RAMBOLL

ENVIRONMENT
& HEALTH

Mr. Joel Paradise
Niagara Falls Water Board
5815 Buffalo Avenue
Niagara Falls, New York 14304

Significant Industrial User (SIU) Permit No. 61 for Forest Glen Site – Quarterly Monitoring Report (Period ending February 29, 2020)

Date March 9, 2020

Ramboll
333 West Washington Street
Syracuse, NY 13202
USA

T 315-956-6100
F 315-463-7554
https://ramboll.com

Dear Mr. Paradise:

This quarterly monitoring report for the period between December 1, 2019 and February 29, 2020 is provided for the groundwater recovery and discharge system (the "system") constructed at the Forest Glen Superfund Site in Niagara Falls, New York. The Goodyear Tire & Rubber Company (Goodyear) owns and operates the system, as agent for the Forest Glen Site Trust, under the Significant Industrial User (SIU) Permit No. 61 issued by the Niagara Falls Water Board (NFWB) on September 5, 2018.

The groundwater recovery system comprises the following:

- Three groundwater recovery wells (RW-1, RW-2 and RW-3) located at the Forest Glen Site.
- An off-site electrical enclosure at Regulator No. 6C, on Hyde Park Avenue in Niagara Falls, housing a power disconnect switch, overflow level sensor, and remote monitoring unit (RMU).

During the quarter between December 1, 2019 and February 29, 2020, a total of 3,100,543 gallons of groundwater were recovered and discharged to the sanitary sewer for treatment at the Niagara Falls publicly owned treatment works (POTW), and in accordance with SIU Permit No. 61 Goodyear conducted self-monitoring of the flow. The monitoring included collection of four separate grab samples from December 17 to December 18, 2019 from recovery wells RW-1, RW-2 and RW-3.

The four grab samples collected from the recovery wells were delivered to Test America, Inc. in Amherst, NY where they were composited and analyzed for

volatile organic compounds (VOCs) including vinyl chloride, 1,1-dichloroethylene, 1,2-dichloroethylene (cis and trans), 1,1-dichloroethane, trichloroethylene, tetrachloroethylene and 1,1,1-trichloroethane using USEPA method 624. The results of the analyses are summarized in the attached Self-Monitoring Report, which presents the concentration for each well based on the composite samples. The Test America laboratory reports are provided in the attached Self-Monitoring Report.

As required by the SIU permit, the results of the self-monitoring were used to calculate daily loading to the POTW. Based on the results, there were no permit limit violations for the quarter and the loads to the POTW were below the established limits.

Per section E3c of SIU Permit No. 61, a manual check of the Regulator 6C alarm system was conducted on December 20, 2019 and found to be operational.

If you have any questions concerning this report, please do not hesitate to call me at (315) 956-6836.

Yours sincerely,

James Cavotta
PROJECT MANAGER-1
657-E&H PM RESOURCES

D 315-956-6836
M 315-575-0729
james.cavotta@ramboll.com

NIAGARA FALLS WATER BOARD
WASTEWATER FACILITIES
ENFORCEMENT DIVISION

SELF-MONITORING REPORT
SIGNIFICANT INDUSTRIAL USERS

PERMIT NO. 61 QUARTER February 29, 2020

INDUSTRY NAME: The Goodyear Tire & Rubber Company

Pursuant to federal pretreatment reporting requirements and the Niagara Falls Water Board Regulations Part 1960, Significant Industrial Users shall submit periodic self-monitoring and compliance reports. Such reports shall be submitted using this form, according to the following schedule:

Quarterly	-	1st Quarter by February 28th
	-	2nd Quarter by May 31st
	-	3rd Quarter by August 31st
	-	4th Quarter by November 30th
Semi-Annual	-	by February 28th and
	-	by August 31st

Each section of this report form shall be filled out for those parameters listed in Section "G" of the company's Wastewater Discharge Permit. The analysis results must be reported in both concentration and mass. In addition, the calculated annual average load (lbs/day) for each pollutant shall also be reported.

The samples shall be collected at the monitoring points identified in the user permit. Identification of those points in this report should be as listed on page two (2) of the User Permit.

SELF-MONITORING REPORT
Significant Industrial Users (SIUs)

PAGE 2

PART II of the report is the Compliance Monitoring section. The user is obligated to determine if the analysis results indicates compliance. All violations noted should be brought to the Niagara Falls Water Board – Wastewater Facilities attention immediately upon noting and should also be reported in this section. The analysis result should be compared against all applicable federal, state and local standards and limitations. If no violations are noted then **"NO VIOLATIONS"** should appear on the report.

Pursuant to 40 CFR Part 403.12g of the Federal Standards, all violations noted must be followed up by a sample recollect/analysis and the results submitted to the Niagara Falls Water Board within thirty (30) days of first becoming aware of the violation.

Pursuant to 40 CFR Part 403.12g all Periodic Self-Monitoring Reports must be signed by a "responsible company official" certifying the following statement:

> I, certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signed: Jeffrey Summa

Title: MNGR. GLOBAL REMEDIATION

Date: MARCH 6, 2020

PART I

ANALYTICAL RESULTS

SIU PERMIT NAME: **The Goodyear Tire & Rubber Company**

SIU PERMIT NO.: **61**

SAMPLE LOCATION: **Forest Glen Site**

	RESULTS RW-1 ug/ℓ	/ RW-2 ug/ℓ	RESULTS RW-3 ug/ℓ	/ Combined lbs/day	ANNUAL AVERAGE ug/ℓ	ANNUAL AVERAGE lbs/day
DATE SAMPLED: → 12/18/19						
24-HOUR FLOW IN MGD *						0.043
BENZENE						
CARBON TETRACHLORIDE						
CHLORODIBROMOMETHANE						
MONOCHLOROBENZENE						
DICHLOROBROMOMETHANE						
CHLOROFORM						
1,1 – DICHLOROETHYLENE	5.0 U	5.0 U	5.0 U	0	0	0
1,2 – DICHLOROETHYLENE	15	7.2	20	0.0042	15.76	0.004
BROMOFORM						
ETHYLBENZENE						
1,1,2,2 – TETRACHLOROETHANE						
TETRACHLOROETHYLENE	5.0 U	5.0 U	0.58 J	0.00003	0.052	0.00001
TOLUENE						
1,1,1 – TRICHLOROETHANE	1.3 J	0.95 J	5.0 U	0.0003	0.546	0.0002
1,1,2 – TRICHLOROETHANE						
TRICHLOROETHYLENE	6.0	1.5 J	5.0 U	0.001	1.437	0.0004
METHYLENE CHLORIDE						
MONOCHLOROTOLUENES						
MONOCHLOROBENZOTRIFLURIDE						
VINYL CHLORIDE	1.3 J	3.0 J	4.5 J	0.001	4.103	0.001
TETRAHYDRAFURAN						
XYLENE						

PART I

ANALYTICAL RESULTS

SIU PERMIT NAME: **The Goodyear Tire & Rubber Company**

SIU PERMIT NO.: **61**

SAMPLE LOCATION: **Forest Glen Site**

	RESULTS RW-1 ug/ℓ	/ RW-2 ug/ℓ	RESULTS RW-3 ug/ℓ	/ Combined lbs/day	ANNUAL AVERAGE ug/ℓ	ANNUAL AVERAGE lbs/day
DATE SAMPLED: → 12/18/19						
24-HOUR FLOW IN MGD						0.043
DIMETHYLPHTHALATE						
BUTYL BENZYL PHTHALATE						
Di-N-BUTHY PHTHALATE						
Di-N-OCTYL PHTHALATE						
DIETHYL PHTHALATE						
NITROSODIPHENYLAMINE						
DICHLOROBENZENES						
DICHLOROTOLUENE						
ACENAPHTHENE						
FLUORANTHENE						
CHRYSENE						
NAPHTHALENE						
BENZO (a) ANTHRACENE						
PYRENE						
TRICHLOROBENZENE						
TRICHLOROTOLUENE						
HEXACHLOROBUTADIENE						
TETRACHLOROBENZENE						
HEXACHLOROCYCLOPENTADIENE						
HEXCHLOROBENZENE						
DICHLOROBENZOTRIFLUORIDE						

PART I

ANALYTICAL RESULTS

SIU PERMIT NAME: **The Goodyear Tire & Rubber Company**

SIU PERMIT NO.: **61**

SAMPLE LOCATION: **Forest Glen Site**

	RESULTS RW-1 ug/ℓ	/ RW-2 ug/ℓ	RESULTS RW-3 ug/ℓ	/ Combined lbs/day	ANNUAL AVERAGE ug/ℓ	ANNUAL AVERAGE lbs/day
DATE SAMPLED: → 12/18/19						
24-HOUR FLOW IN MGD						0.043
PHENANTHRENE						
MONOCHLOROPHENOL						
DICHLOROPHENOL						
MONOCHLOROCRESOL						
TRICHLOROPHENOL						
PENTACHLOROPHENOL						
HEXACHLOROCYCLOHEXANES						
PCB's						
ENDOSULFAN I +						
ENDOSULFAN II +						
ENDOSULFAN SULFATE						
MIREX						
DECHLORANE PLUS						
HEPTACHLOR +						
HEPTACHLOR EPOXIDE						

PART I

ANALYTICAL RESULTS

SIU PERMIT NAME: **The Goodyear Tire & Rubber Company**

SIU PERMIT NO.: **61**

SAMPLE LOCATION: **Forest Glen Site**

	RESULTS RW-1 ug/ℓ	/ RW-2 ug/ℓ	RESULTS RW-3 ug/ℓ	/ Combined lbs/day	ANNUAL AVERAGE ug/ℓ	ANNUAL AVERAGE lbs/day
DATE SAMPLED: → 12/18/19						
24-HOUR FLOW IN MGD *						0.043
1,2,4 – TRICHLOROBENZENE						
1,2 – DICHLOROETHANE						
1,1,1 – TRICHLOROETHANE	1.3 J	0.95 J	5.0 U	0.0003	0.546	0.0002
HEXACHLOROETHANE						
1,1 – DICHLOROETHANE	1.6 J	1.3 J	5.0 U	0.0004	1.383	0.0004
1,1,2 – TRICHLOROETHANE						
CHLOROETHANE						
1,2 – DICHLOROBENZENE						
1,3 – DICHLOROBENZENE						
1,4 – DICHLOROBENZENE						
1,1 DICHLOROETHYLENE	5.0 U	5.0 U	5.0 U	0	0	0
1,2 – TRANS-DICHLOROETHYLENE						
1,3 – DICHLOROPROPYLENE						
METHYL CHLORIDE						
NITROBENZENE						
2 – NITROPHENOL						
4 – NITROPHENOL						
4,6 DINITRO-O-CRESOL						
BIS [2 – ETHYHEXYL] PHTHALATE						
ANTHRACENE						
DIETHYL PHTHALATE						
FLUORENE						

PART I

ANALYTICAL RESULTS

SIU PERMIT NAME: **The Goodyear Tire & Rubber Company**

SIU PERMIT NO.: **61**

SAMPLE LOCATION: **Forest Glen Site**

	RESULTS RW-1 ug/ℓ	/ RW-2 ug/ℓ	RESULTS RW-3 ug/ℓ	/ Combined lbs/day	ANNUAL AVERAGE ug/ℓ	ANNUAL AVERAGE lbs/day
DATE SAMPLED: → 12/18/19						
24-HOUR FLOW IN MGD *						0.043
1,2 - DICHLOROPROPANE						
VINYL CHLORIDE	1.3 J	3.0 J	4.5 J	0.001	4.103	0.001
ACENAPHTHENE						
BENZENE						
CARBON TETRACHLORIDE						
CHLOROBENZENE						
HEXACHLOROBENZENE						
CHLOROFORM						
ETHYLBENZENE						
FLUORANTHENE						
METHYLENE CHLORIDE						
HEXACHLOROBUTADIEN						
NAPHTHALENE DI – N – BUTHYL PHTHALATE						
DIMETHYL PHTHALATE						
PHENANTHRENE						
PYRENE						
TRACHLOROETHYLENE						
TOLUENE						
TRICHLOROETHYLENE	6.0	1.5 J	5.0 U	0.001	1.437	0.0004
TOTAL CYANIDE						
TOTAL LEAD						
TOTAL ZINC						

PART I

ANALYTICAL RESULTS

SIU PERMIT NAME: **The Goodyear Tire & Rubber Company**

SIU PERMIT NO.: **61**

SAMPLE LOCATION: **Forest Glen Site**

	RESULTS RW-1 ug/ℓ	/ RW-2 ug/ℓ	RESULTS RW-3 ug/ℓ	/ Combined lbs/day	ANNUAL AVERAGE ug/ℓ	ANNUAL AVERAGE lbs/day
DATE SAMPLED: → 12/18/19						
24-HOUR FLOW IN MGD						0.043
TOTAL SUSPENDED SOLIDS						
SOLUABLE ORGANIC CARBON						
TOTAL PHOSPHOROUS						
TOTAL PHENOL						
OIL and GREASE						
CADMIUM						
CHROMIUM						
COPPER						
LEAD						
MERCURY						
NICKEL						
ZINC						
ARSENIC						
BERYLLIUM						
BARIUM						
TOTAL CYANIDE						
pH (STANDARD UNITS)						
RESIDUAL CHLORINE						
TOTAL SODIUM CHLORIDE						
TOTAL AMMONIA						
DIETHYLENE GLYCOL						

PART II

COMPLIANCE MONITORING

The Goodyear Tire & Rubber Company

SIU NAME: _____

PERMIT NO.: **61** _____

NO PERMIT VIOLATIONS

VIOLATION PARAMETER	DATE	FLOW [MGD]	SAMPLE POINT LOCATION	ACTUAL* DISCHARGE	PERMIT LIMIT	TYPE** LIMIT VIOLATED

NOTE:

* - Actual discharge – list actual analytical results and appropriate units.

** - Type Limit Violated – List Type:

A.A. = Annual Average

D.M. = Daily Maximum

L.L. = Local Limits (Regulation 1960.5)

QUARTERLY SELF-MONITORING SUMMARY
GROUNDWATER RECOVERY SYSTEM EFFLUENT

FOREST GLEN SUPERFUND SITE
NIAGARA FALLS, NEW YORK

		RW-1 volume 14,544 gallons		RW-2 volume 21,744 gallons		RW-3 volume 6,624 gallons	Total volume 42,912 gallons
Analyte	12/18/2019	Contribution to loading to POTW	12/18/2019	Contribution to loading to POTW	12/18/2019	Contribution to loading to POTW	Total loading to POTW
1,1,1-trichloroethane	1.3 J	0.0002 lbs/day	0.95 J	0.0002 lbs/day	5 U	0 lbs/day	0.0003 lbs/day
1,1-dichloroethane	1.6 J	0.0002 lbs/day	1.3 J	0.0002 lbs/day	5 U	0 lbs/day	0.0004 lbs/day
1,1-dichloroethylene	5 U	0 lbs/day	5 U	0 lbs/day	5 U	0 lbs/day	0 lbs/day
cis-1,2-dichloroethylene	15	0.0018 lbs/day	7.2	0.0013 lbs/day	20	0.0011 lbs/day	0.0042 lbs/day
tetrachloroethylene	5 U	0 lbs/day	5 U	0 lbs/day	0.58 J	0.00003 lbs/day	0.00003 lbs/day
trans-1,2-dichloroethylene	5 U	0 lbs/day	5 U	0 lbs/day	5 U	0 lbs/day	0 lbs/day
trichloroethylene	6.0	0.0007 lbs/day	1.5 J	0.0003 lbs/day	5 U	0 lbs/day	0.0010 lbs/day
vinyl chloride	1.3 J	0.0002 lbs/day	3.0 J	0.0005 lbs/day	4.5 J	0.0002 lbs/day	0.0010 lbs/day

Notes
1. Concentrations reported in units of ug/l
2. U - undetected, with detection limit identified
3. J - estimated value

	3/19/2019	6/20/2019	9/24/2019	12/18/2019	Average
Analyte	ug/l	ug/l	ug/l	ug/l	ug/l
1,1,1-trichloroethane	0.6142	0	0.6476	0.9220	0.546
1,1-dichloroethane	1.0175	1.6113	1.7021	1.2010	1.383
1,1-dichloroethylene	0	0	0	0	0.000
cis-1,2-dichloroethylene	9.2630	23.4716	18.4923	11.8195	15.762
tetrachloroethylene	0	0	0.1171	0.0895	0.052
trans-1,2-dichloroethylene	0	0	0	0	0.000
trichloroethylene	1.3175	1.3681	0.2705	2.7936	1.437
vinyl chloride	2.4180	5.0950	6.2451	2.6554	4.103

Analyte	lb/day	lb/day	lb/day	lb/day	lbs/day
1,1,1-trichloroethane	0.0002	0	0.0002	0.0003	0.0002
1,1-dichloroethane	0.0003	0.0003	0.0006	0.0004	0.0004
1,1-dichloroethylene	0	0	0	0	0.000
cis-1,2-dichloroethylene	0.0023	0.004	0.0061	0.0042	0.004
tetrachloroethylene	0	0	0	0.00003	0.00001
trans-1,2-dichloroethylene	0	0	0	0	0.000
trichloroethylene	0.0003	0.0002	0.0001	0.001	0.0004
vinyl chloride	0.0006	0.0009	0.002	0.001	0.001

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

Laboratory Job ID: 480-164475-1
Client Project/Site: Forest Glen Discharge Analysis

For:
O'Brien & Gere Inc of North America
333 West Washington St.
PO BOX 4873
East Syracuse, New York 13221

Attn: Mr. David J Carnevale

Authorized for release by:
12/24/2019 4:33:01 PM
Alexander Gilbert, Project Management Assistant I
alexander.gilbert@testamericainc.com

Designee for

John Schove, Project Manager II
(716)504-9838
john.schove@testamericainc.com

Table of Contents

Definitions/Glossary

Client: O'Brien & Gere Inc of North America
Project/Site: Forest Glen Discharge Analysis

Job ID: 480-164475-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-164475-1

Laboratory: Eurofins TestAmerica, Buffalo

Narrative

Job Narrative
480-164475-1

Comments
No additional comments.

Receipt
The samples were received on 12/19/2019 4:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.8º C.

GC/MS VOA
Method 624.1: The continuing calibration verification (CCV) associated with batch 480-511023 recovered above the upper control limit for 1,1,1-Trichloroethane. The samples associated with this CCV were non-detected above the reporting limit, for the affected analytes; therefore, the data have been reported. The following samples are impacted: RW - 1 COMPOSITE (480-164475-13), RW - 2 COMPOSITE (480-164475-14) and RW - 3 COMPOSITE (480-164475-15).

Method 624.1: The following Volatile sample(s) was composited by the laboratory on 12/20/19 as requested by the client: RW - 1 COMPOSITE (480-164475-13), RW - 2 COMPOSITE (480-164475-14) and RW - 3 COMPOSITE (480-164475-15).
Regulatory defined guidance for in-laboratory compositing of samples, is currently not available. Laboratory sample compositing was performed using established project specifications and/or laboratory standard operating procedures.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Forest Glen Discharge Analysis

Job ID: 480-164475-1

Client Sample ID: RW - 1 COMPOSITE — Lab Sample ID: 480-164475-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	1.3	J	5.0	0.39	ug/L	1		624.1	Total/NA
1,1-Dichloroethane	1.6	J	5.0	0.59	ug/L	1		624.1	Total/NA
cis-1,2-Dichloroethylene	15		5.0	0.57	ug/L	1		624.1	Total/NA
Trichloroethylene	6.0		5.0	0.60	ug/L	1		624.1	Total/NA
Vinyl chloride	1.3	J	5.0	0.75	ug/L	1		624.1	Total/NA

Client Sample ID: RW - 2 COMPOSITE — Lab Sample ID: 480-164475-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.95	J	5.0	0.39	ug/L	1		624.1	Total/NA
1,1-Dichloroethane	1.3	J	5.0	0.59	ug/L	1		624.1	Total/NA
cis-1,2-Dichloroethylene	7.2		5.0	0.57	ug/L	1		624.1	Total/NA
Trichloroethylene	1.5	J	5.0	0.60	ug/L	1		624.1	Total/NA
Vinyl chloride	3.0	J	5.0	0.75	ug/L	1		624.1	Total/NA

Client Sample ID: RW - 3 COMPOSITE — Lab Sample ID: 480-164475-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethylene	20		5.0	0.57	ug/L	1		624.1	Total/NA
Tetrachloroethylene	0.58	J	5.0	0.34	ug/L	1		624.1	Total/NA
Vinyl chloride	4.5	J	5.0	0.75	ug/L	1		624.1	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: RW - 1 COMPOSITE

Lab Sample ID: 480-164475-13

Date Collected: 12/18/19 09:35

Matrix: Water

Date Received: 12/19/19 16:30

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**1.3**	**J**	5.0	0.39	ug/L			12/20/19 17:25	1
1,1-Dichloroethane	**1.6**	**J**	5.0	0.59	ug/L			12/20/19 17:25	1
1,1-Dichloroethylene	ND		5.0	0.85	ug/L			12/20/19 17:25	1
cis-1,2-Dichloroethylene	**15**		5.0	0.57	ug/L			12/20/19 17:25	1
Tetrachloroethylene	ND		5.0	0.34	ug/L			12/20/19 17:25	1
trans-1,2-Dichloroethylene	ND		5.0	0.59	ug/L			12/20/19 17:25	1
Trichloroethylene	**6.0**		5.0	0.60	ug/L			12/20/19 17:25	1
Vinyl chloride	**1.3**	**J**	5.0	0.75	ug/L			12/20/19 17:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*68 - 130*		*12/20/19 17:25*	*1*
4-Bromofluorobenzene (Surr)	*101*		*76 - 123*		*12/20/19 17:25*	*1*
Dibromofluoromethane (Surr)	*99*		*75 - 123*		*12/20/19 17:25*	*1*
Toluene-d8 (Surr)	*87*		*77 - 120*		*12/20/19 17:25*	*1*

Client Sample ID: RW - 2 COMPOSITE

Lab Sample ID: 480-164475-14

Date Collected: 12/18/19 09:35

Matrix: Water

Date Received: 12/19/19 16:30

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.95**	**J**	5.0	0.39	ug/L			12/20/19 17:49	1
1,1-Dichloroethane	**1.3**	**J**	5.0	0.59	ug/L			12/20/19 17:49	1
1,1-Dichloroethylene	ND		5.0	0.85	ug/L			12/20/19 17:49	1
cis-1,2-Dichloroethylene	**7.2**		5.0	0.57	ug/L			12/20/19 17:49	1
Tetrachloroethylene	ND		5.0	0.34	ug/L			12/20/19 17:49	1
trans-1,2-Dichloroethylene	ND		5.0	0.59	ug/L			12/20/19 17:49	1
Trichloroethylene	**1.5**	**J**	5.0	0.60	ug/L			12/20/19 17:49	1
Vinyl chloride	**3.0**	**J**	5.0	0.75	ug/L			12/20/19 17:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*68 - 130*		*12/20/19 17:49*	*1*
4-Bromofluorobenzene (Surr)	*103*		*76 - 123*		*12/20/19 17:49*	*1*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*12/20/19 17:49*	*1*
Toluene-d8 (Surr)	*87*		*77 - 120*		*12/20/19 17:49*	*1*

Client Sample ID: RW - 3 COMPOSITE

Lab Sample ID: 480-164475-15

Date Collected: 12/18/19 09:35

Matrix: Water

Date Received: 12/19/19 16:30

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			12/20/19 18:13	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			12/20/19 18:13	1
1,1-Dichloroethylene	ND		5.0	0.85	ug/L			12/20/19 18:13	1
cis-1,2-Dichloroethylene	**20**		5.0	0.57	ug/L			12/20/19 18:13	1
Tetrachloroethylene	**0.58**	**J**	5.0	0.34	ug/L			12/20/19 18:13	1
trans-1,2-Dichloroethylene	ND		5.0	0.59	ug/L			12/20/19 18:13	1
Trichloroethylene	ND		5.0	0.60	ug/L			12/20/19 18:13	1
Vinyl chloride	**4.5**	**J**	5.0	0.75	ug/L			12/20/19 18:13	1

Client: O'Brien & Gere Inc of North America
Project/Site: Forest Glen Discharge Analysis

Job ID: 480-164475-1

Client Sample ID: RW - 3 COMPOSITE
Date Collected: 12/18/19 09:35
Date Received: 12/19/19 16:30

Lab Sample ID: 480-164475-15
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		68 - 130		12/20/19 18:13	1
4-Bromofluorobenzene (Surr)	102		76 - 123		12/20/19 18:13	1
Dibromofluoromethane (Surr)	98		75 - 123		12/20/19 18:13	1
Toluene-d8 (Surr)	86		77 - 120		12/20/19 18:13	1

Surrogate Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Forest Glen Discharge Analysis

Job ID: 480-164475-1

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCA (68-130)	BFB (76-123)	DBFM (75-123)	TOL (77-120)
480-164475-13	RW - 1 COMPOSITE	101	101	99	87
480-164475-14	RW - 2 COMPOSITE	103	103	102	87
480-164475-15	RW - 3 COMPOSITE	97	102	98	86
LCS 480-511023/5	Lab Control Sample	103	103	102	87
MB 480-511023/7	Method Blank	100	102	98	88

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-511023/7
Matrix: Water
Analysis Batch: 511023

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			12/20/19 10:53	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			12/20/19 10:53	1
1,1-Dichloroethylene	ND		5.0	0.85	ug/L			12/20/19 10:53	1
cis-1,2-Dichloroethylene	ND		5.0	0.57	ug/L			12/20/19 10:53	1
Tetrachloroethylene	ND		5.0	0.34	ug/L			12/20/19 10:53	1
trans-1,2-Dichloroethylene	ND		5.0	0.59	ug/L			12/20/19 10:53	1
Trichloroethylene	ND		5.0	0.60	ug/L			12/20/19 10:53	1
Vinyl chloride	ND		5.0	0.75	ug/L			12/20/19 10:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*68 - 130*		*12/20/19 10:53*	*1*
4-Bromofluorobenzene (Surr)	*102*		*76 - 123*		*12/20/19 10:53*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 123*		*12/20/19 10:53*	*1*
Toluene-d8 (Surr)	*88*		*77 - 120*		*12/20/19 10:53*	*1*

Lab Sample ID: LCS 480-511023/5
Matrix: Water
Analysis Batch: 511023

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	24.3		ug/L		121	52 - 162
1,1-Dichloroethane	20.0	21.6		ug/L		108	59 - 155
1,1-Dichloroethylene	20.0	22.6		ug/L		113	1 - 234
Tetrachloroethylene	20.0	20.0		ug/L		100	64 - 148
trans-1,2-Dichloroethylene	20.0	22.4		ug/L		112	54 - 156
Trichloroethylene	20.0	22.6		ug/L		113	71 - 157
Vinyl chloride	20.0	20.5		ug/L		103	1 - 251

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*68 - 130*
4-Bromofluorobenzene (Surr)	*103*		*76 - 123*
Dibromofluoromethane (Surr)	*102*		*75 - 123*
Toluene-d8 (Surr)	*87*		*77 - 120*

QC Association Summary

Client: O'Brien & Gere Inc of North America
Job ID: 480-164475-1
Project/Site: Forest Glen Discharge Analysis

GC/MS VOA

Analysis Batch: 511023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-164475-13	RW - 1 COMPOSITE	Total/NA	Water	624.1	
480-164475-14	RW - 2 COMPOSITE	Total/NA	Water	624.1	
480-164475-15	RW - 3 COMPOSITE	Total/NA	Water	624.1	
MB 480-511023/7	Method Blank	Total/NA	Water	624.1	
LCS 480-511023/5	Lab Control Sample	Total/NA	Water	624.1	

Lab Chronicle

Client: O'Brien & Gere Inc of North America
Project/Site: Forest Glen Discharge Analysis

Job ID: 480-164475-1

Client Sample ID: RW - 1 COMPOSITE

Lab Sample ID: 480-164475-13
Matrix: Water
Date Collected: 12/18/19 09:35
Date Received: 12/19/19 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	511023	12/20/19 17:25	S1V	TAL BUF

Client Sample ID: RW - 2 COMPOSITE

Lab Sample ID: 480-164475-14
Matrix: Water
Date Collected: 12/18/19 09:35
Date Received: 12/19/19 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	511023	12/20/19 17:49	S1V	TAL BUF

Client Sample ID: RW - 3 COMPOSITE

Lab Sample ID: 480-164475-15
Matrix: Water
Date Collected: 12/18/19 09:35
Date Received: 12/19/19 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	511023	12/20/19 18:13	S1V	TAL BUF

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: O'Brien & Gere Inc of North America
Job ID: 480-164475-1
Project/Site: Forest Glen Discharge Analysis

Laboratory: Eurofins TestAmerica, Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-20

Method Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Forest Glen Discharge Analysis

Job ID: 480-164475-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL BUF

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Forest Glen Discharge Analysis

Job ID: 480-164475-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-164475-13	RW - 1 COMPOSITE	Water	12/18/19 09:35	12/19/19 16:30	
480-164475-14	RW - 2 COMPOSITE	Water	12/18/19 09:35	12/19/19 16:30	
480-164475-15	RW - 3 COMPOSITE	Water	12/18/19 09:35	12/19/19 16:30	

ırofins TestAmerica, Buffalo
Hazelwood Drive
herst, NY 14228-2298
one: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing TestAmerica

ent Information	Sampler: MARTIN Koennecke	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-139246-14318.1
nt Contact: Yuri Veliz	Phone: 315-729-1300	E-Mail: john.schove@testamericainc.com		Page: Page 1 of 1
pany: Brien & Gere Inc of North America				Job #:

ress: 3 West Washington St. PO BOX 4873	Due Date Requested:	Analysis Requested	Preservation Codes:
st Syracuse	TAT Requested (days):	480-164475 Chain of Custody	A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
e, Zip: , 13221			Other:
ne: 5-956-6100(Tel) 315-463-7554(Fax)	PO #: 91802246		
ail: ri.Veliz@obg.com	WO #:		
ject Name: rest Glen Discharge Analysis	Project #: 48002806		
	SSOW#:		

mple Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	624.1_PREC - Volatile Organic Compounds	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		TO BE Composited BY LABS
2-1 121719	12-17-19	11:45	G	Water			3		
W-2 121719	12-17-19	11:45	G	Water			3		
W3 121719	12-17-19	11:45	G	Water			3		
RW-1 121719	12-17-19	15:00	G	W			3		
RW-2 121719	12-17-19	15:00	G	W			3		
RW-3 121719	12-17-19	15:00	G	W			3		
RW-1 121819	12-18-19	7:20	G	W			3		
RW-2 121819	12-18-19	7:20	G	W			3		
RW-3 121819	12-18-19	7:20	G	W			3		
~~RW-1 121819~~	~~12-18-19~~	~~9:35~~	G	W			3		
~~RW-2 121819~~	~~12-18-19~~	~~9:35~~	G	W			3		
RW-3 121819	12-18-19	9:35	G	W			3		

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

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

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

Special Instructions/QC Requirements:

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

uished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Martin Koennecke	12-19-19 / 1630	OBG	Ewallace	12/19/19 1630	TAB
uished by:	Date/Time:	Company	Received by:	Date/Time:	Company
ished by:	Date/Time:	Company	Received by:	Date/Time:	Company

dy Seals Intact: ○ Yes △ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.8 #11R

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: O'Brien & Gere Inc of North America

Job Number: 480-164475-1

Login Number: 164475
List Number: 1
Creator: Manhardt, Kara M

List Source: Eurofins TestAmerica, Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	OB&G
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	