NHDES Waste Management Division
29 Hazen Drive; PO Box 95
Concord, New Hampshire 03302-0095

GROUNDWATER SAMPLING DATA TRANSMITTAL

FORMER RAND LUMBER COMPANY
511 WALLIS ROAD
RYE, NEW HAMPSHIRE
NHDES #198604301
PROJECT TYPE: SITEEVAL
PROJECT #34669

Prepared For:
Wallis Road Properties, LLC
105 Bartlett Road
Portsmouth, New Hampshire 03801
Phone Number: NA
Contact Name: Ed Hayes
Contact Email: NA

Prepared By:
GeoInsight, Inc.
186 Granite Street, 3rd Floor, Suite A
Manchester, New Hampshire 03101
Phone Number: (603) 314-0820
Contact Name: Brian D. Kisiel, P.G.
Contact Email: bdkisiel@geoinc.com

May 29, 2018
GeoInsight Project 8691-000

GeoInsight®
Environmental Strategy & Engineering
Practical in Nature

May 29, 2018 GeoInsight Project 8691-000

Todd E. Piskovitz, P.G.
NHDES/ORCB
29 Hazen Drive/ P.O. Box 95
Concord, NH 03302-0095

RE: Groundwater Sampling Data Transmittal
Former Rand Lumber Company
511 Wallis Road
Rye, New Hampshire
NHDES #198604301
Project Type: SITEEVAL

Dear Mr. Piskovitz:

GeoInsight, Inc. (GeoInsight) prepared this document to present the results from groundwater sampling performed at the Former Rand Lumber Company site located at 511 Wallis Road in Rye, New Hampshire (the Site – Figure 1). The Site is currently the location of a residential development consisting of 20 residential properties known as Sea Glass Lane (Figure 2).

BACKGROUND

Prior to being developed, the Site was the location of Rand Lumber Company. Environmental investigations performed in 2001 for financing identified the presence of up to 37, 55-gallon waste oil containers. It was reported that some of the containers appeared to have leaked resulting in stained soil. Documentation from the previous owners regarding the disposal of the containers observed at the Site was not available. The area where the containers were located is identified on the attached plan from a report prepared by Exeter Environmental Associates.

In a letter, dated December 13, 2017, to Wallis Road Properties, LLC (Wallis), the New Hampshire Department of Environmental Services (NHDES) requested the installation of a minimum of three monitoring wells to evaluate groundwater in the vicinity of an area where 55-gallon containers reported to contain waste oil were once located.

During a meeting on January 31, 2018, the NHDES requested that Wallis submit a work scope to propose a sampling plan from groundwater sumps located in the basement of select properties in the vicinity of the area identified where containers were stored. GeoInsight submitted a sampling plan that specified the collection of groundwater samples from three groundwater

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sumps located at Lots 6, 9, and 13. Lot 13 is believed to be located in an area where 55-gallon containers were stored. Lots 6 and 9 are located on the presumed downgradient boundary of where the containers were stored. Sampling would be performed at a time when the groundwater elevation results in water flowing through the sumps from the foundation perimeter drains.

One groundwater sample from each Lot would be analyzed for volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260B. The groundwater sample collected from Lot 13 (source area) would be analyzed for polycyclic aromatic hydrocarbons (PAHs) by USEPA Method 8270, polychlorinated biphenyls by USEPA Method 8082, and Resource Conservation Recovery Act (RCRA)-8 Metals. Groundwater samples collected for PAHs and RCRA-8 Metals analyses would be field filtered.

GROUNDWATER SAMPLING RESULTS

On April 26, 2018, GeoInsight collected groundwater samples from the discharge point of sump perimeter drains located on Lot 6 and Lot 8 for analysis of VOCs. At the time of the sample collection, the perimeter drain from Lot 9 was not actively flowing; therefore, a sample was collected from the adjacent Lot 8 drain. Lot 8 is also located downgradient of the presumed source area (Lot 13).

The perimeter drain from Lot 13 was not actively flowing; therefore the sample collected from the sump was not analyzed by the laboratory. The Lot 13 sump is being monitored for active flow; however, if the elevation of groundwater in this area does not increase, a groundwater sample will be collected from a hand-installed monitoring point advanced through the sump located in the basement of the residence located on Lot 13.

VOCs were not detected above the laboratory reporting limits in the groundwater samples collected from Lot 6 and Lot 8. The laboratory report is included as an attachment.

If you have questions regarding the information presented herein, please contact me at (603) 314-0820.

Sincerely,
GEOINSIGHT, INC.

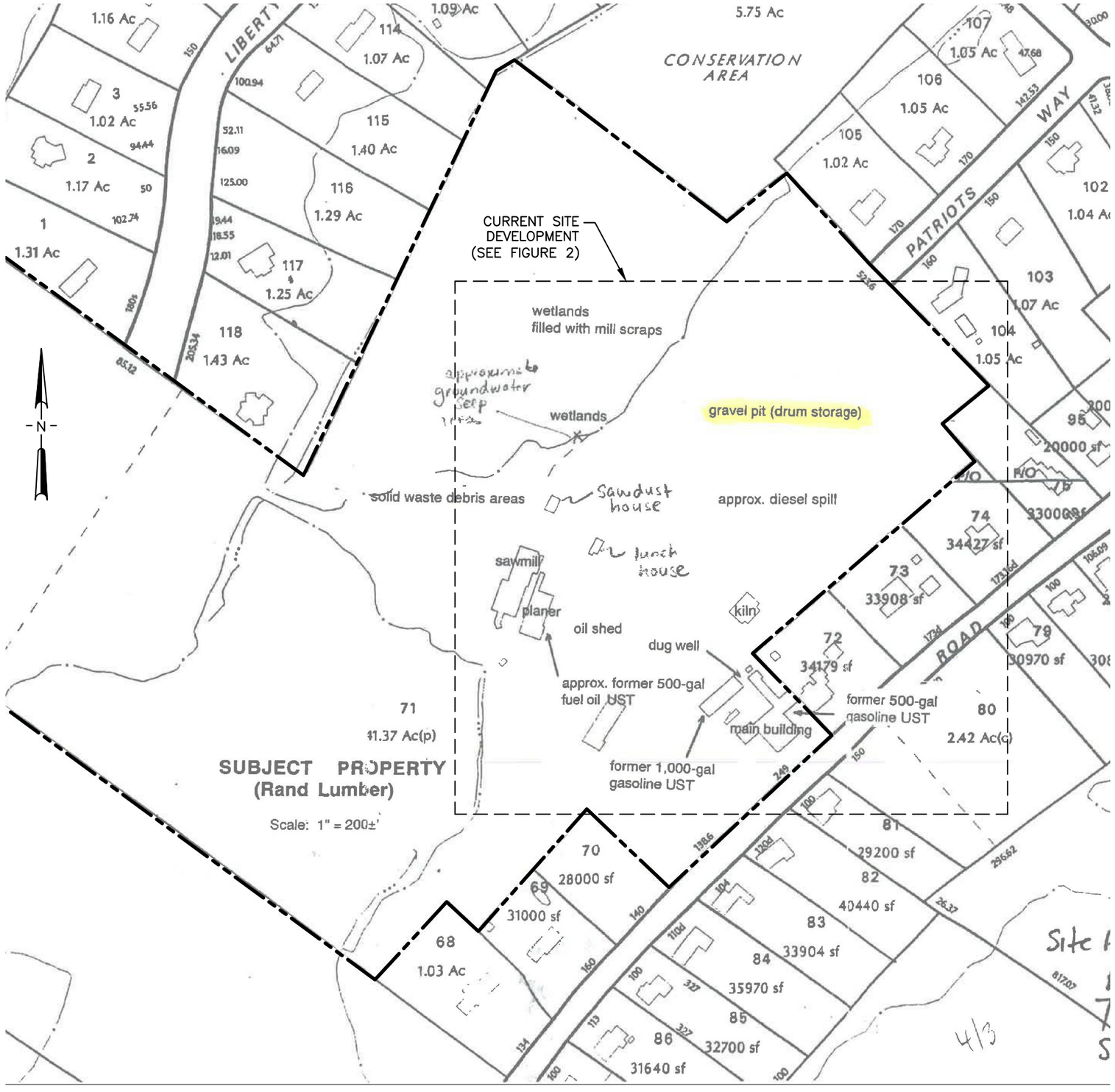
Brian D. Kisiel, P.G.
Principal

Attachments

cc: Ed Hayes, Wallis (electronic only)

\\geonho\NHO_Projects\8691 Sea Glass Lane Rye NH Wallis Properties\8691_2018-05-16_April Sampling Data Transmittal to NHDES.docx

FIGURES



LEGEND

APPROXIMATE PROPERTY BOUNDARY

NOTES:

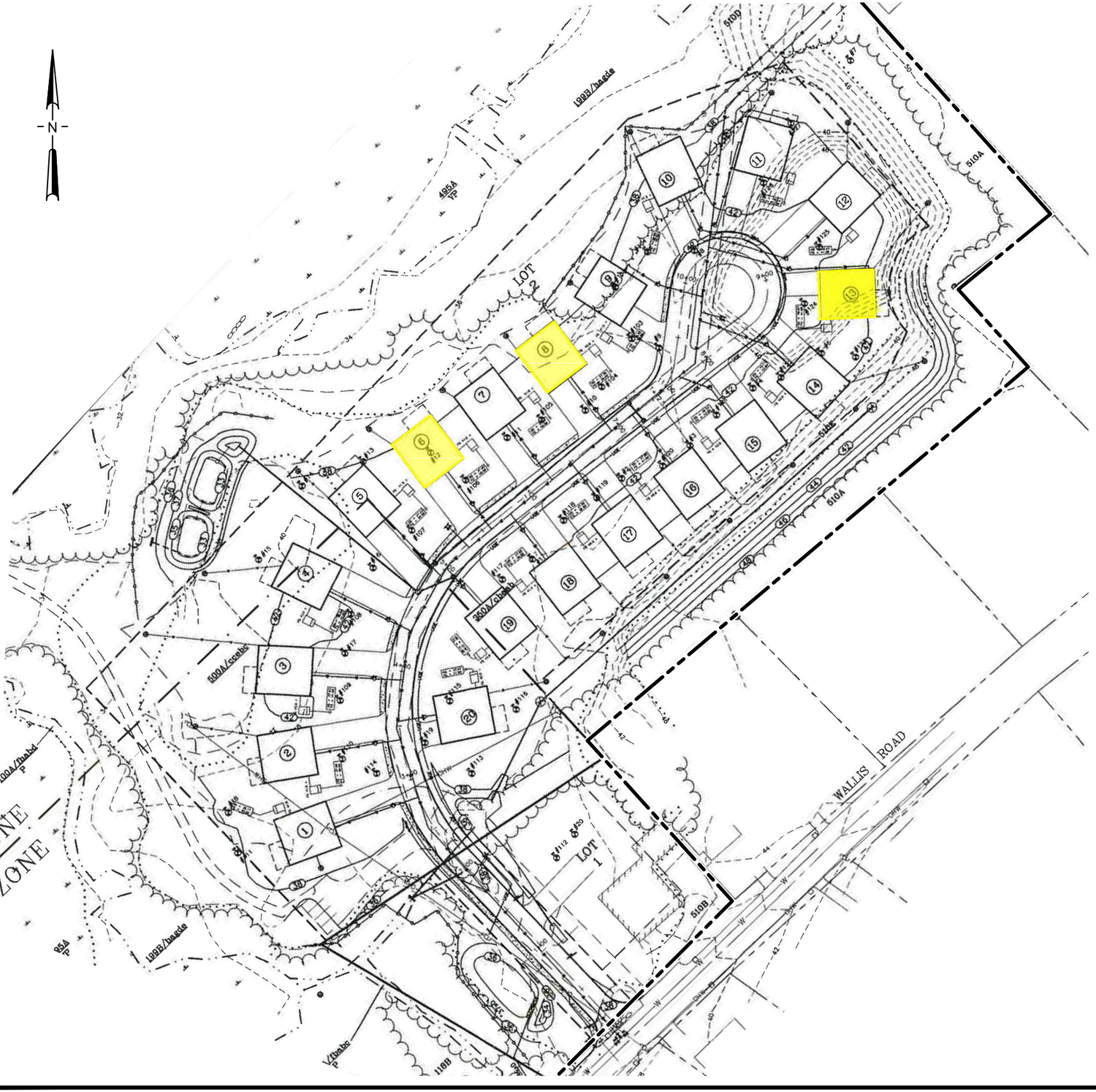
1. THIS PLAN WAS BASED UPON A SITE PLAN OBTAINED FROM A 2001 TRANSACTION SCREEN REPORT PREPARED BY EEA, INC.

0 200 400

APPROX. SCALE IN FEET

CLIENT: FORMER RAND LUMBER COMPANY				GeoInsight *Practical in Nature*
PROJECT: 511 WALLIS ROAD RYE, NEW HAMPSHIRE				
TITLE: SITE PLAN				
DESIGNED: BDK	DRAWN: STM	CHECKED: BDK	APPROVED: BDK	
SCALE: 1" = 200'	DATE: 05/22/18	FILE NO.: 8691D001	PROJECT NO.: 8691-000	FIGURE NO.: 1

PLOT DATE: 5-22-18
FILE: C:\Users\stmckee\appdata\local\temp\AcPublish_18420\8691D001.dwg



LEGEND

APPROXIMATE PROPERTY BOUNDARY

SAMPLE COLLECTION LOCATION

NOTES:

1. THIS PLAN WAS BASED UPON A AUGUST 2013 PLAN ENTITLED "UTILITY PLAN" PREPARED BY BEALS ASSOCIATES, PLLC OF STRATHAM, NEW HAMPSHIRE LAST REVISED JANUARY 30, 2014.

0 100 200

APPROX. SCALE IN FEET

CLIENT: FORMER RAND LUMBER COMPANY			
PROJECT: 511 WALLIS ROAD RYE, NEW HAMPSHIRE			
TITLE: CURRENT SITE DEVELOPMENT			
DESIGNED: BDK	DRAWN: STM	CHECKED: BDK	APPROVED: BDK
SCALE: 1" = 100'	DATE: 05/22/18	FILE NO.: 8691D001	PROJECT NO.: 8691-000

GeoInsight
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FIGURE NO.: 2

PLOT DATE: 5-22-18
FILE: C:\Users\stmckee\appdata\local\temp\AcPublish_18420\8691D001.dwg

LABORATORY REPORT

Laboratory Report

Absolute Resource associates
124 Heritage Avenue Portsmouth NH 03801

Brian Kisiel
GeoInsight, Inc.
186 Granite Street
3rd Floor, Suite A
Manchester, NH 03103

PO Number: 8691
Job ID: 44172
Date Received: 4/26/18

Project: FMR Rand Cumber-Rye 8691

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

Jennifer Lowe (for)

Sue Sylvester
Principal, General Manager

Date of Approval: 5/6/2018
Total number of pages: 8

Absolute Resource Associates Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH903		

Project ID: FMR Rand Cumber-Rye 8691
Job ID: 44172
Sample#: 44172-001
Sample ID: Outfall-6
Matrix: Water
Sampled: 4/26/18 11:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
chloromethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
vinyl chloride	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
bromomethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
chloroethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
trichlorofluoromethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
diethyl ether	< 5	5	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
acetone	< 50	50	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
1,1-dichloroethene	< 1	1	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
methylene chloride	< 5	5	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
carbon disulfide	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
trans-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
isopropyl ether (DIPE)	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
1,1-dichloroethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
t-butanol (TBA)	< 30	30	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
2-butanone (MEK)	< 10	10	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
2,2-dichloropropane	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
cis-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
chloroform	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
bromochloromethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
tetrahydrofuran (THF)	< 10	10	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
1,1,1-trichloroethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
1,1-dichloropropene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
t-amyl-methyl ether (TAME)	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
carbon tetrachloride	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
1,2-dichloroethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
benzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
trichloroethene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
1,2-dichloropropane	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
bromodichloromethane	< 0.6	0.6	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
1,4-dioxane	< 50	50	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
dibromomethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 10	10	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
cis-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
toluene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
trans-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
2-hexanone	< 10	10	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
1,1,2-trichloroethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
1,3-dichloropropane	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
tetrachloroethene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
dibromochloromethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C

Project ID: FMR Rand Cumber-Rye 8691
Job ID: 44172
Sample#: 44172-001
Sample ID: Outfall-6
Matrix: Water
Sampled: 4/26/18 11:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
chlorobenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
1,1,1,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
ethylbenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
m&p-xylenes	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
o-xylene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
styrene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
bromoform	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
isopropylbenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
1,1,2,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
1,2,3-trichloropropane	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
n-propylbenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
bromobenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
2-chlorotoluene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
4-chlorotoluene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
tert-butylbenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
sec-butylbenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
1,3-dichlorobenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
4-isopropyltoluene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
1,4-dichlorobenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
1,2-dichlorobenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
n-butylbenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
1,2,4-trichlorobenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
1,3,5-trichlorobenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
hexachlorobutadiene	< 0.5	0.5	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
naphthalene	< 5	5	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
1,2,3-trichlorobenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**101**	78-114	%	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
toluene-D8 SUR	**103**	88-110	%	1	LMM		1801020	5/1/18	3:07	SW5030C8260C
4-bromofluorobenzene SUR	**101**	86-115	%	1	LMM		1801020	5/1/18	3:07	SW5030C8260C

Project ID: FMR Rand Cumber-Rye 8691
Job ID: 44172
Sample#: 44172-002
Sample ID: Outfall-8
Matrix: Water
Sampled: 4/26/18 11:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
chloromethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
vinyl chloride	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
bromomethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
chloroethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
trichlorofluoromethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
diethyl ether	< 5	5	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
acetone	< 50	50	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
1,1-dichloroethene	< 1	1	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
methylene chloride	< 5	5	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
carbon disulfide	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
trans-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
isopropyl ether (DIPE)	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
1,1-dichloroethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
t-butanol (TBA)	< 30	30	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
2-butanone (MEK)	< 10	10	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
2,2-dichloropropane	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
cis-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
chloroform	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
bromochloromethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
tetrahydrofuran (THF)	< 10	10	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
1,1,1-trichloroethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
1,1-dichloropropene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
t-amyl-methyl ether (TAME)	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
carbon tetrachloride	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
1,2-dichloroethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
benzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
trichloroethene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
1,2-dichloropropane	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
bromodichloromethane	< 0.6	0.6	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
1,4-dioxane	< 50	50	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
dibromomethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 10	10	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
cis-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
toluene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
trans-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
2-hexanone	< 10	10	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
1,1,2-trichloroethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
1,3-dichloropropane	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
tetrachloroethene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
dibromochloromethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C

Project ID: FMR Rand Cumber-Rye 8691
Job ID: 44172
Sample#: 44172-002
Sample ID: Outfall-8
Matrix: Water
Sampled: 4/26/18 11:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
chlorobenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
1,1,1,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
ethylbenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
m&p-xylenes	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
o-xylene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
styrene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
bromoform	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
isopropylbenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
1,1,2,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
1,2,3-trichloropropane	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
n-propylbenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
bromobenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
2-chlorotoluene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
4-chlorotoluene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
tert-butylbenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
sec-butylbenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
1,3-dichlorobenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
4-isopropyltoluene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
1,4-dichlorobenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
1,2-dichlorobenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
n-butylbenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
1,2,4-trichlorobenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
1,3,5-trichlorobenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
hexachlorobutadiene	< 0.5	0.5	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
naphthalene	< 5	5	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
1,2,3-trichlorobenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**100**	78-114	%	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
toluene-D8 SUR	**103**	88-110	%	1	LMM		1801020	5/1/18	3:33	SW5030C8260C
4-bromofluorobenzene SUR	**102**	86-115	%	1	LMM		1801020	5/1/18	3:33	SW5030C8260C

Project ID: FMR Rand Cumber-Rye 8691
Job ID: 44172
Sample#: 44172-004
Sample ID: Trip Blank
Matrix: Water
Sampled: 4/26/18 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
chloromethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
vinyl chloride	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
bromomethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
chloroethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
trichlorofluoromethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
diethyl ether	< 5	5	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
acetone	< 50	50	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
1,1-dichloroethene	< 1	1	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
methylene chloride	< 5	5	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
carbon disulfide	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
trans-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
isopropyl ether (DIPE)	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
1,1-dichloroethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
t-butanol (TBA)	< 30	30	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
2-butanone (MEK)	< 10	10	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
2,2-dichloropropane	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
cis-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
chloroform	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
bromochloromethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
tetrahydrofuran (THF)	< 10	10	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
1,1,1-trichloroethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
1,1-dichloropropene	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
t-amyl-methyl ether (TAME)	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
carbon tetrachloride	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
1,2-dichloroethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
benzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
trichloroethene	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
1,2-dichloropropane	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
bromodichloromethane	< 0.6	0.6	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
1,4-dioxane	< 50	50	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
dibromomethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 10	10	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
cis-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
toluene	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
trans-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
2-hexanone	< 10	10	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
1,1,2-trichloroethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
1,3-dichloropropane	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
tetrachloroethene	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
dibromochloromethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C

Project ID: FMR Rand Cumber-Rye 8691
Job ID: 44172
Sample#: 44172-004
Sample ID: Trip Blank
Matrix: Water
Sampled: 4/26/18 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
chlorobenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
1,1,1,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
ethylbenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
m&p-xylenes	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
o-xylene	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
styrene	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
bromoform	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
isopropylbenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
1,1,2,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
1,2,3-trichloropropane	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
n-propylbenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
bromobenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
2-chlorotoluene	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
4-chlorotoluene	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
tert-butylbenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
sec-butylbenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
1,3-dichlorobenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
4-isopropyltoluene	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
1,4-dichlorobenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
1,2-dichlorobenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
n-butylbenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
1,2,4-trichlorobenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
1,3,5-trichlorobenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
hexachlorobutadiene	< 0.5	0.5	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
naphthalene	< 5	5	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
1,2,3-trichlorobenzene	< 2	2	ug/L	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**100**	78-114	%	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
toluene-D8 SUR	**103**	88-110	%	1	LMM		1801020	5/1/18	1:22	SW5030C8260C
4-bromofluorobenzene SUR	**102**	86-115	%	1	LMM		1801020	5/1/18	1:22	SW5030C8260C

Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

44172

Company Name: Geo Insight Inc
Company Address: 186 Granite St, Suite 3A Manchester, NH, 03101
Report To: Brian Kistel
Phone #: 603 314 0820
Invoice to:
Email:
PO #: 8691

Project Name: ~~FMR~~ Rand Cumberbye
Project #: 8691
Project Location: (NH) MA ME VT
Accreditation Required? N/Y:
Protocol: RCRA SDWA NPDES MCP NHDES DOD
Reporting Limits: QAPP GW-1 S-1 EPA DW Other
Quote #
☐ NH Reimbursement Pricing

ANALYSIS REQUEST

☐ VOC 8260 NHDES ☐ VOC 8260 MADEP ☐ VOC 8260 ☑ VOC 524 ☐ VOC BTEX MtBE, only ☐ VOC 8021VT ☐ VPH MADEP ☐ GRO 8015 ☐ 1,4-Dioxane ☐ VOC 524.2 ☐ VOC 524.2 NH List ☐ Gases-List: ☐ TPH ☐ DRO 8015 ☐ EPH MADEP ☐ TPH Fingerprint ☑ 8270PAH ☐ 8270ABN ☐ 625 ☐ EDB ☑ 8082 PCB ☐ 8081 Pesticides ☐ 608 Pest/PCB ☐ O&G 1664 ☐ Mineral O&G SM5520F ☐ pH ☐ BOD ☐ Conductivity ☐ Turbidity ☐ Apparent Color ☐ TSS ☐ TDS ☐ TS ☐ TVS ☐ Alkalinity ☐ Acidity ☑ RCRA Metals ☐ Priority Pollutant Metals ☐ TAL Metals ☐ Hardness ☐ Total Metals-list: ☐ Dissolved Metals-list: ☐ Ammonia ☐ COD ☐ TKN ☐ TN ☐ TON ☐ TOC ☐ T-Phosphorus ☐ Phenols ☐ Bacteria P/A ☐ Bacteria MPN ☐ Cyanide ☐ Sulfide ☐ Nitrate + Nitrite ☐ Ortho P ☐ Nitrate ☐ Nitrite ☐ Chloride ☐ Sulfate ☐ Bromide ☐ Fluoride ☐ Corrosivity ☐ Reactive CN ☐ Reactive S- ☐ Ignitibility/FP ☐ TCLP Metals ☐ TCLP VOC ☐ TCLP SVOC ☐ TCLP Pesticide Subcontract: ☐ Grain Size ☐ Herbicides ☐ Formaldehyde ☐ PFC

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	SOLID	OTHER	Preservation Method: HCl	HNO_3	H_2SO_4	NaOH	MeOH	Sampling: DATE	TIME	SAMPLER	Grab (G) or Composite (C)
44172-01	Outfall-6	2	✓			✓					4/26/18	11:30	JSB	G
-02	Outfall-8	2	✓			✓						11:20		G
-03	Sump-13 ⊛	5	✓			✓	✓					11:40		G
-04	Trip Blank	1	✓			✓								

TAT REQUESTED
Priority (24 hr)* ☐
Expedited (48 hr)* ☐
Standard ☑ (10 Business Days)
*Date Needed

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

SPECIAL INSTRUCTIONS: Samples For PAH and metals analyses were Field-Filtered using 0.45 um. ⊛ per Jim 4/26/18 - Please HOLD Sump-13 → Sump-12 Cancelled per B.Kistel 5/2/18 ⊛

REPORTING INSTRUCTIONS ☑ PDF (e-mail address) ~~jsb~~ bdkistel@geoinc.com
☐ HARD COPY REQUIRED ☐ EDD

RECEIVED ON ICE ☑ YES ☐ NO
TEMPERATURE 4.5 °C

CUSTODY RECORD
QSD-01 Revision 10/04/17

	Date	Time		Date	Time
Relinquished by Sampler:	4/26/18	12:23	Received by:		
Relinquished by:			Received by:		
Relinquished by:			Received by Laboratory:	4/26/18	12:23