



April 29, 2020

Bob Walker
H2GO Brunswick Regional Water & Sewer
516 Village Rd, NE
Leland, North Carolina 28451

Re: Routine Analytical Analysis
Work Order: 509440

Dear Bob Walker:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on April 15, 2020. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Test results for NELAP or ISO 17025 accredited tests are verified to meet the requirements of those standards, with any exceptions noted. The results reported relate only to the items tested and to the sample as received by the laboratory. These results may not be reproduced except as full reports without approval by the laboratory. Copies of GEL's accreditations and certifications can be found on our website at www.gel.com.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4707.

Sincerely,

Katelyn Gray
Project Manager

Purchase Order: GELP20-0170
Enclosures

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 – (843) 556-8171 – www.gel.com

Certificate of Analysis Report for

H2GO001 H2GO Brunswick Regional Water & Sewer

Client SDG: 509440 GEL Work Order: 509440

The Qualifiers in this report are defined as follows:

- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a Tracer compound
- ** Analyte is a surrogate compound
- J See case narrative for an explanation
- J Value is estimated
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the limit as defined in the 'U' qualifier above.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Katelyn Gray.



Reviewed by _____

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: April 29, 2020

Company : H2GO Brunswick Regional Water & Sewer
Address : 516 Village Rd, NE

Leland, North Carolina 28451

Contact: Bob Walker
Project: Routine Analytical Analysis

Client Sample ID:	1003 GST (Ground Storage Tank)	Project:	H2GO00120
Sample ID:	509440001	Client ID:	H2GO001
Matrix:	Water		
Collect Date:	14-APR-20 13:33		
Receive Date:	15-APR-20		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
LCMSMS PFCs												
EPA 537.1 PFCs Full List "As Received"												
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	U	ND	1.28	3.89	ng/L	0.0194	1	JLS	04/21/20	2058	1990586	1
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	U	ND	0.641	1.94	ng/L	0.0194	1					
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	U	ND	1.28	3.89	ng/L	0.0194	1					
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	U	ND	1.28	3.89	ng/L	0.0194	1					
4-(Heptafluoroisopropoxy)hexafluorobutanoic acid (PFECA-G)	UX	ND	1.28	3.89	ng/L	0.0194	1					
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	U	ND	1.28	3.89	ng/L	0.0194	1					
1H, 1H, 2H, 2H-perfluorododecane sulfonic acid (10:2 FTS)	U	ND	1.28	3.73	ng/L	0.0194	1					
1H, 1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2 FTS)	U	ND	1.28	3.65	ng/L	0.0194	1					
1H, 1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2 FTS)	U	ND	1.28	3.69	ng/L	0.0194	1					
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	U	ND	1.28	3.73	ng/L	0.0194	1					
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	U	ND	1.28	3.89	ng/L	0.0194	1					
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	U	ND	1.28	3.89	ng/L	0.0194	1					
N-Methylperfluorooctane sulfonamide (NMeFOSA)	U	ND	1.28	3.89	ng/L	0.0194	1					
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	U	ND	1.28	3.89	ng/L	0.0194	1					
Nafion Byproduct 1	UX	ND	1.28	3.89	ng/L	0.0194	1					
Nafion Byproduct 2	UX	ND	1.28	3.89	ng/L	0.0194	1					
Perfluoro(3,5,7,9-tetraoxadecanoic) acid (PFO4DA)	UX	ND	1.28	3.89	ng/L	0.0194	1					
Perfluoro(3,5,7-trioxaoctanoic) acid (PFO3OA)	UX	ND	1.28	3.89	ng/L	0.0194	1					
Perfluoro(3,5-dioxahexanoic) acid (PFO2HxA)	UX	ND	1.28	3.89	ng/L	0.0194	1					

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Certificate of Analysis

Report Date: April 29, 2020

Company : H2GO Brunswick Regional Water & Sewer
Address : 516 Village Rd, NE

Leland, North Carolina 28451

Contact: Bob Walker
Project: Routine Analytical Analysis

Client Sample ID: 1003 GST (Ground Storage Tank)
Sample ID: 509440001

Project: H2GO00120
Client ID: H2GO001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
LCMSMS PFCs											
EPA 537.1 PFCs Full List "As Received"											
Perfluorododecane sulfonic acid (PFDoS)	U	ND	0.641	1.88	ng/L	0.0194	1				
Perfluoro-2-methoxyacetic acid (PFMOAA)	UX	ND	1.28	3.89	ng/L	0.0194	1				
Perfluoro-3-methoxypropanoic acid (PFMPA)	UX	ND	1.28	3.89	ng/L	0.0194	1				
Perfluoro-4-methoxybutanoic acid (PFMBA)	UX	ND	1.28	3.89	ng/L	0.0194	1				
Perfluorobutane sulfonic acid (PFBS)	U	ND	0.641	1.73	ng/L	0.0194	1				
Perfluorobutanoic acid (PFBA)	U	ND	0.641	1.94	ng/L	0.0194	1				
Perfluorodecane sulfonic acid (PFDS)	U	ND	0.641	1.88	ng/L	0.0194	1				
Perfluorodecanoic acid (PFDA)	U	ND	0.641	1.94	ng/L	0.0194	1				
Perfluorododecanoic acid (PFDOA)	U	ND	0.641	1.94	ng/L	0.0194	1				
Perfluoroheptane sulfonic acid (PFHpS)	U	ND	0.641	1.85	ng/L	0.0194	1				
Perfluoroheptanoic acid (PFHpA)	U	ND	0.641	1.94	ng/L	0.0194	1				
Perfluorohexane sulfonic acid (PFHxS)	U	ND	0.641	1.77	ng/L	0.0194	1				
Perfluorohexanoic acid (PFHxA)	U	ND	0.641	1.94	ng/L	0.0194	1				
Perfluorononane sulfonic acid (PFNS)	U	ND	0.641	1.87	ng/L	0.0194	1				
Perfluorononanoic acid (PFNA)	U	ND	0.641	1.94	ng/L	0.0194	1				
Perfluorooctane sulfonamide (PFOSAm)	U	ND	0.641	1.81	ng/L	0.0194	1				
Perfluorooctane sulfonic acid (PFOS)	U	ND	0.738	1.94	ng/L	0.0194	1				
Perfluorooctanoic acid (PFOA)	U	ND	0.641	1.94	ng/L	0.0194	1				
Perfluoropentane sulfonic acid (PFPeS)	U	ND	0.641	1.83	ng/L	0.0194	1				
Perfluoropentanoic acid (PFPeA)	U	ND	0.641	1.94	ng/L	0.0194	1				
Perfluorotetradecanoic acid (PFTDA)	U	ND	0.641	1.94	ng/L	0.0194	1				
Perfluorotridecanoic acid (PFTTrDA)	U	ND	0.641	1.94	ng/L	0.0194	1				
Perfluoroundecanoic acid (PFUnDA)	U	ND	0.641	1.94	ng/L	0.0194	1				
Perfluoro(3,5,7,9,11-pentaoxadodecanoic acid (PFO5DA) (TAF)	UX	ND	1.28	1.94	ng/L	0.0194	1				

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Report Date: April 29, 2020

Company : H2GO Brunswick Regional Water & Sewer
Address : 516 Village Rd, NE

Leland, North Carolina 28451

Contact: Bob Walker
Project: Routine Analytical Analysis

Client Sample ID: 1003 GST (Ground Storage Tank)
Sample ID: 509440001

Project: H2GO00120
Client ID: H2GO001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
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LCMSMS PFCs

EPA 537.1 PFCs Full List "As Received"

4,8-Dioxa-3H-perfluoronanoic acid (DONA)	U	ND	0.641	1.94	ng/L	0.0194	1					
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The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 537.1	PFCs Extraction in Drinking Water	LM1	04/17/20	0747	1990585

The following Analytical Methods were performed:

Method	Description	Analyst	Comments
1	EPA 537.1		

Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: April 29, 2020

Company : H2GO Brunswick Regional Water & Sewer
Address : 516 Village Rd, NE

Leland, North Carolina 28451

Contact: Bob Walker
Project: Routine Analytical Analysis

Client Sample ID: 2003 GST Project: H2GO00120
Sample ID: 509440002 Client ID: H2GO001
Matrix: Drinking Water (Potable)
Collect Date: 14-APR-20 13:41
Receive Date: 15-APR-20
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Semi-Volatile-GC/MS												
EPA 522 1,4-Dioxane, Liquid "As Received"												
1,4-Dioxane		0.757	0.0400	0.200	ug/L	0.0200	1	JMB3	04/28/20	1407	1992777	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 522	EPA 522 Prep 1,4-Dioxane	BS2	04/24/20	0834	1991082
EPA 522	EPA 522 Prep 1,4-Dioxane	SJ	04/28/20	0900	1992774

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 522	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
1,4-Dioxane-d8	EPA 522 1,4-Dioxane, Liquid "As Received"	4.32 ug/L	4.00	108	(70%-130%)

Notes:

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Lc/LC: Critical Level
PF: Prep Factor
RL: Reporting Limit
SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: April 29, 2020

Company : H2GO Brunswick Regional Water & Sewer
Address : 516 Village Rd, NE

Leland, North Carolina 28451

Contact: Bob Walker
Project: Routine Analytical Analysis

Client Sample ID: 3003 GST	Project: H2GO00120
Sample ID: 509440003	Client ID: H2GO001
Matrix: Drinking Water (Potable)	
Collect Date: 14-APR-20 13:40	
Receive Date: 15-APR-20	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
LCMSMS PFCs												
EPA 537.1 PFCs Full List "As Received"												
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	U	ND	1.33	4.03	ng/L	0.0201	1	JLS	04/21/20	2107	1990586	1
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)		22.1	0.665	2.01	ng/L	0.0201	1					
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	U	ND	1.33	4.03	ng/L	0.0201	1					
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	U	ND	1.33	4.03	ng/L	0.0201	1					
4-(Heptafluoroisopropoxy)hexafluorobutanoic acid (PFECA-G)	UX	ND	1.33	4.03	ng/L	0.0201	1					
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	U	ND	1.33	4.03	ng/L	0.0201	1					
1H, 1H, 2H, 2H-perfluorododecane sulfonic acid (10:2 FTS)	U	ND	1.33	3.87	ng/L	0.0201	1					
1H, 1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2 FTS)	U	ND	1.33	3.83	ng/L	0.0201	1					
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	U	ND	1.33	3.87	ng/L	0.0201	1					
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	U	ND	1.33	4.03	ng/L	0.0201	1					
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	U	ND	1.33	4.03	ng/L	0.0201	1					
N-Methylperfluorooctane sulfonamide (NMeFOSA)	U	ND	1.33	4.03	ng/L	0.0201	1					
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	U	ND	1.33	4.03	ng/L	0.0201	1					
Nafion Byproduct 1	UX	ND	1.33	4.03	ng/L	0.0201	1					
Nafion Byproduct 2	UX	ND	1.33	4.03	ng/L	0.0201	1					
Perfluoro(3,5,7,9-tetraoxadecanoic) acid (PFO4DA)	JX	2.25	1.33	4.03	ng/L	0.0201	1					
Perfluoro(3,5,7-trioxaoctanoic) acid (PFO3OA)	X	7.52	1.33	4.03	ng/L	0.0201	1					
Perfluoro(3,5-dioxahexanoic) acid (PFO2HxA)	X	21.8	1.33	4.03	ng/L	0.0201	1					
Perfluorododecane sulfonic acid (PFDoS)	U	ND	0.665	1.95	ng/L	0.0201	1					

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Certificate of Analysis

Report Date: April 29, 2020

Company : H2GO Brunswick Regional Water & Sewer
Address : 516 Village Rd, NE

Leland, North Carolina 28451

Contact: Bob Walker
Project: Routine Analytical Analysis

Client Sample ID: 3003 GST	Project: H2GO00120
Sample ID: 509440003	Client ID: H2GO001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
LCMSMS PFCs												
EPA 537.1 PFCs Full List "As Received"												
Perfluoro-2-methoxyacetic acid (PFMOAA)	X	25.8	1.33	4.03	ng/L	0.0201	1					
Perfluoro-3-methoxypropanoic acid (PFMPA)	X	16.8	1.33	4.03	ng/L	0.0201	1					
Perfluoro-4-methoxybutanoic acid (PFMBA)	JX	3.75	1.33	4.03	ng/L	0.0201	1					
Perfluorobutane sulfonic acid (PFBS)		3.61	0.665	1.79	ng/L	0.0201	1					
Perfluorodecane sulfonic acid (PFDS)	U	ND	0.665	1.95	ng/L	0.0201	1					
Perfluorodecanoic acid (PFDA)	U	ND	0.665	2.01	ng/L	0.0201	1					
Perfluorododecanoic acid (PFDOA)	U	ND	0.665	2.01	ng/L	0.0201	1					
Perfluoroheptane sulfonic acid (PFHpS)	U	ND	0.665	1.91	ng/L	0.0201	1					
Perfluoroheptanoic acid (PFHpA)		7.49	0.665	2.01	ng/L	0.0201	1					
Perfluoroheptane sulfonic acid (PFHxS)		4.17	0.665	1.83	ng/L	0.0201	1					
Perfluoroheptanoic acid (PFHxA)		11.1	0.665	2.01	ng/L	0.0201	1					
Perfluorononane sulfonic acid (PFNS)	U	ND	0.665	1.93	ng/L	0.0201	1					
Perfluorononanoic acid (PFNA)	J	0.806	0.665	2.01	ng/L	0.0201	1					
Perfluorooctane sulfonamide (PFOSAm)	U	ND	0.665	1.87	ng/L	0.0201	1					
Perfluorooctane sulfonic acid (PFOS)		12.0	0.765	2.01	ng/L	0.0201	1					
Perfluorooctanoic acid (PFOA)		7.60	0.665	2.01	ng/L	0.0201	1					
Perfluoropentane sulfonic acid (PFPeS)	U	ND	0.665	1.89	ng/L	0.0201	1					
Perfluorotetradecanoic acid (PFTDA)	U	ND	0.665	2.01	ng/L	0.0201	1					
Perfluorotridecanoic acid (PFTrDA)	U	ND	0.665	2.01	ng/L	0.0201	1					
Perfluoroundecanoic acid (PFUnDA)	U	ND	0.665	2.01	ng/L	0.0201	1					
Perfluoro(3,5,7,9,11-pentaaxadodecanoic) acid (PFO5DA) (TAF)	UX	ND	1.33	2.01	ng/L	0.0201	1					
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	U	ND	0.665	2.01	ng/L	0.0201	1					
1H, 1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2 FTS)	U	ND	6.65	18.9	ng/L	0.0201	5	JLS	04/21/20	2219	1990586	2

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: April 29, 2020

Company : H2GO Brunswick Regional Water & Sewer
Address : 516 Village Rd, NE

Leland, North Carolina 28451

Contact: Bob Walker
Project: Routine Analytical Analysis

Client Sample ID: 3003 GST Project: H2GO00120
Sample ID: 509440003 Client ID: H2GO001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
LCMSMS PFCs												
EPA 537.1 PFCs Full List "As Received"												
Perfluorobutanoic acid (PFBA)	U	ND	3.32	10.1	ng/L	0.0201	5					
Perfluoropentanoic acid (PFPeA)	J	8.74	3.32	10.1	ng/L	0.0201	5					

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 537.1	PFCs Extraction in Drinking Water	LM1	04/17/20	0747	1990585

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 537.1	
2	EPA 537.1	

Notes:

Column headers are defined as follows:

DF: Dilution Factor Lc/LC: Critical Level
DL: Detection Limit PF: Prep Factor
MDA: Minimum Detectable Activity RL: Reporting Limit
MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

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QC Summary

Report Date: April 29, 2020

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H2GO Brunswick Regional Water & Sewer
516 Village Rd, NE
Leland, North Carolina

Contact: Bob Walker

Workorder: 509440

Parmname	NOM	Sample	Qual	QC	Units	RPD/D%	REC%	Range	Anlst	Date	Time
Perfluorinated Compounds											
Batch	1990586										
QC1204547223	LCS										
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	18.9			19.9	ng/L		105	(70%-130%)	JLS	04/21/20	20:05
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	19.3			18.1	ng/L		94	(70%-130%)			
1H, 1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2 FTS)	18.8			25.0	ng/L		133*	(70%-130%)			
1H, 1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2 FTS)	19.1			21.1	ng/L		110	(70%-130%)			
1H, 1H, 2H, 2H-perfluorododecane sulfonic acid (10:2 FTS)	19.5			16.9	ng/L		87	(48%-147%)			
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	20.1			21.8	ng/L		108	(70%-130%)			
4-(Heptafluoroisopropoxy)hexafluorobutanoic acid (PFECA-G)	20.1		X	22.0	ng/L		109	(70%-139%)			
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	18.7			18.7	ng/L		100	(70%-130%)			
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	20.1			20.5	ng/L		102	(70%-130%)			
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	20.1			15.6	ng/L		78	(22%-136%)			
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	20.1			19.8	ng/L		98	(70%-130%)			
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	20.1			17.2	ng/L		85	(52%-129%)			
N-Methylperfluorooctane sulfonamide (NMeFOSA)	20.1			14.4	ng/L		72	(22%-135%)			
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	20.1			18.8	ng/L		93	(70%-130%)			

GEL LABORATORIES LLC

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QC Summary

Workorder: 509440

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Parname	NOM	Sample	Qual	QC	Units	RPD/D%	REC%	Range	Anlst	Date	Time
Perfluorinated Compounds											
Batch	1990586										
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	20.1			16.6	ng/L		83	(52%-132%)	JLS	04/21/20	20:05
Nafion Byproduct 1	20.1		X	17.7	ng/L		88	(30%-123%)			
Nafion Byproduct 2	20.1		X	18.9	ng/L		94	(61%-133%)			
Perfluoro(3,5,7,9,11-pentaoxadodecanoic) acid (PFO5DA) (TAF)	20.1		X	16.8	ng/L		83	(57%-153%)			
Perfluoro(3,5,7,9-tetraoxadecanoic) acid (PFO4DA)	20.1		X	21.0	ng/L		105	(55%-159%)			
Perfluoro(3,5,7-trioxaoctanoic) acid (PFO3OA)	20.1		X	22.0	ng/L		110	(59%-154%)			
Perfluoro(3,5-dioxahexanoic) acid (PFO2HxA)	20.1		X	18.9	ng/L		94	(50%-150%)			
Perfluoro-2-methoxyacetic acid (PFMOAA)	20.1		X	18.0	ng/L		90	(40%-149%)			
Perfluoro-3-methoxypropanoic acid (PFMPA)	20.1		X	20.2	ng/L		101	(52%-154%)			
Perfluoro-4-methoxybutanoic acid (PFMBA)	20.1		X	21.0	ng/L		104	(50%-150%)			
Perfluorobutane sulfonic acid (PFBS)	17.8			19.9	ng/L		112	(70%-130%)			
Perfluorobutanoic acid (PFBA)	20.1			21.2	ng/L		105	(70%-130%)			
Perfluorodecane sulfonic acid (PFDS)	19.4			19.8	ng/L		102	(70%-130%)			
Perfluorodecanoic acid (PFDA)	20.1			19.6	ng/L		97	(70%-130%)			
Perfluorododecane sulfonic acid (PFDoS)	19.5			17.2	ng/L		88	(53%-142%)			

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QC Summary

Workorder: 509440

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Parmname	NOM	Sample	Qual	QC	Units	RPD/D%	REC%	Range	Anlst	Date	Time
Perfluorinated Compounds											
Batch	1990586										
Perfluorododecanoic acid (PFDOA)	20.1			21.2	ng/L		105	(70%-130%)	JLS	04/21/20	20:05
Perfluoroheptane sulfonic acid (PFHpS)	19.1			20.3	ng/L		106	(70%-130%)			
Perfluoroheptanoic acid (PFHpA)	20.1			21.6	ng/L		108	(70%-130%)			
Perfluorohexane sulfonic acid (PFHxS)	18.3			18.7	ng/L		102	(70%-130%)			
Perfluorohexanoic acid (PFHxA)	20.1			20.2	ng/L		101	(70%-130%)			
Perfluorononane sulfonic acid (PFNS)	19.3			19.1	ng/L		99	(70%-130%)			
Perfluorononanoic acid (PFNA)	20.1			19.9	ng/L		99	(70%-130%)			
Perfluorooctane sulfonamide (PFOSAm)	20.1			19.0	ng/L		95	(70%-130%)			
Perfluorooctane sulfonic acid (PFOS)	20.1			20.1	ng/L		100	(70%-130%)			
Perfluorooctanoic acid (PFOA)	20.1			23.5	ng/L		117	(70%-130%)			
Perfluoropentane sulfonic acid (PFPeS)	18.9			17.9	ng/L		95	(70%-130%)			
Perfluoropentanoic acid (PFPeA)	20.1			18.9	ng/L		94	(70%-130%)			
Perfluorotetradecanoic acid (PFTDA)	20.1			21.9	ng/L		109	(70%-130%)			
Perfluorotridecanoic acid (PFTTrDA)	20.1			20.3	ng/L		101	(70%-130%)			
Perfluoroundecanoic acid (PFUnDA)	20.1			20.0	ng/L		99	(70%-130%)			

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QC Summary

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Parname	NOM	Sample	Qual	QC	Units	RPD/D%	REC%	Range	Anlst	Date	Time
Perfluorinated Compounds											
Batch	1990586										
QC1204547224	LCSD										
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	18.7			19.0	ng/L	5	102	(0%-30%)	JLS	04/21/20	20:13
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	19.1			18.3	ng/L	1	96	(0%-30%)			
1H, 1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2 FTS)	18.6			22.9	ng/L	9	123	(0%-30%)			
1H, 1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2 FTS)	18.9			22.1	ng/L	5	117	(0%-30%)			
1H, 1H, 2H, 2H-perfluorododecane sulfonic acid (10:2 FTS)	19.3			15.9	ng/L	7	82	(0%-32%)			
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	19.8			24.1	ng/L	10	121	(0%-30%)			
4-(Heptafluoroisopropoxy)hexafluorobutanoic acid (PFECA-G)	19.8		X	22.8	ng/L	4	115	(0%-27%)			
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	18.5			18.0	ng/L	4	97	(0%-30%)			
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	19.8			23.5	ng/L	14	118	(0%-30%)			
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	19.8			17.9	ng/L	14	90	(0%-30%)			
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	19.8			21.7	ng/L	9	109	(0%-30%)			
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	19.8			17.9	ng/L	4	90	(0%-30%)			
N-Methylperfluorooctane sulfonamide (NMeFOSA)	19.8			16.5	ng/L	13	83	(0%-30%)			
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	19.8			21.6	ng/L	14	109	(0%-30%)			
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	19.8			18.1	ng/L	8	91	(0%-30%)			

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QC Summary

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Parname	NOM	Sample	Qual	QC	Units	RPD/D%	REC%	Range	Anlst	Date	Time
Perfluorinated Compounds											
Batch	1990586										
Nafion Byproduct 1	19.8		X	17.2	ng/L	3	87	(0%-30%)	JLS	04/21/20	20:13
Nafion Byproduct 2	19.8		X	21.6	ng/L	13	109	(0%-30%)			
Perfluoro(3,5,7,9,11-pentaoxadodecanoic) acid (PFO5DA) (TAF)	19.8		X	19.5	ng/L	15	98	(0%-47%)			
Perfluoro(3,5,7,9-tetraoxadecanoic) acid (PFO4DA)	19.8		X	19.7	ng/L	7	99	(0%-48%)			
Perfluoro(3,5,7-trioxaoctanoic) acid (PFO3OA)	19.8		X	21.7	ng/L	1	109	(0%-44%)			
Perfluoro(3,5-dioxahexanoic) acid (PFO2HxA)	19.8		X	19.5	ng/L	3	98	(0%-33%)			
Perfluoro-2-methoxyacetic acid (PFMOAA)	19.8		X	18.8	ng/L	4	95	(0%-34%)			
Perfluoro-3-methoxypropanoic acid (PFMPA)	19.8		X	20.0	ng/L	1	101	(0%-29%)			
Perfluoro-4-methoxybutanoic acid (PFMBA)	19.8		X	22.5	ng/L	7	113	(0%-30%)			
Perfluorobutane sulfonic acid (PFBS)	17.6			20.3	ng/L	2	115	(0%-30%)			
Perfluorobutanoic acid (PFBA)	19.8			22.7	ng/L	7	114	(0%-30%)			
Perfluorodecane sulfonic acid (PFDS)	19.2			21.0	ng/L	6	110	(0%-30%)			
Perfluorodecanoic acid (PFDA)	19.8			20.3	ng/L	3	102	(0%-30%)			
Perfluorododecane sulfonic acid (PFDoS)	19.2			18.2	ng/L	6	95	(0%-30%)			
Perfluorododecanoic acid (PFDOA)	19.8			19.8	ng/L	7	100	(0%-30%)			

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Parname	NOM	Sample	Qual	QC	Units	RPD/D%	REC%	Range	Anlst	Date	Time
Perfluorinated Compounds											
Batch	1990586										
Perfluoroheptane sulfonic acid (PFHpS)	18.9			19.6	ng/L	4	104	(0%-30%)	JLS	04/21/20	20:13
Perfluoroheptanoic acid (PFHpA)	19.8			23.3	ng/L	7	117	(0%-30%)			
Perfluorohexane sulfonic acid (PFHxS)	18.1			18.4	ng/L	1	102	(0%-30%)			
Perfluorohexanoic acid (PFHxA)	19.8			23.3	ng/L	14	117	(0%-30%)			
Perfluorononane sulfonic acid (PFNS)	19.1			19.9	ng/L	4	104	(0%-30%)			
Perfluorononanoic acid (PFNA)	19.8			21.3	ng/L	7	107	(0%-30%)			
Perfluorooctane sulfonamide (PFOSAm)	19.8			20.8	ng/L	9	105	(0%-30%)			
Perfluorooctane sulfonic acid (PFOS)	19.8			20.2	ng/L	0	102	(0%-30%)			
Perfluorooctanoic acid (PFOA)	19.8			23.2	ng/L	1	117	(0%-30%)			
Perfluoropentane sulfonic acid (PFPeS)	18.7			19.3	ng/L	7	103	(0%-30%)			
Perfluoropentanoic acid (PFPeA)	19.8			21.1	ng/L	11	107	(0%-30%)			
Perfluorotetradecanoic acid (PFTDA)	19.8			22.4	ng/L	2	113	(0%-30%)			
Perfluorotridecanoic acid (PFTrDA)	19.8			22.4	ng/L	10	113	(0%-30%)			
Perfluoroundecanoic acid (PFUnDA)	19.8			20.1	ng/L	1	101	(0%-30%)			
QC1204547222 MB											
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)			U	ND	ng/L						04/21/20 19:56

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Parname	NOM	Sample	Qual	QC	Units	RPD/D%	REC%	Range	Anlst	Date	Time
Perfluorinated Compounds											
Batch	1990586										
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)			U	ND	ng/L				JLS	04/21/20	19:56
1H, 1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2 FTS)			U	ND	ng/L						
1H, 1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2 FTS)			U	ND	ng/L						
1H, 1H, 2H, 2H-perfluorododecane sulfonic acid (10:2 FTS)			U	ND	ng/L						
4,8-Dioxa-3H-perfluorononanoic acid (DONA)			U	ND	ng/L						
4-(Heptafluoroisopropoxy)hexafluorobutanoic acid (PFECA-G)			UX	ND	ng/L						
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)			U	ND	ng/L						
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)			U	ND	ng/L						
N-Ethylperfluorooctane sulfonamide (EtFOSAm)			U	ND	ng/L						
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)			U	ND	ng/L						
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)			U	ND	ng/L						
N-Methylperfluorooctane sulfonamide (NMeFOSA)			U	ND	ng/L						
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)			U	ND	ng/L						
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)			U	ND	ng/L						
Nafion Byproduct 1			UX	ND	ng/L						

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Parmname	NOM	Sample	Qual	QC	Units	RPD/D%	REC%	Range	Anlst	Date	Time
Perfluorinated Compounds											
Batch	1990586										
Nafion Byproduct 2			UX	ND	ng/L				JLS	04/21/20	19:56
Perfluoro(3,5,7,9,11-pentaoxadodecanoic) acid (PFO5DA) (TAF)			UX	ND	ng/L						
Perfluoro(3,5,7,9-tetraoxadecanoic) acid (PFO4DA)			UX	ND	ng/L						
Perfluoro(3,5,7-trioxaoctanoic) acid (PFO3OA)			UX	ND	ng/L						
Perfluoro(3,5-dioxahexanoic) acid (PFO2HxA)			UX	ND	ng/L						
Perfluoro-2-methoxyacetic acid (PFMOAA)			UX	ND	ng/L						
Perfluoro-3-methoxypropanoic acid (PFMPA)			UX	ND	ng/L						
Perfluoro-4-methoxybutanoic acid (PFMBA)			UX	ND	ng/L						
Perfluorobutane sulfonic acid (PFBS)			U	ND	ng/L						
Perfluorobutanoic acid (PFBA)			U	ND	ng/L						
Perfluorodecane sulfonic acid (PFDS)			U	ND	ng/L						
Perfluorodecanoic acid (PFDA)			U	ND	ng/L						
Perfluorododecane sulfonic acid (PFDoS)			U	ND	ng/L						
Perfluorododecanoic acid (PFDOA)			U	ND	ng/L						
Perfluoroheptane sulfonic acid (PFHpS)			U	ND	ng/L						

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QC Summary

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Parmname	NOM	Sample	Qual	QC	Units	RPD/D%	REC%	Range	Anlst	Date	Time
Perfluorinated Compounds											
Batch	1990586										
Perfluoroheptanoic acid (PFHpA)			U	ND	ng/L				JLS	04/21/20	19:56
Perfluorohexane sulfonic acid (PFHxS)			U	ND	ng/L						
Perfluorohexanoic acid (PFHxA)			U	ND	ng/L						
Perfluorononane sulfonic acid (PFNS)			U	ND	ng/L						
Perfluorononanoic acid (PFNA)			U	ND	ng/L						
Perfluorooctane sulfonamide (PFOSAm)			U	ND	ng/L						
Perfluorooctane sulfonic acid (PFOS)			U	ND	ng/L						
Perfluorooctanoic acid (PFOA)			U	ND	ng/L						
Perfluoropentane sulfonic acid (PFPeS)			U	ND	ng/L						
Perfluoropentanoic acid (PFPeA)			U	ND	ng/L						
Perfluorotetradecanoic acid (PFTDA)			U	ND	ng/L						
Perfluorotridecanoic acid (PFTrDA)			U	ND	ng/L						
Perfluoroundecanoic acid (PFUnDA)			U	ND	ng/L						
Semi-Volatile-GC/MS											
Batch	1992777										
QC1204551977	LCS										
1,4-Dioxane	4.00			4.10	ug/L		102	(70%-130%)	JMB3	04/28/20	13:15

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QC Summary

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Parmname	NOM	Sample	Qual	QC	Units	RPD/D%	REC%	Range	Anlst	Date	Time
Semi-Volatile-GC/MS											
Batch	1992777										
**1,4-Dioxane-d8	4.00			4.96	ug/L		124	(70%-130%)	JMB3	04/28/20	13:15
QC1204551978	LCSD										
1,4-Dioxane	4.00			3.74	ug/L	9	94	(0%-30%)		04/28/20	13:41
**1,4-Dioxane-d8	4.00			4.32	ug/L		108	(70%-130%)			
QC1204551976	MB										
1,4-Dioxane			U	ND	ug/L					04/28/20	12:49
**1,4-Dioxane-d8	4.00			4.74	ug/L		119	(70%-130%)			

Notes:

The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B The target analyte was detected in the associated blank.
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- E Concentration of the target analyte exceeds the instrument calibration range
- H Analytical holding time was exceeded
- J See case narrative for an explanation
- J Value is estimated
- JNX Non Calibrated Compound
- N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
- N Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
- N/A RPD or %Recovery limits do not apply.
- N1 See case narrative
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

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QC Summary

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Parmname	NOM	Sample	Qual	QC	Units	RPD/D%	REC%	Range	Anlst	Date	Time
P											
Q											
R											
U											
UJ											
X											
Y											
^											
h											

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

* Indicates that a Quality Control parameter was not within specifications.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

**Technical Case Narrative
H2GO Brunswick Regional Water & Sewer
SDG #: 509440**

GC/MS Semivolatile

Product: Analysis of 1,4-Dioxane in Drinking Water by Solid Phase Extraction (SPE) and Gas Chromatography/Mass Spectrometry

Analytical Method: EPA 522

Analytical Procedure: GL-OA-E-073 REV# 2

Analytical Batches: 1992777 and 1992774

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
509440002	2003 GST
1204551976	Method Blank (MB)
1204551977	Laboratory Control Sample (LCS)
1204551978	Laboratory Control Sample Duplicate (LCSD)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Quality Control (QC) Information

Laboratory Control Sample Duplicate (LCSD)

An LCSD was used in place of matrix QC due to limited sample volume.

Miscellaneous Information

Manual Integrations

Sample (See Below) required manual integration in order to properly identify one or more peaks and/or to correctly position the baseline as set in the calibration standard injections.

Sample	Analyte	Value
509440002 (2003 GST)	Tetrahydrofuran-d8	Result 10ug/L

LCMSMS-Misc

Product: The Extraction and Analysis of Per and Polyfluoroalkyl Substances Using LCMSMS

Analytical Method: EPA 537.1

Analytical Procedure: GL-OA-E-076 REV# 9

Analytical Batches: 1990586 and 1990585

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
509440001	1003 GST (Ground Storage Tank)
509440003	3003 GST
1204547222	Method Blank (MB)
1204547223	Laboratory Control Sample (LCS)
1204547224	Laboratory Control Sample Duplicate (LCSD)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Quality Control (QC) Information

Laboratory Control Sample (LCS) Recovery

The LCS and/or LCSD (See Below) did not meet the spike recovery acceptance limits with a positive bias. As target analytes were not detected in the associated samples, the data were not adversely impacted.

Sample	Analyte	Value
1204547223 (LCS)	Fluorotelomer sulfonate 4:2 (4:2 FTS)	133* (70%-130%)

Technical Information

Sample Dilutions

The following sample and/or QC were diluted due to the Internal Standard Recovery not within the limits. 509440003 (3003 GST).

Analyte	509440
	003
Fluorotelomer sulfonate 4:2 (4:2 FTS)	5X
Perfluorobutyric acid (PFBA)	5X
Perfluoropentanoic acid (PFPeA)	5X

Miscellaneous Information

Additional Comments

Additional sample was not provided for matrix QC.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Client Name: Bob Walker
 Project/Site Name:
 Address: 516 Village Rd NE Leland, NC 28451
 Collected by: bwalker@hzgonline.com
 Phone #: 910-371-9949
 Fax #:
 Sample Analysis Requested (6) (Fill in the number of containers for each test)

Sample ID <small>* For composites - indicate start and stop date/time</small>	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (7)	Field Filtered (8)	Sample Matrix (4)	Should this sample be considered:		Total number of containers	Field Reagent Blank	1/4 Dioxane EPA 227	PFC 5971 DW	Preservative Type (6)	Comments
						Radioactive	TSCA Regulated						
1003 GST (Ground Storage Tank)	04/14/20	1333	FRB		W			2	X				2 FRB Containers
2003 GST	04/14/20	1341			DW			1	X				1 Container
3003 GST	04/14/20	1340			DW			2	X				2 containers
ADDITIONAL													

TAT Requested: Normal: Rush: _____ Specify: _____ (Subject to Surcharge) Fax Results: Yes / No / Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4
 Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Chain of Custody Signatures			Sample Shipping and Delivery Details		
Relinquished By (Signed)	Date	Time	Received by (Signed)	Date	Time
Bob Walker	4/14/20	1445	Dmytro Danyuk	4-15-20	830

GEL PM:
 Method of Shipment:
 Date Shipped:
 Airbill #:
 Airbill #:

1.) Chain of Custody Number = Client Determined
 2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
 3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for no sample was not field filtered.
 4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Urine, U=Nasal
 5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).
 6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
 Custody Seal Intact? YES NO
 Cooler Temp: 2 C

SAMPLE RECEIPT & REVIEW FORM

509440

Client: <u>H2G0</u>		SDG/AR/COC/Work Order: <u>KG</u>		
Received By: <u>Dye</u>		Date Received: <u>4-15-20</u>		
Carrier and Tracking Number		Circle Applicable: <input checked="" type="checkbox"/> FedEx Express <input type="checkbox"/> FedEx Ground <input type="checkbox"/> UPS <input type="checkbox"/> Field Services <input type="checkbox"/> Courier <input type="checkbox"/> Other <u>3918 8872 7741</u>		
Suspected Hazard Information	Yes	No	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.	
A) Shipped as a DOT Hazardous?		<input checked="" type="checkbox"/>	Hazard Class Shipped: _____ UN#: _____ If UN2910, Is the Radioactive Shipment Survey Compliant? Yes ___ No ___	
B) Did the client designate the samples are to be received as radioactive?		<input checked="" type="checkbox"/>	COC notation or radioactive stickers on containers equal client designation.	
C) Did the RSO classify the samples as radioactive?		<input checked="" type="checkbox"/>	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): <u>0</u> CPM / mR/hr Classified as: Rad 1 Rad 2 Rad 3	
D) Did the client designate samples are hazardous?		<input checked="" type="checkbox"/>	COC notation or hazard labels on containers equal client designation.	
E) Did the RSO identify possible hazards?		<input checked="" type="checkbox"/>	If D or E is yes, select Hazards below. PCBs Flammable Foreign Soil RCRA Asbestos Beryllium Other: _____	
Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2 Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Client contacted and provided COC COC created upon receipt
3 Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Preservation Method: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry ice <input type="checkbox"/> None <input type="checkbox"/> Other: *all temperatures are recorded in Celsius TEMP: <u>20</u>
4 Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Temperature Device Serial #: <u>123-19</u> Secondary Temperature Device Serial # (If Applicable): _____
5 Sample containers intact and sealed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6 Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample ID's and Containers Affected: _____
7 Do any samples require Volatile Analysis?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If Preservation added, Lot#: _____
				If Yes, are Encores or Soil Kits present for solids? Yes ___ No ___ NA ___ (If yes, take to VOA Freezer)
				Do liquid VOA vials contain acid preservation? Yes ___ No ___ NA ___ (If unknown, select No)
8 Samples received within holding time?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Are liquid VOA vials free of headspace? Yes ___ No ___ NA ___ Sample ID's and containers affected: _____
9 Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ID's and tests affected: _____
10 Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ID's and containers affected: _____
11 Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
12 Are sample containers identifiable as GEL provided?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: No container count on COC Other (describe)
13 COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Not relinquished Other (describe)
Comments (Use Continuation Form if needed):				

PM (or PMA) review: Initials SH Date 4/16/20 Page 1 of 1

List of current GEL Certifications as of 29 April 2020

State	Certification
Alaska	17-018
Alaska Drinking Water	SC00012
Arkansas	88-0651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	90129
Kentucky Wastewater	90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2019020
Maryland	270
Massachusetts	M-SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122020-1
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2019-165
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-20-16
Utah NELAP	SC000122020-32
Vermont	VT87156
Virginia NELAP	460202
Washington	C780