210B 21ed	6/11/2019	22:29	AOO
Total Suspended Solids	22	2.0	mg/l	SM2540D 2011	6/14/2019	18:50	SAS
COD	12	10	mg/l	SM5220D 18-21ed	6/13/2019	7:30	SNI
Surfactants (MBAS)	260	100	ug/l	SM5540C 18-21ed	6/11/2019	16:45	SAS
TOC	3.6	0.5	mg/l	SM5310C 21 ed.	6/12/2019	14:04	SAS
Oil & Grease Gravimetric	1.8	0.5	mg/l	EPA 1664A	6/20/2019	15:00	RMS
Total Metals							
Chromium	<1.0	1.0	ug/l	EPA 200.8	6/14/2019	20:47	AJD
Lead	<1.0	1.0	ug/l	EPA 200.8	6/14/2019	20:47	AJD
Total Metals							
Aluminum	<100	100	ug/l	EPA 200.7	6/18/2019	14:07	DDP
Copper	<10	10	ug/l	EPA 200.7	6/18/2019	14:07	DDP
Iron	3188	100	ug/l	EPA 200.7	6/18/2019	14:07	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/18/2019	14:07	DDP
Dissolved Metals							
Potassium	1260	1000	ug/l	EPA 200.7	6/18/2019	16:22	DDP
Sodium	<3000	3000	ug/l	EPA 200.7	6/18/2019	16:22	DDP
Propylene Glycol	See Attached				6/18/2019	20:51	*PA
ICPMS Digestion				EPA 200.8	6/13/2019	17:21	RB
ICP Digestion				EPA 200.7	6/14/2019	17:31	MEM
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019	13:23	MEM

*PA Propylene Glycol analyzed by Pace Analytical Services.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.
Work Order #: 1906-10652
Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 011
Sample Description: OUTFALL 008A-03
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 00:18

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
pH	6.56		SU	SM4500H+B	6/11/2019	15:31	SAS
Fecal Coliform (MPN)	540	1.8	MPN/100 ml	SM9221E2 19-21ed	6/11/2019	3:50	DMC
BOD 5	3.2	3.0	mg/l	SM5210B 21ed	6/11/2019	22:33	AOO
Total Suspended Solids	25	2.0	mg/l	SM2540D 2011	6/14/2019	18:50	SAS
COD	19	10	mg/l	SM5220D 18-21ed	6/13/2019	7:30	SNI
Surfactants (MBAS)	<100	100	ug/l	SM5540C 18-21ed	6/11/2019	16:45	SAS
TOC	3.1	0.5	mg/l	SM5310C 21 ed.	6/12/2019	14:04	SAS
Oil & Grease Gravimetric	1.0	0.5	mg/l	EPA 1664A	6/20/2019	15:00	RMS
Total Metals							
Chromium	1.2	1.0	ug/l	EPA 200.8	6/14/2019	20:51	AJD
Lead	<1.0	1.0	ug/l	EPA 200.8	6/14/2019	20:51	AJD
Total Metals							
Aluminum	268.2	100	ug/l	EPA 200.7	6/18/2019	14:10	DDP
Copper	<10	10	ug/l	EPA 200.7	6/18/2019	14:10	DDP
Iron	5097	100	ug/l	EPA 200.7	6/18/2019	14:10	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/18/2019	14:10	DDP
Dissolved Metals							
Potassium	1310	1000	ug/l	EPA 200.7	6/18/2019	16:24	DDP
Sodium	5020	3000	ug/l	EPA 200.7	6/18/2019	16:24	DDP
Propylene Glycol	See Attached				6/18/2019	21:00	*PA
ICPMS Digestion				EPA 200.8	6/13/2019	17:21	RB
ICP Digestion				EPA 200.7	6/14/2019	17:31	MEM
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019	13:23	MEM

*PA Propylene Glycol analyzed by Pace Analytical Services.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.
Work Order #: 1906-10652
Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 012
Sample Description: OUTFALL 010A-03
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 00:50

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
pH	6.19		SU	SM4500H+B	6/11/2019	15:31	SAS
Fecal Coliform (MPN)	350	1.8	MPN/100 ml	SM9221E2 19-21ed	6/11/2019	3:50	DMC
BOD 5	3.5	3.0	mg/l	SM5210B 21ed	6/11/2019	22:33	AOO
Total Suspended Solids	5.3	2.0	mg/l	SM2540D 2011	6/14/2019	18:50	SAS
COD	17	10	mg/l	SM5220D 18-21ed	6/13/2019	7:30	SNI
Surfactants (MBAS)	<100	100	ug/l	SM5540C 18-21ed	6/11/2019	16:45	SAS
TOC	5.7	0.5	mg/l	SM5310C 21 ed.	6/13/2019	21:25	SAS
Oil & Grease Gravimetric	<0.5	0.5	mg/l	EPA 1664A	6/20/2019	15:00	RMS
Total Metals							
Chromium	<1.0	1.0	ug/l	EPA 200.8	6/14/2019	20:56	AJD
Lead	1.1	1.0	ug/l	EPA 200.8	6/14/2019	20:56	AJD
Total Metals							
Aluminum	<100	100	ug/l	EPA 200.7	6/18/2019	14:13	DDP
Copper	<10	10	ug/l	EPA 200.7	6/18/2019	14:13	DDP
Iron	699.2	100	ug/l	EPA 200.7	6/18/2019	14:13	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/18/2019	14:13	DDP
Dissolved Metals							
Potassium	4880	1000	ug/l	EPA 200.7	6/18/2019	16:26	DDP
Sodium	<3000	3000	ug/l	EPA 200.7	6/18/2019	16:26	DDP
Propylene Glycol	See Attached				6/18/2019	21:10	*PA
ICPMS Digestion				EPA 200.8	6/13/2019	17:21	RB
ICP Digestion				EPA 200.7	6/14/2019	17:31	MEM
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019	13:23	MEM

*PA Propylene Glycol analyzed by Pace Analytical Services.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.

Work Order #: 1906-10652

Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 013
Sample Description: OUTFALL 004A-01
Sample Type : GRAB
Sample Date / Time : 6/10/2019 @ 22:18

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
pH	6.45		SU	SM4500H+B	6/11/2019	15:31	SAS
Fecal Coliform (MPN)	49	1.8	MPN/100 ml	SM9221E2 19-21ed	6/11/2019	3:50	DMC
BOD 5	9.6	3.0	mg/l	SM5210B 21ed	6/11/2019	22:33	AOO
Total Suspended Solids	6.3	2.0	mg/l	SM2540D 2011	6/14/2019	7:50	SNI
Oil & Grease Gravimetric	1.2	0.5	mg/l	EPA 1664A	6/19/2019	8:15	RMS
Dissolved Metals							
Potassium	4720	1000	ug/l	EPA 200.7	6/18/2019	16:33	DDP
Sodium	<3000	3000	ug/l	EPA 200.7	6/18/2019	16:33	DDP
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019	16:09	MEM

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Sample Number: 014
Sample Description: OUTFALL 012A-01
Sample Type : GRAB
Sample Date / Time : 6/10/2019 @ 22:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
pH	6.15		SU	SM4500H+B	6/11/2019	15:31	SAS
Fecal Coliform (MPN)	<1.8	1.8	MPN/100 ml	SM9221E2 19-21ed	6/11/2019	3:50	DMC
BOD 5	<3.0	3.0	mg/l	SM5210B 21ed	6/11/2019	22:36	AOO
Total Suspended Solids	3.7	2.0	mg/l	SM2540D 2011	6/14/2019	7:50	SNI
Oil & Grease Gravimetric	<0.5	0.5	mg/l	EPA 1664A	6/19/2019	8:15	RMS
Dissolved Metals							
Potassium	3980	1000	ug/l	EPA 200.7	6/18/2019	16:46	DDP
Sodium	10200	3000	ug/l	EPA 200.7	6/18/2019	16:46	DDP
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019	16:09	MEM

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.

Work Order #: 1906-10652

Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 015
Sample Description: OUTFALL 001A-02
Sample Type : GRAB
Sample Date / Time : 6/10/2019 @ 23:10

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
pH	4.10		SU	SM4500H+B	6/11/2019 15:31	SAS
Fecal Coliform (MPN)	22	1.8	MPN/100 ml	SM9221E2 19-21ed	6/11/2019 3:50	DMC
BOD 5	12	8.0	mg/l	SM5210B 21ed	6/11/2019 22:36	AOO
Total Suspended Solids	79	2.0	mg/l	SM2540D 2011	6/14/2019 18:50	SAS
Oil & Grease Gravimetric	<0.5	0.5	mg/l	EPA 1664A	6/19/2019 8:15	RMS
Dissolved Metals						
Potassium	<1000	1000	ug/l	EPA 200.7	6/18/2019 16:48	DDP
Sodium	<3000	3000	ug/l	EPA 200.7	6/18/2019 16:48	DDP
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019 16:09	MEM

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Sample Number: 016
Sample Description: OUTFALL 004A-02
Sample Type : GRAB
Sample Date / Time : 6/10/2019 @ 23:29

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
pH	6.18		SU	SM4500H+B	6/11/2019 15:31	SAS
Fecal Coliform (MPN)	540	1.8	MPN/100 ml	SM9221E2 19-21ed	6/11/2019 3:50	DMC
BOD 5	5.4	3.0	mg/l	SM5210B 21ed	6/11/2019 22:36	AOO
Total Suspended Solids	2.8	2.0	mg/l	SM2540D 2011	6/14/2019 18:50	SAS
Oil & Grease Gravimetric	1.7	0.5	mg/l	EPA 1664A	6/19/2019 8:15	RMS
Dissolved Metals						
Potassium	2020	1000	ug/l	EPA 200.7	6/18/2019 16:51	DDP
Sodium	<3000	3000	ug/l	EPA 200.7	6/18/2019 16:51	DDP
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019 16:09	MEM

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.
Work Order #: 1906-10652
Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 017
Sample Description: OUTFALL 012A-02
Sample Type : GRAB
Sample Date / Time : 6/10/2019 @ 23:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
pH	5.99		SU	SM4500H+B	6/11/2019	16:12	SAS
Fecal Coliform (MPN)	<1.8	1.8	MPN/100 ml	SM9221E2 19-21ed	6/11/2019	3:50	DMC
BOD 5	<3.0	3.0	mg/l	SM5210B 21ed	6/11/2019	22:41	AOO
Total Suspended Solids	4.3	2.0	mg/l	SM2540D 2011	6/14/2019	18:50	SAS
Oil & Grease Gravimetric	<0.5	0.5	mg/l	EPA 1664A	6/19/2019	8:15	RMS
Dissolved Metals							
Potassium	3980	1000	ug/l	EPA 200.7	6/18/2019	16:53	DDP
Sodium	10800	3000	ug/l	EPA 200.7	6/18/2019	16:53	DDP
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019	16:09	MEM

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Sample Number: 018
Sample Description: OUTFALL 004A-03
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 00:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
pH	6.24		SU	SM4500H+B	6/11/2019	16:12	SAS
Fecal Coliform (MPN)	170	1.8	MPN/100 ml	SM9221E2 19-21ed	6/11/2019	3:50	DMC
BOD 5	3.5	3.0	mg/l	SM5210B 21ed	6/11/2019	22:41	AOO
Total Suspended Solids	2.0	2.0	mg/l	SM2540D 2011	6/14/2019	18:50	SAS
Oil & Grease Gravimetric	0.6	0.5	mg/l	EPA 1664A	6/20/2019	15:00	RMS
Dissolved Metals							
Potassium	2860	1000	ug/l	EPA 200.7	6/18/2019	16:54	DDP
Sodium	<3000	3000	ug/l	EPA 200.7	6/18/2019	16:54	DDP
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019	16:09	MEM

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.

Work Order #: 1906-10652

Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 019
Sample Description: OUTFALL 012A-03
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 00:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
pH	6.06		SU	SM4500H+B	6/11/2019 16:12	SAS
Fecal Coliform (MPN)	<1.8	1.8	MPN/100 ml	SM9221E2 19-21ed	6/11/2019 3:50	DMC
BOD 5	<3.0	3.0	mg/l	SM5210B 21ed	6/11/2019 22:41	AOO
Total Suspended Solids	3.0	2.0	mg/l	SM2540D 2011	6/14/2019 18:50	SAS
Oil & Grease Gravimetric	<0.5	0.5	mg/l	EPA 1664A	6/20/2019 15:00	RMS
Dissolved Metals						
Potassium	4090	1000	ug/l	EPA 200.7	6/18/2019 16:56	DDP
Sodium	10500	3000	ug/l	EPA 200.7	6/18/2019 16:56	DDP
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019 16:09	MEM

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Sample Number: 020
Sample Description: OUTFALL 001A-01
Sample Type : GRAB
Sample Date / Time : 6/10/2019 @ 22:01

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Dry - no sample	NO FLOW				6/10/2019 22:01	*CS

Sample Number: 021
Sample Description: OUTFALL 006A-01
Sample Type : GRAB
Sample Date / Time : 6/10/2019 @ 22:28

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Dry - no sample	NO FLOW				6/10/2019 22:28	*CS

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.

Work Order #: 1906-10652

Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 022
Sample Description: OUTFALL 007A-01
Sample Type : GRAB
Sample Date / Time : 6/10/2019 @ 22:32

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Dry - no sample	NO FLOW				6/10/2019 22:32	*CS

Sample Number: 023
Sample Description: OUTFALL 009A-01
Sample Type : GRAB
Sample Date / Time : 6/10/2019 @ 22:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Dry - no sample	NO FLOW				6/10/2019 22:00	*CS

Sample Number: 024
Sample Description: OUTFALL 011A-01
Sample Type : GRAB
Sample Date / Time : 6/10/2019 @ 22:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Dry - no sample	NO FLOW				6/10/2019 22:15	*CS

Sample Number: 025
Sample Description: OUTFALL 013A-01
Sample Type : GRAB
Sample Date / Time : 6/10/2019 @ 22:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Dry - no sample	NO FLOW				6/10/2019 22:00	*CS

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.

Work Order #: 1906-10652

Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 026
Sample Description: OUTFALL 006A-02
Sample Type : GRAB
Sample Date / Time : 6/10/2019 @ 23:50

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Dry - no sample	NO FLOW				6/10/2019 23:50	*CS

Sample Number: 027
Sample Description: OUTFALL 007A-02
Sample Type : GRAB
Sample Date / Time : 6/10/2019 @ 23:55

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Dry - no sample	NO FLOW				6/10/2019 23:55	*CS

Sample Number: 028
Sample Description: OUTFALL 009A-02
Sample Type : GRAB
Sample Date / Time : 6/10/2019 @ 23:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Dry - no sample	NO FLOW				6/10/2019 23:00	*CS

Sample Number: 029
Sample Description: OUTFALL 011A-02
Sample Type : GRAB
Sample Date / Time : 6/10/2019 @ 23:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Dry - no sample	NO FLOW				6/10/2019 23:15	*CS

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.

Work Order #: 1906-10652

Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 030
Sample Description: OUTFALL 013A-02
Sample Type : GRAB
Sample Date / Time : 6/10/2019 @ 23:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Dry - no sample	NO FLOW				6/10/2019 23:00	*CS

Sample Number: 031
Sample Description: OUTFALL 001A-03
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 00:14

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Dry - no sample	NO FLOW				6/11/2019 0:14	*CS

Sample Number: 032
Sample Description: OUTFALL 006A-03
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 00:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Dry - no sample	NO FLOW				6/11/2019 0:40	*CS

Sample Number: 033
Sample Description: OUTFALL 007A-03
Sample Type : GRAB
Sample Date / Time : 6/11/2019

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Dry - no sample	NO FLOW				6/11/2019 0:00	*CS

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.

Work Order #: 1906-10652

Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 034
Sample Description: OUTFALL 009A-03
Sample Type : GRAB
Sample Date / Time : 6/11/2019

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Dry - no sample	NO FLOW				6/11/2019 0:00	*CS

Sample Number: 035
Sample Description: OUTFALL 011A-03
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 00:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Dry - no sample	NO FLOW				6/11/2019 0:15	*CS

Sample Number: 036
Sample Description: OUTFALL 013A-03
Sample Type : GRAB
Sample Date / Time : 6/11/2019

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Dry - no sample	NO FLOW				6/11/2019 0:00	*CS

*CS - No sample flow per client.

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

July 01, 2019

Data Reporting
R.I. Analytical Laboratories
41 Illinois Avenue
Warwick, RI 02888

RE: Project: 1906-10652
Pace Project No.: 7093905

Dear Data Reporting:
Enclosed are the analytical results for sample(s) received by the laboratory on June 17, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Sophia Sparkes

Sophia Sparkes
sophia.sparkes@pacelabs.com
(631)694-3040
Project Manager

Enclosures

cc: Kristen Phelan, R.I. Analytical Laboratories
Dawne Smart, R.I. Analytical

CERTIFICATIONS

Project: 1906-10652
Pace Project No.: 7093905

Indiana Certification IDs

7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas/NELAP Certification #: E-10177
Kentucky UST Certification #: 80226
Kentucky WW Certification #: 98019
Michigan Department of Environmental Quality, Laboratory #9050
Ohio VAP Certification #: CL0065
Oklahoma Certification #: 2018-101
Texas Certification #: T104704355
West Virginia Certification #: 330
Wisconsin Certification #: 999788130
USDA Soil Permit #: P330-16-00257

SAMPLE ANALYTE COUNT

Project: 1906-10652
Pace Project No.: 7093905

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
7093905001	1906-10652-001	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I
7093905002	1906-10652-002	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I
7093905003	1906-10652-003	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I
7093905004	1906-10652-004	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I
7093905005	1906-10652-005	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I
7093905006	1906-10652-006	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I
7093905007	1906-10652-007	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I
7093905008	1906-10652-008	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I
7093905009	1906-10652-009	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I
7093905010	1906-10652-010	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I
7093905011	1906-10652-011	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I
7093905012	1906-10652-012	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I

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Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: 1906-10652
Pace Project No.: 7093905

Sample: 1906-10652-001 **Lab ID: 7093905001** Collected: 06/10/19 22:00 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/18/19 17:58	57-55-6	

REPORT OF LABORATORY ANALYSIS

ANALYTICAL RESULTS

Project: 1906-10652
Pace Project No.: 7093905

Sample: 1906-10652-002 **Lab ID: 7093905002** Collected: 06/10/19 22:00 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/18/19 19:29	57-55-6	

REPORT OF LABORATORY ANALYSIS

ANALYTICAL RESULTS

Project: 1906-10652
Pace Project No.: 7093905

Sample: 1906-10652-003 **Lab ID: 7093905003** Collected: 06/10/19 22:00 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/18/19 19:38	57-55-6	

REPORT OF LABORATORY ANALYSIS

ANALYTICAL RESULTS

Project: 1906-10652
Pace Project No.: 7093905

Sample: 1906-10652-004 **Lab ID: 7093905004** Collected: 06/10/19 22:35 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/18/19 19:47	57-55-6	

REPORT OF LABORATORY ANALYSIS

ANALYTICAL RESULTS

Project: 1906-10652
Pace Project No.: 7093905

Sample: 1906-10652-005 **Lab ID: 7093905005** Collected: 06/10/19 23:00 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/18/19 19:56	57-55-6	

REPORT OF LABORATORY ANALYSIS

ANALYTICAL RESULTS

Project: 1906-10652
Pace Project No.: 7093905

Sample: 1906-10652-006 **Lab ID: 7093905006** Collected: 06/10/19 23:00 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/18/19 20:06	57-55-6	

REPORT OF LABORATORY ANALYSIS

ANALYTICAL RESULTS

Project: 1906-10652
Pace Project No.: 7093905

Sample: 1906-10652-007 **Lab ID: 7093905007** Collected: 06/10/19 23:14 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/18/19 20:24	57-55-6	

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Melville, NY 11747
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ANALYTICAL RESULTS

Project: 1906-10652
Pace Project No.: 7093905

Sample: 1906-10652-008 **Lab ID: 7093905008** Collected: 06/10/19 23:42 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/18/19 20:33	57-55-6	

REPORT OF LABORATORY ANALYSIS

ANALYTICAL RESULTS

Project: 1906-10652
Pace Project No.: 7093905

Sample: 1906-10652-009 **Lab ID: 7093905009** Collected: 06/11/19 00:00 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/18/19 20:42	57-55-6	

ANALYTICAL RESULTS

Project: 1906-10652
Pace Project No.: 7093905

Sample: 1906-10652-010 **Lab ID: 7093905010** Collected: 06/11/19 00:00 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/18/19 20:51	57-55-6	

REPORT OF LABORATORY ANALYSIS

ANALYTICAL RESULTS

Project: 1906-10652
Pace Project No.: 7093905

Sample: 1906-10652-011 **Lab ID: 7093905011** Collected: 06/11/19 00:18 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/18/19 21:00	57-55-6	

ANALYTICAL RESULTS

Project: 1906-10652
Pace Project No.: 7093905

Sample: 1906-10652-012 **Lab ID: 7093905012** Collected: 06/11/19 00:50 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/18/19 21:10	57-55-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: 1906-10652
Pace Project No.: 7093905

QC Batch: 507125 Analysis Method: EPA 8015 Alcohol-Glycol
QC Batch Method: EPA 8015 Alcohol-Glycol Analysis Description: EPA 8015 Modified
Associated Lab Samples: 7093905001, 7093905002, 7093905003, 7093905004, 7093905005, 7093905006, 7093905007, 7093905008, 7093905009

METHOD BLANK: 2340100 Matrix: Water
Associated Lab Samples: 7093905001, 7093905002, 7093905003, 7093905004, 7093905005, 7093905006, 7093905007, 7093905008, 7093905009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Propylene glycol	mg/L	<5.0	5.0	06/18/19 17:03	

LABORATORY CONTROL SAMPLE: 2340101

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Propylene glycol	mg/L	25	20.4	82	42-141	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2340102 2340103

Parameter	Units	7093905001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Propylene glycol	mg/L	<5.0	25	25	19.9	19.4	75	73	35-141	3	

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

QUALITY CONTROL DATA

Project: 1906-10652
Pace Project No.: 7093905

QC Batch: 507136 Analysis Method: EPA 8015 Alcohol-Glycol
QC Batch Method: EPA 8015 Alcohol-Glycol Analysis Description: EPA 8015 Modified
Associated Lab Samples: 7093905010, 7093905011, 7093905012

METHOD BLANK: 2340144 Matrix: Water
Associated Lab Samples: 7093905010, 7093905011, 7093905012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Propylene glycol	mg/L	<5.0	5.0	06/18/19 17:21	

LABORATORY CONTROL SAMPLE: 2340145

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Propylene glycol	mg/L	25	21.3	85	42-141	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2340146 2340147

Parameter	Units	7093907001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Propylene glycol	mg/L	<5.0	25	25	20.0	23.8	77	92	35-141	17	

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

QUALIFIERS

Project: 1906-10652
Pace Project No.: 7093905

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

LABORATORIES

PASI-I Pace Analytical Services - Indianapolis

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 1906-10652
Pace Project No.: 7093905

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
7093905001	1906-10652-001	EPA 8015 Alcohol-Glycol	507125		
7093905002	1906-10652-002	EPA 8015 Alcohol-Glycol	507125		
7093905003	1906-10652-003	EPA 8015 Alcohol-Glycol	507125		
7093905004	1906-10652-004	EPA 8015 Alcohol-Glycol	507125		
7093905005	1906-10652-005	EPA 8015 Alcohol-Glycol	507125		
7093905006	1906-10652-006	EPA 8015 Alcohol-Glycol	507125		
7093905007	1906-10652-007	EPA 8015 Alcohol-Glycol	507125		
7093905008	1906-10652-008	EPA 8015 Alcohol-Glycol	507125		
7093905009	1906-10652-009	EPA 8015 Alcohol-Glycol	507125		
7093905010	1906-10652-010	EPA 8015 Alcohol-Glycol	507136		
7093905011	1906-10652-011	EPA 8015 Alcohol-Glycol	507136		
7093905012	1906-10652-012	EPA 8015 Alcohol-Glycol	507136		

CHAIN OF CUSTODY RECORD

R.I. Analytical Laboratories, Inc.

41 Illinois Avenue
Warwick, RI 02888-3007
Tel: 800-937-2580
Fax: 401-738-1970

131 Coolidge St, Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580
Fax: 978-568-0078

Date Collected	Time Collected	Lab ID	Sample Identification	Grab or Composite	# of Containers & Type [C]	Preservation Code [P]	Matrix Code [M]		Propylene Glycol													
6/10/2019	22:00	1906-10652-001	Outfall 002A-01	G	2V	NP	O		X													
6/10/2019	22:00	1906-10652-002	Outfall 003A-01	G	2V	NP	O		X													
6/10/2019	22:00	1906-10652-003	Outfall 008A-01	G	2V	NP	O		X													
6/10/2019	22:35	1906-10652-004	Outfall 010A-01	G	2V	NP	O		X													
6/10/2019	23:00	1906-10652-005	Outfall 002A-02	G	2V	NP	O		X													
6/10/2019	23:00	1906-10652-006	Outfall 003A-02	G	2V	NP	O		X													
6/10/2019	23:14	1906-10652-007	Outfall 008A-02	G	2V	NP	O		X													
6/10/2019	23:42	1906-10652-008	Outfall 010A-02	G	2V	NP	O		X													
6/11/2019	0:00	1906-10652-009	Outfall 002A-03	G	2V	NP	O		X													
6/11/2019	0:00	1906-10652-010	Outfall 003A-03	G	2V	NP	O		X													

WO#:7093905

Send Report and Invoice to:		Subcontractor Information:	
Company Name: R.I. Analytical Laboratories, Inc.		Company Name:	Pace Analytical Services-IN
Address: 41 Illinois Avenue		Address:	7726 Moller Road
City/State/Zip: Warwick, RI 02888		City/State/Zip:	Indianapolis, IN 46268
Contact Person: Kristen Phelan		Contact Person:	Sophia Sparkes
Email: kphelan@rianalytical.com; datareporting@rianalytical.com		Email:	Sophia.Sparkes@pacelabs.com
Telephone: 401-737-8500 x 116		Telephone:	317-228-3100

Relinquished By	Date	Time	Received by	Date	Time
TQuarterman	6-12-19	1155	Fedex		
Fedex			Cary Turner	6/13/19	905

Turn Around Time	
X	Normal
	Rush ____ (Days)

Project Comments

If MCL is exceeded, notify Kristen Mayo (800-937-2580 x109) and Ruben Parrilla (800-937-2580 x160/cell #(617) 893-0257)

PO # : 397

Temperature Upon Receipt 5.1 °C

Date Shipped: 6/12/2019	
X	Fedex-rec. lab
X	Overnight
X	Shipped on Ice
WO #:	1906-10652

Containers: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile Preservatives: A=Ascorbic Acid, NH4=NH_4Cl, H=HCl, M=MeOH, N=HNO_3, NP=None, S=H_2SO_4, SB=$NaHSO_4$, SH=NaOH, T=$Na_2S_2O_3$, Z=ZnOAc

Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=Bulk/Solid, O=_____

CHAIN OF CUSTODY RECORD

R.I. Analytical Laboratories, Inc.

41 Illinois Avenue
Warwick, RI 02888-3007
Tel: 800-937-2580
Fax: 401-738-1970

131 Coolidge St, Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580
Fax: 978-568-0078

Date Collected	Time Collected	Lab ID	Sample Identification	Grab or Composite	# of Containers & Type [C]	Preservation Code [P]	Matrix Code [M]		Propylene Glycol													
6/11/2019	0:18	1906-10652-011	Outfall 008A-03	G	2V	NP	O		X													
6/11/2019	0:50	1906-10652-012	Outfall 010A-03	G	2V	NP	O		X													

WO#:7093905
PM: STS Due Date: 07/01/19
CLIENT: RIAL

Send Report and Invoice to:		Subcontractor Information:	
Company Name:	R.I. Analytical Laboratories, Inc.	Company Name:	Pace Analytical Services-IN
Address:	41 Illinois Avenue	Address:	7726 Moller Road
City/State/Zip:	Warwick, RI 02888	City/State/Zip:	Indianapolis, IN 46268
Contact Person:	Kristen Phelan	Contact Person:	Sophia Sparkes
Email:	kphelan@rianalytical.com; datareporting@rianalytical.com	Email:	Sophia.Sparkes@pacelabs.com
Telephone:	401-737-8500 x 116	Telephone:	317-228-3100

Relinquished By	Date	Time	Received by	Date	Time
T Quattrone	6.12.19	1155	Fedex		
Fedex			Cary Lucci	6/13/19	905

Turn Around Time	
X	Normal
	Rush ____ (Days)

Project Comments

If MCL is exceeded, notify Kristen Mayo (800-937-2580 x109) and Ruben Parrilla (800-937-2580 x160/cell #(617) 893-0257)

PO # : 397

Temperature Upon Receipt 5.1 °C

Date Shipped:	6/12/2019
X	Fedex-rec. lab
X	Overnight
X	Shipped on Ice
WO #:	1906-10652

Containers: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile Preservatives: A=Ascorbic Acid, NH4=NH_4Cl, H=HCl, M=MeOH, N=HNO_3, NP=None, S=H_2SO_4, SB=$NaHSO_4$, SH=NaOH, T=$Na_2S_2O_3$, Z=ZnOAc

Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=Bulk/Solid, O=_____

Pace Analytical

SAMPLE CONDITION UPON RECEIPT FORM

Project #: _____

Date/Time and Initials of person examining contents: CT 6/13/19 1222

Courier: [X] Fed Ex [ ] UPS [ ] USPS [ ] Client [ ] Commercial [ ] Pace [ ] Other _____

Tracking #: 7754 5323 6796

Custody Seal on Cooler/Box Present: [X] Yes [ ] No Seals Intact: [X] Yes [ ] No

Packing Material: [ ] Bubble Wrap [X] Bubble Bags [ ] None [ ] Other _____

Thermometer: 1 2 3 (4) 5 6 A B C D E F Ice Type [ ] Wet [X] Blue [ ] None

Samples collected today and on ice: [ ] Yes [ ] No [X] N/A

Cooler Temperature: 4.8 | 5.1

Ice Visible in Sample Containers?: [ ] Yes [X] No [ ] N/A

(Initial/Corrected) Temp should be above freezing to 6°C

If temp. is Over 6°C or under 0°C, was the PM Notified?: [ ] Yes [ ] No [X] N/A

All discrepancies will be written out in the comments section below.

	Yes	No
Are samples from West Virginia? Document any containers out of temp.		X
USDA Regulated Soils? (ID, NY, WA, OR,CA, NM, TX, OK, AR, LA, TN, AL, MS, NC, SC, GA, FL, or Puerto Rico)		X
Chain of Custody Present	X	
Chain of Custody Filled Out	X	
Short Hold Time Analysis (<72hr)?: Analysis:		X
Time 5035A TC placed in Freezer or Short Holds To Lab:		
Rush TAT Requested:		X
Containers Intact?	X	
Sample Label (IDs/Dates/Times) Match COC? Except TCs, which only require sample ID	X	

	Yes	No	N/A
All containers needing acid/base pres. Have been checked?: exceptions: VOA, coliform, LLHg, O&G, and any container with a septum cap or preserved with HCl. All containers needing preservation are found to be in compliance with EPA recommendation (<2, >9, >12) unless otherwise noted. Circle: HNO3 H2SO4 NaOH NaOH/ZnAc			X
Dissolved Metals field filtered?			X
Headspace Wisconsin Sulfide			X
	Present	Absent	N/A
Residual Chlorine Check (SVOC 625 Pest/PCB 608)			X
Residual Chlorine Check (Total/Amenable/Free Cyanide)			X
Headspace in VOA Vials (>6mm):			X
Trip Blank Present?:		X	
Trip Blank Custody Seals?:		X	

Comments:

Sample Container Count

CLIENT: PI ANALYTICAL

COC PAGE 1 of 2

COC ID# _____ Project # _____

Sample Line Item	DG9H VG9H	AG0U	AG1H	AG1U	AG2U	AG3S	WGFU	SP5T	BP1U	BP2N	BP2S	BP2U	BP3B	BP3N	BP3S	BP3U	SBS DI Bulk Kit R	VG9U		Matrix SlWt/NAL (Soil/Water/Non-Aqueous Liquid)	pH <2	pH >9	pH>12
1																		2		WT			
2																							
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							

Container Codes

Glass

DG9B	40mL Na Bisulfate amber vial	AG0U	100mL unpreserved amber glass
DG9H	40mL HCL amber voa vial	AG1H	1 liter HCL amber glass
DG9M	40mL MeOH clear vial	AG1S	1 liter H2SO4 amber glass
DG9P	40mL TSP amber vial	AG1T	1 liter Na Thiosulfate amber glass
DG9S	40mL H2SO4 amber vial	AG1U	1liter unpreserved amber glass
DG9T	40mL Na Thio amber vial	AG2N	500mL HNO3 amber glass
DG9U	40mL unpreserved amber vial	AG2S	500mL H2SO4 amber glass
VG9H	40mL HCL clear vial	AG2U	500mL unpreserved amber glass
VG9T	40mL Na Thio. clear vial	AG3S	250mL H2SO4 glass amber
VG9U	40mL unpreserved clear vial	AG3U	250mL unpreserved amber glass
VGFX	40mL w/hexane wipe vial	BG1H	1 liter HCL clear glass
VSG	Headspace septa vial & HCL	BG1S	1 liter H2SO4 clear glass
WGKU	8oz unpreserved clear jar	BG1T	1 liter Na Thiosulfate clear glass
WGFU	4oz clear soil jar	BG1U	1 liter unpreserved glass
JGFU	4oz unpreserved amber wide	BG3H	250mL HCl Clear Glass
		BG3U	250mL Unpreserved Clear Glass

Plastic / Misc.

BP1A	1 liter NaOH, Asc Acid plastic	BP3U	250mL unpreserved plastic
BP1N	1 liter HNO3 plastic	BP3Z	250mL NaOH, Zn Ac plastic
BP1S	1 liter H2SO4 plastic		
BP1U	1 liter unpreserved plastic	AF	Air Filter
BP1Z	1 liter NaOH, Zn, Ac	C	Air Cassettes
BP2A	500mL NaOH, Asc Acid plastic	R	Terra core kit
BP2N	500mL HNO3 plastic	SP5T	120mL Coliform Na Thiosulfate
BP2O	500mL NaOH plastic	U	Summa Can
BP2S	500mL H2SO4 plastic	ZPLC	Ziploc Bag
BP2U	500mL unpreserved plastic		
BP2Z	500mL NaOH, Zn Ac		
BP3B	250mL NaOH plastic		
BP3N	250mL HNO3 plastic		
BP3S	250mL H2SO4 plastic		

Sample Container Count

CLIENT: RI ANALYTICAL

COC PAGE 2 of 2

COC ID# _____ Project # _____

Sample Line Item	DG9H VG9H	AG0U	AG1H	AG1U	AG2U	AG3S	WGFU	SP5T	BP1U	BP2N	BP2S	BP2U	BP3B	BP3N	BP3S	BP3U	SBS Bulk Kit R	VGFU			Matrix SI/Wt/NAL (Soil/Water/Non-Aqueous Liquid)	pH <2	pH >9	pH>12
1																		2			WT			
2																		2			WT			
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

Container Codes

Glass

DG9B	40mL Na Bisulfate amber vial	AG0U	100mL unpreserved amber glass
DG9H	40mL HCL amber voa vial	AG1H	1 liter HCL amber glass
DG9M	40mL MeOH clear vial	AG1S	1 liter H2SO4 amber glass
DG9P	40mL TSP amber vial	AG1T	1 liter Na Thiosulfate amber glass
DG9S	40mL H2SO4 amber vial	AG1U	1liter unpreserved amber glass
DG9T	40mL Na Thio amber vial	AG2N	500mL HNO3 amber glass
DG9U	40mL unpreserved amber vial	AG2S	500mL H2SO4 amber glass
VG9H	40mL HCL clear vial	AG2U	500mL unpreserved amber glass
VG9T	40mL Na Thio. clear vial	AG3S	250mL H2SO4 glass amber
VG9U	40mL unpreserved clear vial	AG3U	250mL unpreserved amber glass
VGFX	40mL w/hexane wipe vial	BG1H	1 liter HCL clear glass
VSG	Headspace septa vial & HCL	BG1S	1 liter H2SO4 clear glass
WGKU	8oz unpreserved clear jar	BG1T	1 liter Na Thiosulfate clear glass
WGFU	4oz clear soil jar	BG1U	1 liter unpreserved glass
JGFU	4oz unpreserved amber wide	BG3H	250mL HCl Clear Glass
		BG3U	250mL Unpreserved Clear Glass

Plastic / Misc.

BP1A	1 liter NaOH, Asc Acid plastic	BP3U	250mL unpreserved plastic
BP1N	1 liter HNO3 plastic	BP3Z	250mL NaOH, Zn Ac plastic
BP1S	1 liter H2SO4 plastic		
BP1U	1 liter unpreserved plastic	AF	Air Filter
BP1Z	1 liter NaOH, Zn, Ac	C	Air Cassettes
BP2A	500mL NaOH, Asc Acid plastic	R	Terra core kit
BP2N	500mL HNO3 plastic	SP5T	120mL Coliform Na Thiosulfate
BP2O	500mL NaOH plastic	U	Summa Can
BP2S	500mL H2SO4 plastic	ZPLC	Ziploc Bag
BP2U	500mL unpreserved plastic		
BP2Z	500mL NaOH, Zn Ac		
BP3B	250mL NaOH plastic		
BP3N	250mL HNO3 plastic		
BP3S	250mL H2SO4 plastic		

CHAIN OF CUSTODY RECORD

R.I. Analytical Laboratories, Inc.

41 Illinois Avenue
Warwick, RI 02888
Tel: 800-937-2580
Fax: 401-738-1970

131 Coolidge St, Bldg. 2
Hudson, MA 01749
Tel: 888-228-3334
Fax: 978-568-0078

Date Collected	Time Collected	Field Sample Identification	Grab or Composite	# of Containers & Type [T]	Preservation Code [P]	Matrix Code [M]	Fecal Coliform	BOD, TSS, Surfactants, pH	COD, TOC	Oil & Grease 1664	Propylene Glycol	Total Metals	Dissolved K & Na		
6/10	2200	Outfall 002A-01	G	*	*	O	X	X	X	X	X	X	X		
6/10	2200	Outfall 003A-01 *	G	*	*	O	X	X	X	X	X	X	X		
6/10	2200	Outfall 008A-01	G	*	*	O	X	X	X	X	X	X	X		
6/10	2235	Outfall 010A-01	G	*	*	O	X	X	X	X	X	X	X		
6/10	2300	Outfall 002A-02	G	*	*	O	X	X	X	X	X	X	X		
6/10	2300	Outfall 003A-02	G	*	*	O	X	X	X	X	X	X	X		
6/10	2314	Outfall 008A-02	G	*	*	O	X	X	X	X	X	X	X		
6/10	2342	Outfall 010A-02	G	*	*	O	X	X	X	X	X	X	X		
6/11	0000	Outfall 002A-03	G	*	*	O	X	X	X	X	X	X	X		
6/11	0000	Outfall 003A-03	G	*	*	O	X	X	X	X	X	X	X		
6/11	0018	Outfall 008A-03	G	*	*	O	X	X	X	X	X	X	X		
6/11	0050	Outfall 010A-03	G	*	*	O	X	X	X	X	X	X	X		

*Fecal Coliform – 1 Sterile Non Preserved
BOD, TSS, Surfactants, pH – 1 500mL Non Preserved
COD, TOC – 1 250mL Sulfiric Acid Preserved
Oil & Grease 1664 – 32 oz Amber Glass Sulfuric Preserved
Propylene Glycol – 2 40mL Non-Preserved VOA Vial
Metals – 250mL Nitric Preserved
Dissolved Metals – 250ml Non Preserved

Total Metals:
Aluminum – 200.7
Chromium – 200.8
Copper – 200.7
Iron – 200.7
Lead – 200.7
Zinc – 200.7

Client Information				Project Information			
Company	Rhode Island Airport Corp			ProjectName:	T.F. Green RIPDES Monitoring		
Address:	2000 Post Rd			P.O. Number:		Project Number:	
City / State /	Warwick, RI 02886			Sampled by:			
Telephone:	691-2490	Fax:	691-2560	Email :address:	jbrolin@pvdairport.com		
Contact Person:	Jay Brolin			Email :address:			

Relinquished By	Date	Time	Received By
	06/11/19	0151	

Turn Around Time	
X	Normal
X	EMAIL Report
	5 Business days. Possible
	Rush _____ (business

Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, Sl=Sludge, A=Air, B=Bulk/Solid, O=__Storm Water_

* broke O+G upon receipt in lab
one
limited sample in remaining jar 06/11/19

Lab Use Only	
	Sample Pick Up Only
X	RIAL sampled; attach field hours
X	Shipped on ice
Workorder No:	1906-10652

2.0°C

CHAIN OF CUSTODY RECORD

R.I. Analytical Laboratories, Inc.

41 Illinois Avenue
Warwick, RI 02888
Tel: 800-937-2580
Fax: 401-738-1970

131 Coolidge St, Bldg. 2
Hudson, MA 01749
Tel: 888-228-3334
Fax: 978-568-0078

Date Collected	Time Collected	Field Sample Identification		Grab or Composite	# of Containers & Type [T]	Preservation Code [P]	Matrix Code [M]	Fecal Coliform	BOD, TSS, pH	Oil & Grease 1664	Dissolved Metals**
6/10	2201	Outfall 001A-01	NO FLOW	G	*	*	O				
6/10	2218	Outfall 004A-01		G	*	*	O	X	X	X	X
6/10	2228	Outfall 006A-01	NO FLOW	G	*	*	O				
6/10	2232	Outfall 007A-01	NO FLOW	G	*	*	O				
6/10	2200	Outfall 009A-01	NO FLOW	G	*	*	O				
6/10	2215	Outfall 011A-01	NO FLOW	G	*	*	O				
6/10	2230	Outfall 012A-01		G	*	*	O	X	X	X	X
6/10	2200	Outfall 013A-01	NO FLOW	G	*	*	O				
6/10	2310	Outfall 001A-02	NO FLOW	G	*	*	O	X	X	X	X
6/10	2329	Outfall 004A-02		G	*	*	O	X	X	X	X
6/10	2350	Outfall 006A-02	NO FLOW	G	*	*	O				
6/10	2355	Outfall 007A-02	NO FLOW	G	*	*	O				
6/10	2300	Outfall 009A-02	NO FLOW	G	*	*	O				
6/10	2315	Outfall 011A-02	NO FLOW	G	*	*	O				
6/10	2330	Outfall 012A-02		G	*	*	O	X	X	X	X
6/10	2300	Outfall 013A-02	NO FLOW	G	*	*	O				
6/11	0014	Outfall 001A-03	NO FLOW	G	*	*	O				
6/11	0030	Outfall 004A-03		G	*	*	O	X	X	X	X
6/11	0040	Outfall 006A-03	NO FLOW	G	*	*	O				
6/11		Outfall 007A-03	NO FLOW	G	*	*	O				
6/11	0000	Outfall 009A-03	NO FLOW	G	*	*	O				
6/11	0015	Outfall 011A-03	NO FLOW	G	*	*	O				
6/11	0030	Outfall 012A-03		G	*	*	O	X	X	X	X
6/11	0000	Outfall 013A-03	NO FLOW	G	*	*	O				

*Fecal Coliform – 1 Sterile Non Preserved
BOD, TSS, pH – 1 1000mL Non Preserved
Oil & Grease 1664 – 32 oz Amber Glass Sulfuric Preserved
Metals – 1 250mL Nitric Preserved

** Potassium – 200.7
Sodium – 200.7

Client Information			
Company	Rhode Island Airport Corp		
Address:	2000 Post Rd		
City / State /	Warwick, RI 02886		
Telephone:	691.2490	Fax:	691.2560
Contact Person:	Jay Brolin		

Project Information			
ProjectName:	T.F. Green RIPDES Monitoring		
P.O. Number:		Project Number:	
Sampled by:	RIAL Personnel		
Email :address:	jbrolin@pvdairport.com		
Email :address:			

Relinquished By	Date	Time	Received By
	061119	0157	

Turn Around Time	
X Normal	X EMAIL Report
5 Business days. Possible surcharge	
Rush ____ (business days)	

(*) Sample "Outfall 001A-02" was received.

pg 2 of 2

Lab Use Only	
	Sample Pick Up Only
X	RIAL sampled; attach field hours
X	Shipped on ice
Workorder No	1906-10652

2.0 °C

R.I. ANALYTICAL
Specialists in Environmental Services

LABORATORY REPORT

Rhode Island Airport Corp.
Attn: Mr. Jay Brolin
2000 Post Road
Warwick, RI 02886

Date Received: 6/11/2019
Date Reported: 7/8/2019
P.O. Number 27599

Work Order #: 1906-10661

Project Name: T.F. GREEN RIPDES MONITORING

Enclosed are the analytical results and Chain of Custody for your project referenced above. The sample(s) were analyzed by our Warwick, RI laboratory unless noted otherwise. When applicable, indication of sample analysis at our Hudson, MA laboratory and/or subcontracted results are noted and subcontracted reports are enclosed in their entirety.

All samples were analyzed within the established guidelines of US EPA approved methods with all requirements met, unless otherwise noted at the end of a given sample's analytical results or in a case narrative.

The Detection Limit is defined as the lowest level that can be reliably achieved during routine laboratory conditions.

These results only pertain to the samples submitted for this Work Order # and this report shall not be reproduced except in its entirety.

We certify that the following results are true and accurate to the best of our knowledge. If you have questions or need further assistance, please contact our Customer Service Department.

Approved by:

Dawne E. Smart
Data Reporting Manager

Laboratory Certification Numbers (as applicable to sample's origin state):
Warwick RI * RI LAI00033, MA M-RI015, CT PH-0508 Hudson MA * M-MA1117, RI LAO00319

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.
Work Order #: 1906-10661
Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 001
Sample Description: OUTFALL 002A-04
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 01:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
pH	6.68		SU	SM4500H+B	6/11/2019 16:40	SAS
BOD 5	<3.0	3.0	mg/l	SM5210B 21ed	6/11/2019 22:45	AOO
COD	15	10	mg/l	SM5220D 18-21ed	6/17/2019 8:00	SNI
Surfactants (MBAS)	140	100	ug/l	SM5540C 18-21ed	6/11/2019 16:45	SAS
TOC	5.4	0.5	mg/l	SM5310C 21 ed.	6/13/2019 21:25	SAS
Dissolved Metals						
Potassium	2770	1000	ug/l	EPA 200.7	6/18/2019 15:28	DDP
Sodium	<3000	3000	ug/l	EPA 200.7	6/18/2019 15:28	DDP
Total Metals						
Aluminum	<100	100	ug/l	EPA 200.7	6/18/2019 14:16	DDP
Copper	<10	10	ug/l	EPA 200.7	6/18/2019 14:16	DDP
Iron	671.3	100	ug/l	EPA 200.7	6/18/2019 14:16	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/18/2019 14:16	DDP
Total Metals						
Chromium	<1.0	1.0	ug/l	EPA 200.8	6/14/2019 21:00	AJD
Lead	<1.0	1.0	ug/l	EPA 200.8	6/14/2019 21:00	AJD
Propylene Glycol	See Attached				6/18/2019 18:25	*PA
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019 13:03	MEM
ICP Digestion				EPA 200.7	6/14/2019 17:31	MEM
ICPMS Digestion				EPA 200.8	6/13/2019 17:21	RB

*PA Propylene Glycol analyzed by Pace Analytical Services.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.
Work Order #: 1906-10661
Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 002
Sample Description: OUTFALL 003A-04
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 01:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
pH	6.45		SU	SM4500H+B	6/11/2019 16:40	SAS
BOD 5	<3.0	3.0	mg/l	SM5210B 21ed	6/11/2019 22:45	AOO
COD	10	10	mg/l	SM5220D 18-21ed	6/17/2019 8:00	SNI
Surfactants (MBAS)	260	100	ug/l	SM5540C 18-21ed	6/11/2019 16:45	SAS
TOC	4.1	0.5	mg/l	SM5310C 21 ed.	6/13/2019 21:25	SAS
Dissolved Metals						
Potassium	1660	1000	ug/l	EPA 200.7	6/18/2019 15:39	DDP
Sodium	<3000	3000	ug/l	EPA 200.7	6/18/2019 15:39	DDP
Total Metals						
Aluminum	<100	100	ug/l	EPA 200.7	6/18/2019 14:19	DDP
Copper	<10	10	ug/l	EPA 200.7	6/18/2019 14:19	DDP
Iron	1966	100	ug/l	EPA 200.7	6/18/2019 14:19	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/18/2019 14:19	DDP
Total Metals						
Chromium	<1.0	1.0	ug/l	EPA 200.8	6/14/2019 21:14	AJD
Lead	<1.0	1.0	ug/l	EPA 200.8	6/14/2019 21:14	AJD
Propylene Glycol	See Attached				6/18/2019 21:19	*PA
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019 13:03	MEM
ICP Digestion				EPA 200.7	6/14/2019 17:31	MEM
ICPMS Digestion				EPA 200.8	6/13/2019 17:21	RB

*PA Propylene Glycol analyzed by Pace Analytical Services.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.
Work Order #: 1906-10661
Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 003
Sample Description: OUTFALL 008A-04
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 01:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
pH	6.45		SU	SM4500H+B	6/11/2019	16:40	SAS
BOD 5	6.3	3.0	mg/l	SM5210B 21ed	6/11/2019	22:45	AOO
COD	17	10	mg/l	SM5220D 18-21ed	6/17/2019	8:00	SNI
Surfactants (MBAS)	<100	100	ug/l	SM5540C 18-21ed	6/11/2019	16:45	SAS
TOC	5.0	0.5	mg/l	SM5310C 21 ed	6/13/2019	21:25	SAS
Dissolved Metals							
Potassium	2400	1000	ug/l	EPA 200.7	6/18/2019	15:42	DDP
Sodium	8520	3000	ug/l	EPA 200.7	6/18/2019	15:42	DDP
Total Metals							
Aluminum	<100	100	ug/l	EPA 200.7	6/18/2019	14:37	DDP
Copper	10.17	10	ug/l	EPA 200.7	6/18/2019	14:37	DDP
Iron	1014	100	ug/l	EPA 200.7	6/18/2019	14:37	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/18/2019	14:37	DDP
Total Metals							
Chromium	1.1	1.0	ug/l	EPA 200.8	6/14/2019	21:18	AJD
Lead	1.4	1.0	ug/l	EPA 200.8	6/14/2019	21:18	AJD
Propylene Glycol	See Attached				6/18/2019	21:28	*PA
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019	13:03	MEM
ICP Digestion				EPA 200.7	6/14/2019	17:31	MEM
ICPMS Digestion				EPA 200.8	6/13/2019	17:21	RB

*PA Propylene Glycol analyzed by Pace Analytical Services.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.
Work Order #: 1906-10661
Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 004
Sample Description: OUTFALL 002A-05
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 02:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
pH	6.52		SU	SM4500H+B	6/11/2019 16:40	SAS
BOD 5	3.5	3.0	mg/l	SM5210B 21ed	6/11/2019 22:48	AOO
COD	11	10	mg/l	SM5220D 18-21ed	6/17/2019 8:00	SNI
Surfactants (MBAS)	<100	100	ug/l	SM5540C 18-21ed	6/11/2019 16:45	SAS
TOC	4.3	0.5	mg/l	SM5310C 21 ed.	6/13/2019 21:25	SAS
Dissolved Metals						
Potassium	3660	1000	ug/l	EPA 200.7	6/18/2019 15:45	DDP
Sodium	4720	3000	ug/l	EPA 200.7	6/18/2019 15:45	DDP
Total Metals						
Aluminum	<100	100	ug/l	EPA 200.7	6/18/2019 14:40	DDP
Copper	<10	10	ug/l	EPA 200.7	6/18/2019 14:40	DDP
Iron	1184	100	ug/l	EPA 200.7	6/18/2019 14:40	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/18/2019 14:40	DDP
Total Metals						
Chromium	<1.0	1.0	ug/l	EPA 200.8	6/14/2019 21:23	AJD
Lead	<1.0	1.0	ug/l	EPA 200.8	6/14/2019 21:23	AJD
Propylene Glycol	See Attached				6/18/2019 21:37	*PA
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019 13:03	MEM
ICP Digestion				EPA 200.7	6/14/2019 17:31	MEM
ICPMS Digestion				EPA 200.8	6/13/2019 17:21	RB

*PA Propylene Glycol analyzed by Pace Analytical Services.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.
Work Order #: 1906-10661
Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 005
Sample Description: OUTFALL 003A-05
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 02:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
pH	6.26		SU	SM4500H+B	6/11/2019	16:40	SAS
BOD 5	<3.0	3.0	mg/l	SM5210B 21ed	6/11/2019	23:25	AOO
COD	11	10	mg/l	SM5220D 18-21ed	6/17/2019	8:00	SNI
Surfactants (MBAS)	<100	100	ug/l	SM5540C 18-21ed	6/11/2019	16:45	SAS
TOC	4.1	0.5	mg/l	SM5310C 21 ed.	6/13/2019	21:25	SAS
Dissolved Metals							
Potassium	1840	1000	ug/l	EPA 200.7	6/18/2019	15:47	DDP
Sodium	<3000	3000	ug/l	EPA 200.7	6/18/2019	15:47	DDP
Total Metals							
Aluminum	<100	100	ug/l	EPA 200.7	6/18/2019	14:43	DDP
Copper	<10	10	ug/l	EPA 200.7	6/18/2019	14:43	DDP
Iron	2239	100	ug/l	EPA 200.7	6/18/2019	14:43	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/18/2019	14:43	DDP
Total Metals							
Chromium	<1.0	1.0	ug/l	EPA 200.8	6/14/2019	21:36	AJD
Lead	<1.0	1.0	ug/l	EPA 200.8	6/14/2019	21:36	AJD
Propylene Glycol	See Attached				6/18/2019	21:46	*PA
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019	13:03	MEM
ICP Digestion				EPA 200.7	6/14/2019	17:31	MEM
ICPMS Digestion				EPA 200.8	6/13/2019	17:21	RB

*PA Propylene Glycol analyzed by Pace Analytical Services.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.
Work Order #: 1906-10661
Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 006
Sample Description: OUTFALL 008A-05
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 02:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
pH	5.84		SU	SM4500H+B	6/11/2019	16:40	SAS
BOD 5	6.4	3.0	mg/l	SM5210B 21ed	6/11/2019	23:25	AOO
COD	13	10	mg/l	SM5220D 18-21ed	6/17/2019	8:00	SNI
Surfactants (MBAS)	<100	100	ug/l	SM5540C 18-21ed	6/11/2019	16:45	SAS
TOC	4.3	0.5	mg/l	SM5310C 21 ed.	6/13/2019	21:25	SAS
Dissolved Metals							
Potassium	2600	1000	ug/l	EPA 200.7	6/18/2019	15:50	DDP
Sodium	13000	3000	ug/l	EPA 200.7	6/18/2019	15:50	DDP
Total Metals							
Aluminum	<100	100	ug/l	EPA 200.7	6/18/2019	14:46	DDP
Copper	<10	10	ug/l	EPA 200.7	6/18/2019	14:46	DDP
Iron	1100	100	ug/l	EPA 200.7	6/18/2019	14:46	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/18/2019	14:46	DDP
Total Metals							
Chromium	1.0	1.0	ug/l	EPA 200.8	6/14/2019	21:40	AJD
Lead	<1.0	1.0	ug/l	EPA 200.8	6/14/2019	21:40	AJD
Propylene Glycol	See Attached				6/18/2019	22:04	*PA
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019	13:03	MEM
ICP Digestion				EPA 200.7	6/14/2019	17:31	MEM
ICPMS Digestion				EPA 200.8	6/13/2019	17:21	RB

*PA Propylene Glycol analyzed by Pace Analytical Services.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.
Work Order #: 1906-10661
Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 007
Sample Description: OUTFALL 002A-06
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 03:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
pH	6.33		SU	SM4500H+B	6/11/2019	16:40	SAS
BOD 5	4.7	3.0	mg/l	SM5210B 21ed	6/11/2019	23:25	AOO
COD	12	10	mg/l	SM5220D 18-21ed	6/17/2019	8:00	SNI
Surfactants (MBAS)	<100	100	ug/l	SM5540C 18-21ed	6/11/2019	16:45	SAS
TOC	5.1	0.5	mg/l	SM5310C 21 ed.	6/13/2019	21:25	SAS
Dissolved Metals							
Potassium	2220	1000	ug/l	EPA 200.7	6/18/2019	16:02	DDP
Sodium	<3000	3000	ug/l	EPA 200.7	6/18/2019	16:02	DDP
Total Metals							
Aluminum	<100	100	ug/l	EPA 200.7	6/19/2019	15:50	DDP
Copper	<10	10	ug/l	EPA 200.7	6/19/2019	15:50	DDP
Iron	3240	100	ug/l	EPA 200.7	6/20/2019	13:42	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/19/2019	15:50	DDP
Total Metals							
Chromium	<1.0	1.0	ug/l	EPA 200.8	6/14/2019	21:45	AJD
Lead	<1.0	1.0	ug/l	EPA 200.8	6/14/2019	21:45	AJD
Propylene Glycol	See Attached				6/18/2019	22:14	*PA
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019	13:03	MEM
ICP Digestion				EPA 200.7	6/18/2019	13:27	RB
ICPMS Digestion				EPA 200.8	6/13/2019	17:21	RB

*PA Propylene Glycol analyzed by Pace Analytical Services.

BOD 5 - Greater than 30% difference in dilution results, highest sample volume reported.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.

Work Order #: 1906-10661

Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 008
Sample Description: OUTFALL 003A-06
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 03:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
pH	6.52		SU	SM4500H+B	6/11/2019	16:40	SAS
BOD 5	<3.0	3.0	mg/l	SM5210B 21ed	6/11/2019	23:29	AOO
COD	<10	10	mg/l	SM5220D 18-21ed	6/17/2019	8:00	SNI
Surfactants (MBAS)	<100	100	ug/l	SM5540C 18-21ed	6/11/2019	16:45	SAS
TOC	3.8	0.5	mg/l	SM5310C 21 ed.	6/13/2019	21:25	SAS
Dissolved Metals							
Potassium	3680	1000	ug/l	EPA 200.7	6/18/2019	16:04	DDP
Sodium	9110	3000	ug/l	EPA 200.7	6/18/2019	16:04	DDP
Total Metals							
Aluminum	<100	100	ug/l	EPA 200.7	6/19/2019	15:52	DDP
Copper	10.5	10	ug/l	EPA 200.7	6/19/2019	15:52	DDP
Iron	966	100	ug/l	EPA 200.7	6/20/2019	13:44	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/19/2019	15:52	DDP
Total Metals							
Chromium	<1.0	1.0	ug/l	EPA 200.8	6/14/2019	21:49	AJD
Lead	<1.0	1.0	ug/l	EPA 200.8	6/14/2019	21:49	AJD
Propylene Glycol	See Attached				6/18/2019	22:23	*PA
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019	13:03	MEM
ICP Digestion				EPA 200.7	6/18/2019	13:27	RB
ICPMS Digestion				EPA 200.8	6/13/2019	17:21	RB

*PA Propylene Glycol analyzed by Pace Analytical Services.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.
Work Order #: 1906-10661
Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 009
Sample Description: OUTFALL 008A-06
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 03:05

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
pH	6.47		SU	SM4500H+B	6/11/2019	16:40	SAS
BOD 5	5.8	3.0	mg/l	SM5210B 21ed	6/11/2019	23:29	AOO
COD	15	10	mg/l	SM5220D 18-21ed	6/17/2019	8:00	SNI
Surfactants (MBAS)	<100	100	ug/l	SM5540C 18-21ed	6/11/2019	19:00	SAS
TOC	4.2	0.5	mg/l	SM5310C 21 ed.	6/13/2019	21:25	SAS
Dissolved Metals							
Potassium	2940	1000	ug/l	EPA 200.7	6/18/2019	16:07	DDP
Sodium	22200	3000	ug/l	EPA 200.7	6/18/2019	16:07	DDP
Total Metals							
Aluminum	<100	100	ug/l	EPA 200.7	6/19/2019	15:53	DDP
Copper	10.6	10	ug/l	EPA 200.7	6/19/2019	15:53	DDP
Iron	2170	100	ug/l	EPA 200.7	6/20/2019	13:46	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/19/2019	15:53	DDP
Total Metals							
Chromium	1.0	1.0	ug/l	EPA 200.8	6/14/2019	21:54	AJD
Lead	<1.0	1.0	ug/l	EPA 200.8	6/14/2019	21:54	AJD
Propylene Glycol	See Attached				6/18/2019	22:32	*PA
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019	13:03	MEM
ICP Digestion				EPA 200.7	6/18/2019	13:27	RB
ICPMS Digestion				EPA 200.8	6/13/2019	17:21	RB

*PA Propylene Glycol analyzed by Pace Analytical Services.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.
Work Order #: 1906-10661
Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 010
Sample Description: OUTFALL 002A-07
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 04:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
pH	6.35		SU	SM4500H+B	6/11/2019 17:00	SAS
BOD 5	5.7	3.0	mg/l	SM5210B 21ed	6/11/2019 23:29	AOO
COD	<10	10	mg/l	SM5220D 18-21ed	6/17/2019 8:00	SNI
Surfactants (MBAS)	<100	100	ug/l	SM5540C 18-21ed	6/11/2019 19:00	SAS
TOC	4.7	0.5	mg/l	SM5310C 21 ed.	6/17/2019 17:52	SAS
Dissolved Metals						
Potassium	2530	1000	ug/l	EPA 200.7	6/18/2019 16:10	DDP
Sodium	<3000	3000	ug/l	EPA 200.7	6/18/2019 16:10	DDP
Total Metals						
Aluminum	<100	100	ug/l	EPA 200.7	6/19/2019 16:03	DDP
Copper	<10	10	ug/l	EPA 200.7	6/19/2019 16:03	DDP
Iron	6500	100	ug/l	EPA 200.7	6/20/2019 13:47	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/19/2019 16:03	DDP
Total Metals						
Chromium	<1.0	1.0	ug/l	EPA 200.8	6/14/2019 21:58	AJD
Lead	<1.0	1.0	ug/l	EPA 200.8	6/14/2019 21:58	AJD
Propylene Glycol	See Attached				6/18/2019 22:41	*PA
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019 13:03	MEM
ICP Digestion				EPA 200.7	6/18/2019 13:27	RB
ICPMS Digestion				EPA 200.8	6/13/2019 17:21	RB

*PA Propylene Glycol analyzed by Pace Analytical Services.

BOD 5 - Greater than 30% difference in dilution results, highest sample volume reported.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.
Work Order #: 1906-10661
Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 011
Sample Description: OUTFALL 003A-07
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 04:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
pH	6.36		SU	SM4500H+B	6/11/2019	17:00	SAS
BOD 5	<3.0	3.0	mg/l	SM5210B 21ed	6/11/2019	23:32	AOO
COD	<10	10	mg/l	SM5220D 18-21ed	6/17/2019	8:00	SNI
Surfactants (MBAS)	<100	100	ug/l	SM5540C 18-21ed	6/11/2019	19:00	SAS
TOC	5.0	0.5	mg/l	SM5310C 21 ed.	6/17/2019	17:52	SAS
Dissolved Metals							
Potassium	3180	1000	ug/l	EPA 200.7	6/18/2019	16:13	DDP
Sodium	4690	3000	ug/l	EPA 200.7	6/18/2019	16:13	DDP
Total Metals							
Aluminum	<100	100	ug/l	EPA 200.7	6/19/2019	16:04	DDP
Copper	13.7	10	ug/l	EPA 200.7	6/19/2019	16:04	DDP
Iron	914	100	ug/l	EPA 200.7	6/20/2019	13:49	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/19/2019	16:04	DDP
Total Metals							
Chromium	<1.0	1.0	ug/l	EPA 200.8	6/14/2019	22:03	AJD
Lead	<1.0	1.0	ug/l	EPA 200.8	6/14/2019	22:03	AJD
Propylene Glycol	See Attached				6/18/2019	22:50	*PA
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019	13:03	MEM
ICP Digestion				EPA 200.7	6/18/2019	13:27	RB
ICPMS Digestion				EPA 200.8	6/13/2019	17:21	RB

*PA Propylene Glycol analyzed by Pace Analytical Services.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.

Work Order #: 1906-10661

Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 012
Sample Description: OUTFALL 008A-07
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 04:10

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
pH	6.45		SU	SM4500H+B	6/11/2019 17:00	SAS
BOD 5	6.0	3.0	mg/l	SM5210B 21ed	6/11/2019 23:32	AOO
COD	<10	10	mg/l	SM5220D 18-21ed	6/17/2019 8:00	SNI
Surfactants (MBAS)	100	100	ug/l	SM5540C 18-21ed	6/11/2019 19:00	SAS
TOC	4.5	0.5	mg/l	SM5310C 21 ed.	6/17/2019 17:52	SAS
Dissolved Metals						
Potassium	2750	1000	ug/l	EPA 200.7	6/18/2019 16:16	DDP
Sodium	12400	3000	ug/l	EPA 200.7	6/18/2019 16:16	DDP
Total Metals						
Aluminum	<100	100	ug/l	EPA 200.7	6/19/2019 16:06	DDP
Copper	<10	10	ug/l	EPA 200.7	6/19/2019 16:06	DDP
Iron	928	100	ug/l	EPA 200.7	6/20/2019 13:50	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/19/2019 16:06	DDP
Total Metals						
Chromium	<1.0	1.0	ug/l	EPA 200.8	6/14/2019 22:07	AJD
Lead	<1.0	1.0	ug/l	EPA 200.8	6/14/2019 22:07	AJD
Propylene Glycol	See Attached				6/18/2019 22:59	*PA
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019 13:03	MEM
ICP Digestion				EPA 200.7	6/18/2019 13:27	RB
ICPMS Digestion				EPA 200.8	6/13/2019 17:21	RB

*PA Propylene Glycol analyzed by Pace Analytical Services.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.
Work Order #: 1906-10661
Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 013
Sample Description: OUTFALL 002A-08
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 05:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
pH	6.49		SU	SM4500H+B	6/11/2019	17:00	SAS
BOD 5	<3.0	3.0	mg/l	SM5210B 21ed	6/12/2019	17:26	AOO
COD	<10	10	mg/l	SM5220D 18-21ed	6/18/2019	8:00	SNI
Surfactants (MBAS)	110	100	ug/l	SM5540C 18-21ed	6/11/2019	19:00	SAS
TOC	3.1	0.5	mg/l	SM5310C 21 ed.	6/17/2019	17:52	SAS
Dissolved Metals							
Potassium	3720	1000	ug/l	EPA 200.7	6/18/2019	16:19	DDP
Sodium	6970	3000	ug/l	EPA 200.7	6/18/2019	16:19	DDP
Total Metals							
Aluminum	<100	100	ug/l	EPA 200.7	6/19/2019	16:08	DDP
Copper	11.3	10	ug/l	EPA 200.7	6/19/2019	16:08	DDP
Iron	703	100	ug/l	EPA 200.7	6/20/2019	13:52	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/19/2019	16:08	DDP
Total Metals							
Chromium	1.0	1.0	ug/l	EPA 200.8	6/20/2019	20:17	AJD
Lead	<1.0	1.0	ug/l	EPA 200.8	6/20/2019	20:17	AJD
Propylene Glycol	See Attached				6/18/2019	23:08	*PA
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019	13:03	MEM
ICP Digestion				EPA 200.7	6/18/2019	13:27	RB
ICPMS Digestion				EPA 200.8	6/19/2019	13:27	RB

*PA Propylene Glycol analyzed by Pace Analytical Services.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.

Work Order #: 1906-10661

Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 014
Sample Description: OUTFALL 003A-08
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 05:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
pH	6.31		SU	SM4500H+B	6/11/2019	17:00	SAS
BOD 5	<3.0	3.0	mg/l	SM5210B 21ed	6/12/2019	17:26	AOO
COD	12	10	mg/l	SM5220D 18-21ed	6/18/2019	8:00	SNI
Surfactants (MBAS)	120	100	ug/l	SM5540C 18-21ed	6/11/2019	19:00	SAS
TOC	3.0	0.5	mg/l	SM5310C 21 ed.	6/17/2019	17:52	SAS
Dissolved Metals							
Potassium	1460	1000	ug/l	EPA 200.7	6/18/2019	16:22	DDP
Sodium	<3000	3000	ug/l	EPA 200.7	6/18/2019	16:22	DDP
Total Metals							
Aluminum	<100	100	ug/l	EPA 200.7	6/19/2019	16:09	DDP
Copper	<10	10	ug/l	EPA 200.7	6/19/2019	16:09	DDP
Iron	14200	100	ug/l	EPA 200.7	6/20/2019	13:54	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/19/2019	16:09	DDP
Total Metals							
Chromium	<1.0	1.0	ug/l	EPA 200.8	6/20/2019	20:26	AJD
Lead	1.5	1.0	ug/l	EPA 200.8	6/20/2019	20:26	AJD
Propylene Glycol	See Attached				6/18/2019	23:17	*PA
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019	13:03	MEM
ICP Digestion				EPA 200.7	6/18/2019	13:27	RB
ICPMS Digestion				EPA 200.8	6/19/2019	13:27	RB

*PA Propylene Glycol analyzed by Pace Analytical Services.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.
Work Order #: 1906-10661
Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 015
Sample Description: OUTFALL 008A-08
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 05:10

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
pH	6.40		SU	SM4500H+B	6/11/2019	17:38	SAS
BOD 5	3.6	3.0	mg/l	SM5210B 21ed	6/12/2019	17:26	AOO
COD	16	10	mg/l	SM5220D 18-21ed	6/18/2019	8:00	SNI
Surfactants (MBAS)	<100	100	ug/l	SM5540C 18-21ed	6/11/2019	19:00	SAS
TOC	3.5	0.5	mg/l	SM5310C 21 ed.	6/17/2019	17:52	SAS
Dissolved Metals							
Potassium	1300	1000	ug/l	EPA 200.7	6/18/2019	16:24	DDP
Sodium	6880	3000	ug/l	EPA 200.7	6/18/2019	16:24	DDP
Total Metals							
Aluminum	180	100	ug/l	EPA 200.7	6/19/2019	16:13	DDP
Copper	12.3	10	ug/l	EPA 200.7	6/19/2019	16:13	DDP
Iron	2160	100	ug/l	EPA 200.7	6/20/2019	13:57	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/19/2019	16:13	DDP
Total Metals							
Chromium	1.8	1.0	ug/l	EPA 200.8	6/20/2019	20:30	AJD
Lead	1.6	1.0	ug/l	EPA 200.8	6/20/2019	20:30	AJD
Propylene Glycol	See Attached				6/18/2019	23:26	*PA
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019	13:03	MEM
ICP Digestion				EPA 200.7	6/18/2019	13:27	RB
ICPMS Digestion				EPA 200.8	6/19/2019	13:27	RB

*PA Propylene Glycol analyzed by Pace Analytical Services.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.
Work Order #: 1906-10661
Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 016
Sample Description: OUTFALL 002A-09
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 06:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
pH	5.79		SU	SM4500H+B	6/11/2019 17:38	SAS
BOD 5	<3.0	3.0	mg/l	SM5210B 21ed	6/12/2019 17:28	AOO
COD	<10	10	mg/l	SM5220D 18-21ed	6/18/2019 8:00	SNI
Surfactants (MBAS)	130	100	ug/l	SM5540C 18-21ed	6/11/2019 19:00	SAS
TOC	3.0	0.5	mg/l	SM5310C 21 ed.	6/17/2019 17:52	SAS
Dissolved Metals						
Potassium	1120	1000	ug/l	EPA 200.7	6/18/2019 16:27	DDP
Sodium	<3000	3000	ug/l	EPA 200.7	6/18/2019 16:27	DDP
Total Metals						
Aluminum	<100	100	ug/l	EPA 200.7	6/19/2019 16:14	DDP
Copper	<10	10	ug/l	EPA 200.7	6/19/2019 16:14	DDP
Iron	2180	100	ug/l	EPA 200.7	6/20/2019 14:32	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/19/2019 16:14	DDP
Total Metals						
Chromium	<1.0	1.0	ug/l	EPA 200.8	6/20/2019 20:35	AJD
Lead	1.0	1.0	ug/l	EPA 200.8	6/20/2019 20:35	AJD
Propylene Glycol	See Attached				6/18/2019 23:45	*PA
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019 13:03	MEM
ICP Digestion				EPA 200.7	6/18/2019 13:27	RB
ICPMS Digestion				EPA 200.8	6/19/2019 13:27	RB

*PA Propylene Glycol analyzed by Pace Analytical Services.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.
Work Order #: 1906-10661
Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 017
Sample Description: OUTFALL 003A-09
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 06:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
pH	6.26		SU	SM4500H+B	6/11/2019	17:38	SAS
BOD 5	<3.0	3.0	mg/l	SM5210B 21ed	6/12/2019	17:28	AOO
COD	14	10	mg/l	SM5220D 18-21ed	6/18/2019	8:00	SNI
Surfactants (MBAS)	<100	100	ug/l	SM5540C 18-21ed	6/11/2019	19:00	SAS
TOC	4.5	0.5	mg/l	SM5310C 21 ed.	6/17/2019	17:52	SAS
Dissolved Metals							
Potassium	1690	1000	ug/l	EPA 200.7	6/18/2019	16:38	DDP
Sodium	<3000	3000	ug/l	EPA 200.7	6/18/2019	16:38	DDP
Total Metals							
Aluminum	<100	100	ug/l	EPA 200.7	6/19/2019	16:17	DDP
Copper	<10	10	ug/l	EPA 200.7	6/19/2019	16:17	DDP
Iron	356	100	ug/l	EPA 200.7	6/20/2019	14:36	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/19/2019	16:17	DDP
Total Metals							
Chromium	<1.0	1.0	ug/l	EPA 200.8	6/20/2019	20:39	AJD
Lead	<1.0	1.0	ug/l	EPA 200.8	6/20/2019	20:39	AJD
Propylene Glycol	See Attached				6/18/2019	23:54	*PA
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019	13:03	MEM
ICP Digestion				EPA 200.7	6/18/2019	13:27	RB
ICPMS Digestion				EPA 200.8	6/19/2019	13:27	RB

*PA Propylene Glycol analyzed by Pace Analytical Services.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.

Work Order #: 1906-10661

Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 018
Sample Description: OUTFALL 008A-09
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 06:05

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
pH	6.47		SU	SM4500H+B	6/11/2019	17:38	SAS
BOD 5	<3.0	3.0	mg/l	SM5210B 21ed	6/12/2019	17:28	AOO
COD	<10	10	mg/l	SM5220D 18-21ed	6/18/2019	8:00	SNI
Surfactants (MBAS)	<100	100	ug/l	SM5540C 18-21ed	6/11/2019	19:00	SAS
TOC	3.6	0.5	mg/l	SM5310C 21 ed.	6/17/2019	17:52	SAS
Dissolved Metals							
Potassium	1580	1000	ug/l	EPA 200.7	6/18/2019	16:41	DDP
Sodium	6240	3000	ug/l	EPA 200.7	6/18/2019	16:41	DDP
Total Metals							
Aluminum	<100	100	ug/l	EPA 200.7	6/19/2019	16:41	DDP
Copper	<10	10	ug/l	EPA 200.7	6/19/2019	16:41	DDP
Iron	1290	100	ug/l	EPA 200.7	6/20/2019	14:37	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/19/2019	16:41	DDP
Total Metals							
Chromium	1.3	1.0	ug/l	EPA 200.8	6/20/2019	20:44	AJD
Lead	<1.0	1.0	ug/l	EPA 200.8	6/20/2019	20:44	AJD
Propylene Glycol	See Attached				6/19/2019	0:03	*PA
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019	13:03	MEM
ICP Digestion				EPA 200.7	6/18/2019	13:27	RB
ICPMS Digestion				EPA 200.8	6/19/2019	13:27	RB

*PA Propylene Glycol analyzed by Pace Analytical Services.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.
Work Order #: 1906-10661
Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 019
Sample Description: OUTFALL 002A-10
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 07:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
pH	6.16		SU	SM4500H+B	6/11/2019	17:38	SAS
BOD 5	<3.0	3.0	mg/l	SM5210B 21ed	6/12/2019	17:31	AOO
COD	<10	10	mg/l	SM5220D 18-21ed	6/18/2019	8:00	SNI
Surfactants (MBAS)	<100	100	ug/l	SM5540C 18-21ed	6/11/2019	19:00	SAS
TOC	3.2	0.5	mg/l	SM5310C 21 ed.	6/17/2019	17:52	SAS
Dissolved Metals							
Potassium	1250	1000	ug/l	EPA 200.7	6/18/2019	16:44	DDP
Sodium	<3000	3000	ug/l	EPA 200.7	6/18/2019	16:44	DDP
Total Metals							
Aluminum	<100	100	ug/l	EPA 200.7	6/19/2019	16:43	DDP
Copper	<10	10	ug/l	EPA 200.7	6/19/2019	16:43	DDP
Iron	1330	100	ug/l	EPA 200.7	6/20/2019	14:39	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/19/2019	16:43	DDP
Total Metals							
Chromium	<1.0	1.0	ug/l	EPA 200.8	6/20/2019	20:48	AJD
Lead	<1.0	1.0	ug/l	EPA 200.8	6/20/2019	20:48	AJD
Propylene Glycol	See Attached				6/19/2019	0:12	*PA
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019	13:03	MEM
ICP Digestion				EPA 200.7	6/18/2019	13:27	RB
ICPMS Digestion				EPA 200.8	6/19/2019	13:27	RB

*PA Propylene Glycol analyzed by Pace Analytical Services.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.
Work Order #: 1906-10661
Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 020
Sample Description: OUTFALL 003A-10
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 07:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
pH	6.37		SU	SM4500H+B	6/11/2019	17:38	SAS
BOD 5	<3.0	3.0	mg/l	SM5210B 21ed	6/12/2019	17:31	AOO
COD	11	10	mg/l	SM5220D 18-21ed	6/18/2019	8:00	SNI
Surfactants (MBAS)	<100	100	ug/l	SM5540C 18-21ed	6/11/2019	19:00	SAS
TOC	5.6	0.5	mg/l	SM5310C 21 ed.	6/17/2019	17:52	SAS
Dissolved Metals							
Potassium	3190	1000	ug/l	EPA 200.7	6/18/2019	15:36	DDP
Sodium	3680	3000	ug/l	EPA 200.7	6/18/2019	15:36	DDP
Total Metals							
Aluminum	<100	100	ug/l	EPA 200.7	6/19/2019	16:46	DDP
Copper	11.1	10	ug/l	EPA 200.7	6/19/2019	16:46	DDP
Iron	909	100	ug/l	EPA 200.7	6/20/2019	14:42	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/19/2019	16:46	DDP
Total Metals							
Chromium	<1.0	1.0	ug/l	EPA 200.8	6/20/2019	21:01	AJD
Lead	<1.0	1.0	ug/l	EPA 200.8	6/20/2019	21:01	AJD
Propylene Glycol	See Attached				6/19/2019	0:21	*PA
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019	13:23	MEM
ICP Digestion				EPA 200.7	6/18/2019	13:27	RB
ICPMS Digestion				EPA 200.8	6/19/2019	13:27	RB

*PA Propylene Glycol analyzed by Pace Analytical Services.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.
Work Order #: 1906-10661
Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 021
Sample Description: OUTFALL 008A-10
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 07:05

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
pH	6.31		SU	SM4500H+B	6/11/2019	17:38	SAS
BOD 5	<3.0	3.0	mg/l	SM5210B 21ed	6/12/2019	17:31	AOO
COD	<10	10	mg/l	SM5220D 18-21ed	6/18/2019	8:00	SNI
Surfactants (MBAS)	<100	100	ug/l	SM5540C 18-21ed	6/11/2019	19:00	SAS
TOC	3.4	0.5	mg/l	SM5310C 21 ed.	6/17/2019	17:52	SAS
Dissolved Metals							
Potassium	2330	1000	ug/l	EPA 200.7	6/18/2019	15:42	DDP
Sodium	10400	3000	ug/l	EPA 200.7	6/18/2019	15:42	DDP
Total Metals							
Aluminum	<100	100	ug/l	EPA 200.7	6/19/2019	16:50	DDP
Copper	<10	10	ug/l	EPA 200.7	6/19/2019	16:50	DDP
Iron	699	100	ug/l	EPA 200.7	6/20/2019	14:53	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/19/2019	16:50	DDP
Total Metals							
Chromium	1.1	1.0	ug/l	EPA 200.8	6/20/2019	21:06	AJD
Lead	<1.0	1.0	ug/l	EPA 200.8	6/20/2019	21:06	AJD
Propylene Glycol	See Attached				6/19/2019	0:30	*PA
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019	13:23	MEM
ICP Digestion				EPA 200.7	6/18/2019	13:27	RB
ICPMS Digestion				EPA 200.8	6/19/2019	13:27	RB

*PA Propylene Glycol analyzed by Pace Analytical Services.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.
Work Order #: 1906-10661
Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 022
Sample Description: OUTFALL 002A-11
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 08:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
pH	6.10		SU	SM4500H+B	6/11/2019 17:38	SAS
BOD 5	<3.0	3.0	mg/l	SM5210B 21ed	6/12/2019 17:35	AOO
COD	<10	10	mg/l	SM5220D 18-21ed	6/18/2019 8:00	SNI
Surfactants (MBAS)	<100	100	ug/l	SM5540C 18-21ed	6/11/2019 19:00	SAS
TOC	3.1	0.5	mg/l	SM5310C 21 ed.	6/17/2019 17:52	SAS
Dissolved Metals						
Potassium	<1000	1000	ug/l	EPA 200.7	6/18/2019 15:43	DDP
Sodium	<3000	3000	ug/l	EPA 200.7	6/18/2019 15:43	DDP
Total Metals						
Aluminum	<100	100	ug/l	EPA 200.7	6/19/2019 16:52	DDP
Copper	<10	10	ug/l	EPA 200.7	6/19/2019 16:52	DDP
Iron	2490	100	ug/l	EPA 200.7	6/20/2019 14:55	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/19/2019 16:52	DDP
Total Metals						
Chromium	<1.0	1.0	ug/l	EPA 200.8	6/20/2019 21:10	AJD
Lead	1.6	1.0	ug/l	EPA 200.8	6/20/2019 21:10	AJD
Propylene Glycol	See Attached				6/18/2019 0:39	*PA
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019 13:23	MEM
ICP Digestion				EPA 200.7	6/18/2019 13:27	RB
ICPMS Digestion				EPA 200.8	6/19/2019 13:27	RB

*PA Propylene Glycol analyzed by Pace Analytical Services.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.

Work Order #: 1906-10661

Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 023
Sample Description: OUTFALL 003A-11
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 08:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
pH	6.20		SU	SM4500H+B	6/11/2019	17:38	SAS
BOD 5	<3.0	3.0	mg/l	SM5210B 21ed	6/12/2019	17:35	AOO
COD	<10	10	mg/l	SM5220D 18-21ed	6/18/2019	8:00	SNI
Surfactants (MBAS)	<100	100	ug/l	SM5540C 18-21ed	6/11/2019	19:00	SAS
TOC	4.3	0.5	mg/l	SM5310C 21 ed.	6/17/2019	17:52	SAS
Dissolved Metals							
Potassium	1290	1000	ug/l	EPA 200.7	6/18/2019	15:45	DDP
Sodium	<3000	3000	ug/l	EPA 200.7	6/18/2019	15:45	DDP
Total Metals							
Aluminum	<100	100	ug/l	EPA 200.7	6/19/2019	16:53	DDP
Copper	<10	10	ug/l	EPA 200.7	6/19/2019	16:53	DDP
Iron	894	100	ug/l	EPA 200.7	6/20/2019	14:57	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/19/2019	16:53	DDP
Total Metals							
Chromium	<1.0	1.0	ug/l	EPA 200.8	6/20/2019	21:15	AJD
Lead	<1.0	1.0	ug/l	EPA 200.8	6/20/2019	21:15	AJD
Propylene Glycol	See Attached				6/18/2019	0:49	*PA
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019	13:23	MEM
ICP Digestion				EPA 200.7	6/18/2019	13:27	RB
ICPMS Digestion				EPA 200.8	6/19/2019	13:27	RB

*PA Propylene Glycol analyzed by Pace Analytical Services

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.

Work Order #: 1906-10661

Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 024
Sample Description: OUTFALL 008A-11
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 08:05

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
pH	6.33		SU	SM4500H+B	6/11/2019 17:38	SAS
BOD 5	<3.0	3.0	mg/l	SM5210B 21ed	6/12/2019 17:35	AOO
COD	11	10	mg/l	SM5220D 18-21ed	6/18/2019 8:00	SNI
Surfactants (MBAS)	<100	100	ug/l	SM5540C 18-21ed	6/11/2019 19:00	SAS
TOC	3.7	0.5	mg/l	SM5310C 21 ed.	6/17/2019 17:52	SAS
Dissolved Metals						
Potassium	1210	1000	ug/l	EPA 200.7	6/18/2019 15:46	DDP
Sodium	4070	3000	ug/l	EPA 200.7	6/18/2019 15:46	DDP
Total Metals						
Aluminum	102	100	ug/l	EPA 200.7	6/19/2019 16:55	DDP
Copper	<10	10	ug/l	EPA 200.7	6/19/2019 16:55	DDP
Iron	882	100	ug/l	EPA 200.7	6/20/2019 14:58	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/19/2019 16:55	DDP
Total Metals						
Chromium	1.6	1.0	ug/l	EPA 200.8	6/20/2019 21:19	AJD
Lead	1.0	1.0	ug/l	EPA 200.8	6/20/2019 21:19	AJD
Propylene Glycol	See Attached				6/19/2019 0:58	*PA
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019 13:23	MEM
ICP Digestion				EPA 200.7	6/18/2019 13:27	RB
ICPMS Digestion				EPA 200.8	6/19/2019 13:27	RB

*PA Propylene Glycol analyzed by Pace Analytical Services.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.

Work Order #: 1906-10661

Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 025
Sample Description: OUTFALL 002A-12
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 09:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
pH	6.07		SU	SM4500H+B	6/11/2019	17:38	SAS
BOD 5	<3.0	3.0	mg/l	SM5210B 21ed	6/12/2019	17:38	AOO
COD	14	10	mg/l	SM5220D 18-21ed	6/18/2019	8:00	SNI
Surfactants (MBAS)	110	100	ug/l	SM5540C 18-21ed	6/12/2019	19:30	DMC
TOC	3.2	0.5	mg/l	SM5310C 21 ed.	6/17/2019	17:52	SAS
Dissolved Metals							
Potassium	1200	1000	ug/l	EPA 200.7	6/18/2019	15:48	DDP
Sodium	<3000	3000	ug/l	EPA 200.7	6/18/2019	15:48	DDP
Total Metals							
Aluminum	<100	100	ug/l	EPA 200.7	6/19/2019	17:03	DDP
Copper	<10	10	ug/l	EPA 200.7	6/19/2019	17:03	DDP
Iron	2230	100	ug/l	EPA 200.7	6/20/2019	15:00	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/19/2019	17:03	DDP
Total Metals							
Chromium	<1.0	1.0	ug/l	EPA 200.8	6/20/2019	21:24	AJD
Lead	<1.0	1.0	ug/l	EPA 200.8	6/20/2019	21:24	AJD
Propylene Glycol	See Attached				6/19/2019	1:07	*PA
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019	13:23	MEM
ICP Digestion				EPA 200.7	6/18/2019	13:27	RB
ICPMS Digestion				EPA 200.8	6/19/2019	13:27	RB

*PA Propylene Glycol analyzed by Pace Analytical Services.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.
Work Order #: 1906-10661
Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 026
Sample Description: OUTFALL 003A-12
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 09:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
pH	6.13		SU	SM4500H+B	6/11/2019	17:38	SAS
BOD 5	<3.0	3.0	mg/l	SM5210B 21ed	6/12/2019	17:38	AOO
COD	11	10	mg/l	SM5220D 18-21ed	6/18/2019	8:00	SNI
Surfactants (MBAS)	150	100	ug/l	SM5540C 18-21ed	6/12/2019	19:30	DMC
TOC	4.7	0.5	mg/l	SM5310C 21 ed.	6/17/2019	17:52	SAS
Dissolved Metals							
Potassium	1420	1000	ug/l	EPA 200.7	6/18/2019	15:56	DDP
Sodium	<3000	3000	ug/l	EPA 200.7	6/18/2019	15:56	DDP
Total Metals							
Aluminum	<100	100	ug/l	EPA 200.7	6/19/2019	12:44	DDP
Copper	12.3	10	ug/l	EPA 200.7	6/19/2019	12:44	DDP
Iron	385	100	ug/l	EPA 200.7	6/19/2019	12:44	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/19/2019	12:44	DDP
Total Metals							
Chromium	<1.0	1.0	ug/l	EPA 200.8	6/20/2019	21:33	AJD
Lead	<1.0	1.0	ug/l	EPA 200.8	6/20/2019	21:33	AJD
Propylene Glycol	See Attached				6/19/2019	1:25	*PA
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019	13:23	MEM
ICP Digestion				EPA 200.7	6/18/2019	16:25	RB
ICPMS Digestion				EPA 200.8	6/19/2019	13:27	RB

*PA Propylene Glycol analyzed by Pace Analytical Services.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.
Work Order #: 1906-10661
Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 027
Sample Description: OUTFALL 008A-12
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 09:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
pH	6.32		SU	SM4500H+B	6/11/2019	17:38	SAS
BOD 5	<3.0	3.0	mg/l	SM5210B 21ed	6/12/2019	17:38	AOO
COD	<10	10	mg/l	SM5220D 18-21ed	6/18/2019	8:00	SNI
Surfactants (MBAS)	<100	100	ug/l	SM5540C 18-21ed	6/12/2019	19:30	DMC
TOC	3.8	0.5	mg/l	SM5310C 21 ed.	6/17/2019	17:52	SAS
Dissolved Metals							
Potassium	1690	1000	ug/l	EPA 200.7	6/18/2019	15:58	DDP
Sodium	12000	3000	ug/l	EPA 200.7	6/18/2019	15:58	DDP
Total Metals							
Aluminum	<100	100	ug/l	EPA 200.7	6/21/2019	12:40	DDP
Copper	<10	10	ug/l	EPA 200.7	6/21/2019	12:40	DDP
Iron	865	100	ug/l	EPA 200.7	6/21/2019	12:40	DDP
Zinc	<100	100	ug/l	EPA 200.7	6/21/2019	12:40	DDP
Total Metals							
Chromium	1.8	1.0	ug/l	EPA 200.8	6/20/2019	21:37	AJD
Lead	<1.0	1.0	ug/l	EPA 200.8	6/20/2019	21:37	AJD
Propylene Glycol	See Attached				6/18/2019	19:01	*PA
ICP Digestion (Dissolved)				EPA 200.7	6/14/2019	13:23	MEM
ICP Digestion				EPA 200.7	6/19/2019	12:13	RB
ICPMS Digestion				EPA 200.8	6/19/2019	13:27	RB

*PA Propylene Glycol analyzed by Pace Analytical Services.

The pH analysis ideally should be performed in the field. The pH analysis was performed by the laboratory as soon as possible after receipt.

Surfactants (MBAS) - Calculated as LAS, mol wt. 342.

Sample Number: 028
Sample Description: OUTFALL 0010A-04
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 01:56

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED		ANALYST
Dry - no sample	Complete				7/8/2019	15:52	DMC

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.
Work Order #: 1906-10661
Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 029
Sample Description: OUTFALL 0010A-05
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 02:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Dry - no sample	Complete				7/8/2019 15:52	DMC

Sample Number: 030
Sample Description: OUTFALL 0010A-06
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 03:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Dry - no sample	Complete				7/8/2019 15:52	DMC

Sample Number: 031
Sample Description: OUTFALL 0010A-07
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 04:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Dry - no sample	Complete				7/8/2019 15:52	DMC

Sample Number: 032
Sample Description: OUTFALL 0010A-08
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 05:20

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Dry - no sample	Complete				7/8/2019 15:52	DMC

R.I. Analytical Laboratories, Inc.

Laboratory Report

Rhode Island Airport Corp.
Work Order #: 1906-10661
Project Name: T.F. GREEN RIPDES MONITORING

Sample Number: 033
Sample Description: OUTFALL 0010A-09
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 06:20

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Dry - no sample	Complete				7/8/2019 15:52	DMC

Sample Number: 034
Sample Description: OUTFALL 0010A-10
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 07:20

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Dry - no sample	Complete				7/8/2019 15:52	DMC

Sample Number: 035
Sample Description: OUTFALL 0010A-11
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 08:20

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Dry - no sample	Complete				7/8/2019 15:52	DMC

Sample Number: 036
Sample Description: OUTFALL 0010A-12
Sample Type : GRAB
Sample Date / Time : 6/11/2019 @ 09:20

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TIME ANALYZED	ANALYST
Dry - no sample	Complete				7/8/2019 15:52	DMC

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

July 01, 2019

Data Reporting
R.I. Analytical Laboratories
41 Illinois Avenue
Warwick, RI 02888

RE: Project: 1906-10661
Pace Project No.: 7093907

Dear Data Reporting:
Enclosed are the analytical results for sample(s) received by the laboratory on June 17, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Sophia Sparkes

Sophia Sparkes
sophia.sparkes@pacelabs.com
(631)694-3040
Project Manager

Enclosures

cc: Kristen Phelan, R.I. Analytical Laboratories
Dawne Smart, R.I. Analytical

CERTIFICATIONS

Project: 1906-10661
Pace Project No.: 7093907

Indiana Certification IDs

7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas/NELAP Certification #: E-10177
Kentucky UST Certification #: 80226
Kentucky WW Certification #: 98019
Michigan Department of Environmental Quality, Laboratory #9050
Ohio VAP Certification #: CL0065
Oklahoma Certification #: 2018-101
Texas Certification #: T104704355
West Virginia Certification #: 330
Wisconsin Certification #: 999788130
USDA Soil Permit #: P330-16-00257

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

SAMPLE ANALYTE COUNT

Project: 1906-10661
Pace Project No.: 7093907

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
7093907001	1906-10661-001	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I
7093907002	1906-10661-002	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I
7093907003	1906-10661-003	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I
7093907004	1906-10661-004	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I
7093907005	1906-10661-005	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I
7093907006	1906-10661-006	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I
7093907007	1906-10661-007	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I
7093907008	1906-10661-008	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I
7093907009	1906-10661-009	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I
7093907010	1906-10661-010	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I
7093907011	1906-10661-011	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I
7093907012	1906-10661-012	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I
7093907013	1906-10661-013	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I
7093907014	1906-10661-014	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I
7093907015	1906-10661-015	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I
7093907016	1906-10661-016	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I
7093907017	1906-10661-017	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I
7093907018	1906-10661-018	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I
7093907019	1906-10661-019	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I
7093907020	1906-10661-020	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I
7093907021	1906-10661-021	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I
7093907022	1906-10661-022	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I
7093907023	1906-10661-023	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I
7093907024	1906-10661-024	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I
7093907025	1906-10661-025	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I
7093907026	1906-10661-026	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I
7093907027	1906-10661-027	EPA 8015 Alcohol-Glycol	CPH	1	PASI-I

ANALYTICAL RESULTS

Project: 1906-10661
Pace Project No.: 7093907

Sample: 1906-10661-001 **Lab ID: 7093907001** Collected: 06/11/19 01:00 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/18/19 18:25	57-55-6	

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
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ANALYTICAL RESULTS

Project: 1906-10661
Pace Project No.: 7093907

Sample: 1906-10661-002 **Lab ID: 7093907002** Collected: 06/11/19 01:00 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/18/19 21:19	57-55-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: 1906-10661
Pace Project No.: 7093907

Sample: 1906-10661-003 **Lab ID: 7093907003** Collected: 06/11/19 01:40 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/18/19 21:28	57-55-6	

ANALYTICAL RESULTS

Project: 1906-10661
Pace Project No.: 7093907

Sample: 1906-10661-004 **Lab ID: 7093907004** Collected: 06/11/19 02:00 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/18/19 21:37	57-55-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: 1906-10661
Pace Project No.: 7093907

Sample: 1906-10661-005 **Lab ID: 7093907005** Collected: 06/11/19 02:00 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/18/19 21:46	57-55-6	

REPORT OF LABORATORY ANALYSIS

ANALYTICAL RESULTS

Project: 1906-10661
Pace Project No.: 7093907

Sample: 1906-10661-006 **Lab ID: 7093907006** Collected: 06/11/19 02:15 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/18/19 22:04	57-55-6	

ANALYTICAL RESULTS

Project: 1906-10661
Pace Project No.: 7093907

Sample: 1906-10661-007 **Lab ID: 7093907007** Collected: 06/11/19 03:00 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/18/19 22:14	57-55-6	

REPORT OF LABORATORY ANALYSIS

ANALYTICAL RESULTS

Project: 1906-10661
Pace Project No.: 7093907

Sample: 1906-10661-008 **Lab ID: 7093907008** Collected: 06/11/19 03:00 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/18/19 22:23	57-55-6	

ANALYTICAL RESULTS

Project: 1906-10661
Pace Project No.: 7093907

Sample: 1906-10661-009 **Lab ID: 7093907009** Collected: 06/11/19 03:05 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/18/19 22:32	57-55-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: 1906-10661
Pace Project No.: 7093907

Sample: 1906-10661-010 **Lab ID: 7093907010** Collected: 06/11/19 04:00 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/18/19 22:41	57-55-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: 1906-10661
Pace Project No.: 7093907

Sample: 1906-10661-011 **Lab ID: 7093907011** Collected: 06/11/19 04:00 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/18/19 22:50	57-55-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: 1906-10661
Pace Project No.: 7093907

Sample: 1906-10661-012 **Lab ID: 7093907012** Collected: 06/11/19 04:10 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/18/19 22:59	57-55-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: 1906-10661
Pace Project No.: 7093907

Sample: 1906-10661-013 **Lab ID: 7093907013** Collected: 06/11/19 05:00 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/18/19 23:08	57-55-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: 1906-10661
Pace Project No.: 7093907

Sample: 1906-10661-014 **Lab ID: 7093907014** Collected: 06/11/19 05:00 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/18/19 23:17	57-55-6	

ANALYTICAL RESULTS

Project: 1906-10661
Pace Project No.: 7093907

Sample: 1906-10661-015 **Lab ID: 7093907015** Collected: 06/11/19 05:10 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/18/19 23:26	57-55-6	

ANALYTICAL RESULTS

Project: 1906-10661
Pace Project No.: 7093907

Sample: 1906-10661-016 **Lab ID: 7093907016** Collected: 06/11/19 06:00 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/18/19 23:45	57-55-6	

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: 1906-10661
Pace Project No.: 7093907

Sample: 1906-10661-017 **Lab ID: 7093907017** Collected: 06/11/19 06:00 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/18/19 23:54	57-55-6	

REPORT OF LABORATORY ANALYSIS

ANALYTICAL RESULTS

Project: 1906-10661
Pace Project No.: 7093907

Sample: 1906-10661-018 **Lab ID: 7093907018** Collected: 06/11/19 06:05 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/19/19 00:03	57-55-6	

REPORT OF LABORATORY ANALYSIS

ANALYTICAL RESULTS

Project: 1906-10661
Pace Project No.: 7093907

Sample: 1906-10661-019 **Lab ID: 7093907019** Collected: 06/11/19 07:00 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/19/19 00:12	57-55-6	

REPORT OF LABORATORY ANALYSIS

ANALYTICAL RESULTS

Project: 1906-10661
Pace Project No.: 7093907

Sample: 1906-10661-020 **Lab ID: 7093907020** Collected: 06/11/19 07:00 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/19/19 00:21	57-55-6	

REPORT OF LABORATORY ANALYSIS

ANALYTICAL RESULTS

Project: 1906-10661
Pace Project No.: 7093907

Sample: 1906-10661-021 **Lab ID: 7093907021** Collected: 06/11/19 07:05 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/19/19 00:30	57-55-6	

REPORT OF LABORATORY ANALYSIS

ANALYTICAL RESULTS

Project: 1906-10661
Pace Project No.: 7093907

Sample: 1906-10661-022 **Lab ID: 7093907022** Collected: 06/11/19 08:00 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/19/19 00:39	57-55-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: 1906-10661
Pace Project No.: 7093907

Sample: 1906-10661-023 **Lab ID: 7093907023** Collected: 06/11/19 08:00 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/19/19 00:49	57-55-6	

REPORT OF LABORATORY ANALYSIS

ANALYTICAL RESULTS

Project: 1906-10661
Pace Project No.: 7093907

Sample: 1906-10661-024 **Lab ID: 7093907024** Collected: 06/11/19 08:05 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/19/19 00:58	57-55-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: 1906-10661
Pace Project No.: 7093907

Sample: 1906-10661-025 **Lab ID: 7093907025** Collected: 06/11/19 09:00 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/19/19 01:07	57-55-6	

REPORT OF LABORATORY ANALYSIS

ANALYTICAL RESULTS

Project: 1906-10661
Pace Project No.: 7093907

Sample: 1906-10661-026 **Lab ID: 7093907026** Collected: 06/11/19 09:00 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/19/19 01:25	57-55-6	

REPORT OF LABORATORY ANALYSIS

ANALYTICAL RESULTS

Project: 1906-10661
Pace Project No.: 7093907

Sample: 1906-10661-027 **Lab ID: 7093907027** Collected: 06/11/19 09:20 Received: 06/17/19 15:45 Matrix: Other

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015M Glycols in water	Analytical Method: EPA 8015 Alcohol-Glycol							
Propylene glycol	**<5.0**	mg/L	5.0	1		06/18/19 19:01	57-55-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: 1906-10661
Pace Project No.: 7093907

QC Batch: 507136 Analysis Method: EPA 8015 Alcohol-Glycol
QC Batch Method: EPA 8015 Alcohol-Glycol Analysis Description: EPA 8015 Modified
Associated Lab Samples: 7093907001, 7093907002, 7093907003, 7093907004, 7093907005, 7093907006, 7093907007, 7093907008, 7093907009, 7093907010, 7093907011, 7093907012, 7093907013, 7093907014, 7093907015, 7093907016, 7093907017

METHOD BLANK: 2340144 Matrix: Water
Associated Lab Samples: 7093907001, 7093907002, 7093907003, 7093907004, 7093907005, 7093907006, 7093907007, 7093907008, 7093907009, 7093907010, 7093907011, 7093907012, 7093907013, 7093907014, 7093907015, 7093907016, 7093907017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Propylene glycol	mg/L	<5.0	5.0	06/18/19 17:21	

LABORATORY CONTROL SAMPLE: 2340145

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Propylene glycol	mg/L	25	21.3	85	42-141	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2340146 2340147

Parameter	Units	7093907001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Propylene glycol	mg/L	<5.0	25	25	20.0	23.8	77	92	35-141	17	

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

QUALITY CONTROL DATA

Project: 1906-10661
Pace Project No.: 7093907

QC Batch: 507138 Analysis Method: EPA 8015 Alcohol-Glycol
QC Batch Method: EPA 8015 Alcohol-Glycol Analysis Description: EPA 8015 Modified
Associated Lab Samples: 7093907018, 7093907019, 7093907020, 7093907021, 7093907022, 7093907023, 7093907024, 7093907025, 7093907026, 7093907027

METHOD BLANK: 2340152 Matrix: Water
Associated Lab Samples: 7093907018, 7093907019, 7093907020, 7093907021, 7093907022, 7093907023, 7093907024, 7093907025, 7093907026, 7093907027

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Propylene glycol	mg/L	<5.0	5.0	06/18/19 17:39	

LABORATORY CONTROL SAMPLE: 2340153

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Propylene glycol	mg/L	25	20.8	83	42-141	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2340154 2340155

Parameter	Units	7093907027 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Propylene glycol	mg/L	<5.0	25	25	23.8	23.1	92	89	35-141	3	

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

QUALIFIERS

Project: 1906-10661
Pace Project No.: 7093907

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

LABORATORIES

PASI-I Pace Analytical Services - Indianapolis

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 1906-10661
Pace Project No.: 7093907

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
7093907001	1906-10661-001	EPA 8015 Alcohol-Glycol	507136		
7093907002	1906-10661-002	EPA 8015 Alcohol-Glycol	507136		
7093907003	1906-10661-003	EPA 8015 Alcohol-Glycol	507136		
7093907004	1906-10661-004	EPA 8015 Alcohol-Glycol	507136		
7093907005	1906-10661-005	EPA 8015 Alcohol-Glycol	507136		
7093907006	1906-10661-006	EPA 8015 Alcohol-Glycol	507136		
7093907007	1906-10661-007	EPA 8015 Alcohol-Glycol	507136		
7093907008	1906-10661-008	EPA 8015 Alcohol-Glycol	507136		
7093907009	1906-10661-009	EPA 8015 Alcohol-Glycol	507136		
7093907010	1906-10661-010	EPA 8015 Alcohol-Glycol	507136		
7093907011	1906-10661-011	EPA 8015 Alcohol-Glycol	507136		
7093907012	1906-10661-012	EPA 8015 Alcohol-Glycol	507136		
7093907013	1906-10661-013	EPA 8015 Alcohol-Glycol	507136		
7093907014	1906-10661-014	EPA 8015 Alcohol-Glycol	507136		
7093907015	1906-10661-015	EPA 8015 Alcohol-Glycol	507136		
7093907016	1906-10661-016	EPA 8015 Alcohol-Glycol	507136		
7093907017	1906-10661-017	EPA 8015 Alcohol-Glycol	507136		
7093907018	1906-10661-018	EPA 8015 Alcohol-Glycol	507138		
7093907019	1906-10661-019	EPA 8015 Alcohol-Glycol	507138		
7093907020	1906-10661-020	EPA 8015 Alcohol-Glycol	507138		
7093907021	1906-10661-021	EPA 8015 Alcohol-Glycol	507138		
7093907022	1906-10661-022	EPA 8015 Alcohol-Glycol	507138		
7093907023	1906-10661-023	EPA 8015 Alcohol-Glycol	507138		
7093907024	1906-10661-024	EPA 8015 Alcohol-Glycol	507138		
7093907025	1906-10661-025	EPA 8015 Alcohol-Glycol	507138		
7093907026	1906-10661-026	EPA 8015 Alcohol-Glycol	507138		
7093907027	1906-10661-027	EPA 8015 Alcohol-Glycol	507138		

CHAIN OF CUSTODY RECORD

R.I. Analytical Laboratories, Inc.

41 Illinois Avenue
Warwick, RI 02888-3007
Tel: 800-937-2580
Fax: 401-738-1970

131 Coolidge St, Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580
Fax: 978-568-0078

Date Collected	Time Collected	Lab ID	Sample Identification	Grab or Composite	# of Containers & Type [C]	Preservation Code [P]	Matrix Code [M]		Propylene Glycol
6/11/2019	01:00	1906-10661-001	Outfall 002A-04	G	2V	NP	O		X
6/11/2019	01:00	1906-10661-002	Outfall 003A-04	G	2V	NP	O		X
6/11/2019	01:40	1906-10661-003	Outfall 008A-04	G	2V	NP	O		X
6/11/2019	02:00	1906-10661-004	Outfall 002A-05	G	2V	NP	O		X
6/11/2019	02:00	1906-10661-005	Outfall 003A-05	G	2V	NP	O		X
6/11/2019	02:15	1906-10661-006	Outfall 008A-05	G	2V	NP	O		X
6/11/2019	03:00	1906-10661-007	Outfall 002A-06	G	2V	NP	O		X
6/11/2019	03:00	1906-10661-008	Outfall 003A-06	G	2V	NP	O		X
6/11/2019	03:05	1906-10661-009	Outfall 008A-06	G	2V	NP	O		X
6/11/2019	04:00	1906-10661-010	Outfall 002A-07	G	2V	NP	O		X

WO#:7093907

Send Report and Invoice to:		Subcontractor Information:	
Company Name: R.I. Analytical Laboratories, Inc.		Company Name:	Pace Analytical Services-IN
Address: 41 Illinois Avenue		Address:	7726 Moller Road
City/State/Zip: Warwick, RI 02888		City/State/Zip:	Indianapolis, IN 46268
Contact Person: Kristen Phelan		Contact Person:	Sophia Sparkes
Email: kphelan@rianalytical.com; datareporting@rianalytical.com		Email:	Sophia.Sparkes@pacelabs.com
Telephone: 401-737-8500 x 116		Telephone:	317-228-3100

Relinquished By	Date	Time	Received by	Date	Time
[illegible]	6/12/19	1155	Fed-ex		
FedEX			Lenny Tucci	6/13/19	905

Turn Around Time	
X	Normal
	Rush ____ (Days)

Project Comments

If MCL is exceeded, notify Kristen Mayo (800-937-2580 x109) and Ruben Parrilla (800-937-2580 x160/cell #(617) 893-0257)

PO # : 398

Temperature Upon Receipt 5.1 °C

Date Shipped: 6/12/2019	
X	Fedex-rec. lab
X	Overnight
X	Shipped on Ice
WO #:	1906-10661

Containers: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile Preservatives: A=Ascorbic Acid, NH4=NH_4Cl, H=HCl, M=MeOH, N=HNO_3, NP=None, S=H_2SO_4, SB=$NaHSO_4$, SH=NaOH, T=$Na_2S_2O_3$, Z=ZnOAc

Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=Bulk/Solid, O=_____ Stormwater

CHAIN OF CUSTODY RECORD

R.I. Analytical Laboratories, Inc.

41 Illinois Avenue
Warwick, RI 02888-3007
Tel: 800-937-2580
Fax: 401-738-1970

131 Coolidge St, Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580
Fax: 978-568-0078

Date Collected	Time Collected	Lab ID	Sample Identification	Grab or Composite	# of Containers & Type C	Preservation Code P	Matrix Code M		Propylene Glycol
6/11/2019	04:00	1906-10661-011	Outfall 003A-07	G	2V	NP	O		X
6/11/2019	04:10	1906-10661-012	Outfall 008A-07	G	2V	NP	O		X
6/11/2019	05:00	1906-10661-013	Outfall 002A-08	G	2V	NP	O		X
6/11/2019	05:00	1906-10661-014	Outfall 003A-08	G	2V	NP	O		X
6/11/2019	05:10	1906-10661-015	Outfall 008A-08	G	2V	NP	O		X
6/11/2019	06:00	1906-10661-016	Outfall 002A-09	G	2V	NP	O		X
6/11/2019	06:00	1906-10661-017	Outfall 003A-09	G	2V	NP	O		X
6/11/2019	06:05	1906-10661-018	Outfall 008A-09	G	2V	NP	O		X
6/11/2019	07:00	1906-10661-019	Outfall 002A-10	G	2V	NP	O		X
6/11/2019	07:00	1906-10661-020	Outfall 003A-10	G	2V	NP	O		X

WO#:7093907
PM: STS Due Date: 07/01/19
CLIENT: RIAL

Send Report and Invoice to:		Subcontractor Information:	
Company Name:	R.I. Analytical Laboratories, Inc.	Company Name:	Pace Analytical Services-IN
Address:	41 Illinois Avenue	Address:	7726 Moller Road
City/State/Zip:	Warwick, RI 02888	City/State/Zip:	Indianapolis, IN 46268
Contact Person:	Kristen Phelan	Contact Person:	Sophia Sparkes
Email:	kphelan@rianalytical.com; datareporting@rianalytical.com	Email:	Sophia.Sparkes@pacelabs.com
Telephone:	401-737-8500 x 116	Telephone:	317-228-3100

Relinquished By	Date	Time	Received by	Date	Time
[illegible]	6/12/19	1155	Fedex		
Fedex			Courtney	6-13-19	905

Turn Around Time	
X	Normal
	Rush ____ (Days)

Project Comments

If MCL is exceeded, notify Kristen Mayo (800-937-2580 x109) and Ruben Parrilla (800-937-2580 x160/cell #(617) 893-0257)

PO # : 398

Temperature Upon Receipt 5.1 °C

Date Shipped: 6/12/2019	
X	Fedex-rec. lab
X	Overnight
X	Shipped on Ice
WO #:	1906-10661

Containers: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile Preservatives: A=Ascorbic Acid, NH4=NH_4Cl, H=HCl, M=MeOH, N=HNO_3, NP=None, S=H_2SO_4, SB=$NaHSO_4$, SH=NaOH, T=$Na_2S_2O_3$, Z=ZnOAc

Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=Bulk/Solid, O=_____ Stormwater

CHAIN OF CUSTODY RECORD

R.I. Analytical Laboratories, Inc.

41 Illinois Avenue
Warwick, RI 02888-3007
Tel: 800-937-2580
Fax: 401-738-1970

131 Coolidge St, Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580
Fax: 978-568-0078

Date Collected	Time Collected	Lab ID	Sample Identification	Grab or Composite	# of Containers & Type [C]	Preservation Code [P]	Matrix Code [M]		Propylene Glycol														
6/11/2019	07:05	1906-10661-021	Outfall 008A-10	G	2V	NP	O		X														
6/11/2019	08:00	1906-10661-022	Outfall 002A-11	G	2V	NP	O		X														
6/11/2019	08:00	1906-10661-023	Outfall 003A-11	G	2V	NP	O		X														
6/11/2019	08:05	1906-10661-024	Outfall 008A-11	G	2V	NP	O		X														
6/11/2019	09:00	1906-10661-025	Outfall 002A-12	G	2V	NP	O		X														
6/11/2019	09:00	1906-10661-026	Outfall 003A-12	G	2V	NP	O		X														
6/11/2019	09:20	1906-10661-027	Outfall 008A-12	G	2V	NP	O		X														
				G	2V	NP	O		X														
				G	2V	NP	O		X														
				G	2V	NP	O		X														

WO#: 7093907

PM: STS Due Date: 07/01/19
CLIENT: RIAL

Send Report and Invoice to:		Subcontractor Information:	
Company Name: R.I. Analytical Laboratories, Inc.		Company Name:	Pace Analytical Services-IN
Address: 41 Illinois Avenue		Address:	7726 Moller Road
City/State/Zip: Warwick, RI 02888		City/State/Zip:	Indianapolis, IN 46268
Contact Person: Kristen Phelan		Contact Person:	Sophia Sparkes
Email: kphelan@rianalytical.com; datareporting@rianalytical.com		Email:	Sophia.Sparkes@pacelabs.com
Telephone: 401-737-8500 x 116		Telephone:	317-228-3100

Relinquished By	Date	Time	Received by	Date	Time
Thermo-S	6-12-19	1155	Fedex		
Fedex				6/13/19	905

Turn Around Time	
X	Normal
	Rush ____ (Days)

Project Comments

If MCL is exceeded, notify Kristen Mayo (800-937-2580 x109) and Ruben Parrilla (800-937-2580 x160/cell #(617) 893-0257)

PO # : 398

Temperature Upon Receipt 5.1 °C

Date Shipped: 6/12/2019	
X	Fedex-rec. lab
X	Overnight
X	Shipped on Ice
WO #:	1906-10661

Containers: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile Preservatives: A=Ascorbic Acid, NH4=NH_4Cl, H=HCl, M=MeOH, N=HNO_3, NP=None, S=H_2SO_4, SB=$NaHSO_4$, SH=NaOH, T=$Na_2S_2O_3$, Z=ZnOAc

Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=Bulk/Solid, O=_____ Stormwater

CHAIN OF CUSTODY RECORD

R.I. Analytical Laboratories, Inc.

41 Illinois Avenue
Warwick, RI 02888
Tel: 800-937-2580
Fax: 401-738-1970

131 Coolidge St, Bldg. 2
Hudson, MA 01749
Tel: 888-228-3334
Fax: 978-568-0078

Date Collected	Time Collected	Field Sample Identification	Grab or Composite	# of Containers & Type T	Preservation Code P	Matrix Code M	BOD, Surfactants, pH	COD, TOC	Propylene Glycol	Metals**	Dissolved K & Na
6/11	0100	Outfall 002A-04	G	*	*	O	X	X	X	X	X
6/11	0100	Outfall 003A-04	G	*	*	O	X	X	X	X	X
6/11	0140	Outfall 008A-04	G	*	*	O	X	X	X	X	X
6/11	0156	Outfall 010A-04 NO FLOW	~~G~~	*	*	~~O~~					
6/11	0200	Outfall 002A-05	G	*	*	O	X	X	X	X	X
6/11	0200	Outfall 003A-05	G	*	*	O	X	X	X	X	X
6/11	0215	Outfall 008A-05	G	*	*	O	X	X	X	X	X
6/11	0240	Outfall 010A-05 NO FLOW	~~G~~	*	*	~~O~~					
6/11	0300	Outfall 002A-06	G	*	*	O	X	X	X	X	X
6/11	0300	Outfall 003A-06	G	*	*	O	X	X	X	X	X
6/11	0305	Outfall 008A-06	G	*	*	O	X	X	X	X	X
6/11	0330	Outfall 010A-06 NO FLOW	~~G~~	*	*	~~O~~					
6/11	0400	Outfall 002A-07	G	*	*	O	X	X	X	X	X
6/11	0400	Outfall 003A-07	G	*	*	O	X	X	X	X	X
6/11	0410	Outfall 008A-07	G	*	*	O	X	X	X	X	X
6/11	0430	Outfall 010A-07 NO FLOW	~~G~~	*	*	~~O~~					

*BOD,Surfactants, pH – 1 1000mL Non Preserved
COD, TOC – 1 250mL Sulfuric Acid Preserved
Propylene Glycol – 2 40mL Non-Preserved VOA Vial
Metals – 250mL Nitric Preserved
Dissolved Metals – 250ml Non Preserved

Total Metals:
Aluminum – 200.7
Chromium – 200.8
Copper – 200.7
Iron – 200.7
Lead – 200.7
Zinc – 200.7

Client Information				Project Information			
Company	Rhode Island Airport Corp			ProjectName:	T.F. Green RIPDES Monitoring		
Address:	2000 Post Rd			P.O. Number:		Project Number:	
City / State /	Warwick, RI 02886			Sampled by:			
Telephone:	691-2490	Fax:	691-2560	Email :address:	jbrolin@pvdairport.com		
Contact Person:	Jay Brolin			Email :address:			

on ice 4.6°C - 5.4°C

Relinquished By	Date	Time	Received By
	6/11/14	0953	

Turn Around Time	
X Normal	X EMAIL Report
5 Business days. Possible	
Rush _____ (business	

Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, Sl=Sludge, A=Air, B=Bulk/Solid, O=__Storm Water_

Lab Use Only	
	Sample Pick Up Only
	RIAL sampled; attach field hours
	Shipped on ice
Workorder No:	1906-1061

CHAIN OF CUSTODY RECORD

R.I. Analytical Laboratories, Inc.

41 Illinois Avenue
Warwick, RI 02888
Tel: 800-937-2580
Fax: 401-738-1970

131 Coolidge St, Bldg. 2
Hudson, MA 01749
Tel: 888-228-3334
Fax: 978-568-0078

Date Collected	Time Collected	Field Sample Identification	Grab or Composite	# of Containers & Type [T]	Preservation Code [P]	Matrix Code [M]	BOD, Surfactants, pH	COD, TOC	Propylene Glycol	Metals**	Dissolved K & Na
6/11	0500	Outfall 002A-08	G	*	*	O	X	X	X	X	X
6/11	0500	Outfall 003A-08	G	*	*	O	X	X	X	X	X
6/11	0510	Outfall 008A-08	G	*	*	O	X	X	X	X	X
6/11	0520	Outfall 010A-08 NO FLOW	~~G~~	*	*	O					
6/11	0600	Outfall 002A-09	G	*	*	O	X	X	X	X	X
6/11	0600	Outfall 003A-09	G	*	*	O	X	X	X	X	X
6/11	0605	Outfall 008A-09	G	*	*	O	X	X	X	X	X
6/11	0620	Outfall 010A-09 NO FLOW	~~G~~	*	*	O					
6/11	0700	Outfall 002A-10	G	*	*	O	X	X	X	X	X
6/11	0700	Outfall 003A-10	G	*	*	O	X	X	X	X	X
6/11	0705	Outfall 008A-10	G	*	*	O	X	X	X	X	X
6/11	0720	Outfall 010A-10 No Flow	~~G~~	*	*	O					

*BOD,Surfactants, pH – 1 1000mL Non Preserved
COD, TOC – 1 250mL Sulfuric Acid Preserved
Propylene Glycol – 2 40mL Non-Preserved VOA Vial
Metals – 250mL Nitric Preserved
Dissolved Metals – 250ml Non Preserved

Total Metals:
Aluminum – 200.7
Chromium – 200.8
Copper – 200.7
Iron – 200.7
Lead – 200.7
Zinc – 200.7

Client Information				Project Information			
Company	Rhode Island Airport Corp			ProjectName:	T.F. Green RIPDES Monitoring		
Address:	2000 Post Rd			P.O. Number:		Project Number:	
City / State /	Warwick, RI 02886			Sampled by:			
Telephone:	691-2490	Fax:	691-2560	Email :address:	jbrolin@pvdairport.com		
Contact Person:	Jay Brolin			Email :address:			

On ice 4.6°C - 5.4°C

Relinquished By	Date	Time	Received By
[signature]	6/11/15	0953	[signature]

Turn Around Time

- X Normal
- X EMAIL Report
- 5 Business days. Possible
- Rush _____ (business

Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, Sl=Sludge, A=Air, B=Bulk/Solid, O=__Storm Water_

Lab Use Only

- Sample Pick Up Only
- RIAL sampled; attach field hours
- Shipped on ice

Workorder No: 1906-10661

CHAIN OF CUSTODY RECORD

R.I. Analytical Laboratories, Inc.

41 Illinois Avenue
Warwick, RI 02888
Tel: 800-937-2580
Fax: 401-738-1970

131 Coolidge St, Bldg. 2
Hudson, MA 01749
Tel: 888-228-3334
Fax: 978-568-0078

Date Collected	Time Collected	Field Sample Identification	Grab or Composite	# of Containers & Type [T]	Preservation Code [P]	Matrix Code [M]	BOD, Surfactants, pH	COD, TOC	Propylene Glycol	Metals**	Dissolved K & Na
6/11	0800	Outfall 002A-11	G	*	*	O	X	X	X	X	X
6/11	0800	Outfall 003A-11	G	*	*	O	X	X	X	X	X
6/11	0805	Outfall 008A-11	G	*	*	O	X	X	X	X	X
6/11	0820	Outfall 010A-11 No FLOW	~~G~~	*	*	~~O~~					
6/11	0900	Outfall 002A-12	G	*	*	O	X	X	X	X	X
6/11	0900	Outfall 003A-12	G	*	*	O	X	X	X	X	X
6/11	0900	Outfall 008A-12	G	*	*	O	X	X	X	X	X
6/11	0920	Outfall 010A-12 NO FLOW	~~G~~	*	*	~~O~~					

*BOD, Surfactants, pH – 1 1000mL Non Preserved
COD, TOC – 1 250mL Sulfuric Acid Preserved
Propylene Glycol – 2 40mL Non-Preserved VOA Vial
Metals – 250mL Nitric Preserved
Dissolved Metals – 250ml Non Preserved

Total Metals:
Aluminum – 200.7
Chromium – 200.8
Copper – 200.7
Iron – 200.7
Lead – 200.7
Zinc – 200.7

Client Information				Project Information			
Company	Rhode Island Airport Corp			ProjectName:	T.F. Green RIPDES Monitoring		
Address:	2000 Post Rd			P.O. Number:		Project Number:	
City / State /	Warwick, RI 02886			Sampled by:			
Telephone:	691-2490	Fax:	691-2560	Email :address:	jbrolin@pvdairport.com		
Contact Person:	Jay Brolin			Email :address:			

onice 4.6°C-5.4°C

Relinquished By	Date	Time	Received By
[signature]	6/11/19	0953	[signature]

Turn Around Time	
X	Normal
X	EMAIL Report
	5 Business days. Possible surcharge
	Rush _____ (business

Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, Sl=Sludge, A=Air, B=Bulk/Solid, O=__Storm Water_

Lab Use Only	
	Sample Pick Up Only
	RIAL sampled; attach field hours
	Shipped on ice
Workorder No:	1906-10661