

December 21, 2017

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

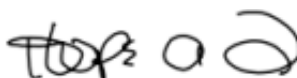
Re: Sample Analysis  
Work Order: 439610

Dear Bob Walker:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on December 08, 2017. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

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. 4778.

Sincerely,



Hope Taylor  
Project Manager

Purchase Order: signed quote  
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: 439610 GEL Work Order: 439610

**The Qualifiers in this report are defined as follows:**

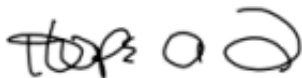
- \* A quality control analyte recovery is outside of specified acceptance criteria
- \*\* Analyte is a Tracer compound
- \*\* Analyte is a surrogate compound
- B The target analyte was detected in the associated blank.
- J Value is estimated
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- h Preparation or preservation holding time was exceeded

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, Hope Taylor.

Reviewed by



# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: December 21, 2017

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

Leland, North Carolina 28451

Contact: Bob Walker  
Project: Sample Analysis

Client Sample ID:	GST/BPS	Project:	H2GO00117
Sample ID:	439610001	Client ID:	H2GO001
Matrix:	Drinking Water (Potable)		
Collect Date:	22-NOV-17 13:30		
Receive Date:	08-DEC-17		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
LCMSMS PFCs												
NC 6 PFCs by LC-MS/MS "As Received"												
Nafion Byproduct 1	UXh	ND			ng/L	0.0199	1	JLS	12/18/17	2057	1724946	1
Nafion Byproduct 2	UXh	ND			ng/L	0.0199	1					
Perfluoro(3,5,7,9-tetraoxadecanoic) acid (PFO4DA)	UXh	ND			ng/L	0.0199	1					
Perfluoro(3,5,7-trioxaoctanoic) acid (PFO3OA)	UXh	ND			ng/L	0.0199	1					
Perfluoro(3,5-dioxahexanoic) acid (PFO2HxA)	UXh	ND			ng/L	0.0199	1					
Perfluoro-2-methoxyacetic acid (PFMOAA)	UXh	ND			ng/L	0.0199	1					
Perfluoro-3-methoxypropanoic acid (PFMOPrA)	UXh	ND			ng/L	0.0199	1					
Perfluoro-4-methoxybutanic acid (PFMOBA)	UXh	ND			ng/L	0.0199	1					
PFOA, PFOS by LC-MS/MS "As Received"												
2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-propanoic acid (PFPrOPrA)	Uh	ND	0.657	1.99	ng/L	0.0199	1	JLS	12/18/17	2057	1724946	2
Fluorotelomer sulfonate 4:2 (4:2 FTS)	Uh	ND	1.31	3.74	ng/L	0.0199	1					
Fluorotelomer sulfonate 6:2 (6:2 FTS)	Uh	ND	1.31	3.78	ng/L	0.0199	1					
Fluorotelomer sulfonate 8:2 (8:2 FTS)	Uh	ND	1.31	3.82	ng/L	0.0199	1					
Perfluorobutanesulfonate (PFBS)	Uh	ND	0.657	1.77	ng/L	0.0199	1					
Perfluorobutyric acid (PFBA)	Uh	ND	0.657	1.99	ng/L	0.0199	1					
Perfluorodecanesulfonate (PFDS)	Uh	ND	0.657	1.93	ng/L	0.0199	1					
Perfluorodecanoic acid (PFDA)	Uh	ND	0.657	1.99	ng/L	0.0199	1					
Perfluorododecanoic acid (PFDoA)	Uh	ND	0.657	1.99	ng/L	0.0199	1					
Perfluoroheptanesulfonate (PFHpS)	Uh	ND	0.657	1.89	ng/L	0.0199	1					
Perfluoroheptanoic acid (PFHpA)	Uh	ND	0.657	1.99	ng/L	0.0199	1					
Perfluorohexanesulfonate (PFHxS)	Uh	ND	0.657	1.81	ng/L	0.0199	1					
Perfluorohexanoic acid (PFHxA)	Uh	ND	0.657	1.99	ng/L	0.0199	1					
Perfluorononanesulfonate (PFNS)	Uh	ND	0.657	1.91	ng/L	0.0199	1					
Perfluorononanoic acid (PFNA)	Uh	ND	0.657	1.99	ng/L	0.0199	1					
Perfluorooctanesulfonamide (PFOSA)	Uh	ND	0.657	1.85	ng/L	0.0199	1					
Perfluorooctanesulfonate (PFOS)	BJh	0.938	0.657	1.99	ng/L	0.0199	1					
Perfluorooctanoic acid (PFOA)	Uh	ND	0.657	1.99	ng/L	0.0199	1					

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## Certificate of Analysis

Report Date: December 21, 2017

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

Leland, North Carolina 28451

Contact: Bob Walker  
Project: Sample Analysis

Client Sample ID: GST/BPS  
Sample ID: 439610001

Project: H2GO00117  
Client ID: H2GO001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
LCMSMS PFCs												
PFOA, PFOS by LC-MS/MS "As Received"												
Perfluoropentanesulfonate (PFPeS)	Uh	ND	0.657	1.87	ng/L	0.0199	1					
Perfluoropentanoic acid (PFPeA)	Uh	ND	0.657	1.99	ng/L	0.0199	1					
Perfluorotetradecanoic acid (PFTeDA)	Uh	ND	0.657	1.99	ng/L	0.0199	1					
Perfluorotridecanoic acid (PFTeDA)	Uh	ND	0.657	1.99	ng/L	0.0199	1					
Perfluoroundecanoic acid (PFUdA)	Uh	ND	0.657	1.99	ng/L	0.0199	1					

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 537	PFCs Extraction in Drinking Water	GXC1	12/08/17	1200	1724945

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 537	
2	EPA 537	

### 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: December 21, 2017

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

Leland, North Carolina 28451

Contact: Bob Walker  
Project: Sample Analysis

Client Sample ID: GST/BPS  
Sample ID: 439610002  
Matrix: Drinking Water (Potable)  
Collect Date: 22-NOV-17 13:30  
Receive Date: 08-DEC-17  
Collector: Client

Project: H2GO00117  
Client ID: H2GO001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
LCMSMS PFCs												
NC 6 PFCs by LC-MS/MS "As Received"												
Nafion Byproduct 1	Xh	0.775			ng/L	0.0224	1	JLS	12/18/17	2112	1724946	1
Nafion Byproduct 2	Xh	3.96			ng/L	0.0224	1					
Perfluoro(3,5,7,9-tetraoxadecanoic) acid (PFO4DA)	Xh	1.49			ng/L	0.0224	1					
Perfluoro(3,5,7-trioxaoctanoic) acid (PFO3OA)	Xh	5.36			ng/L	0.0224	1					
Perfluoro(3,5-dioxahexanoic) acid (PFO2HxA)	Xh	16.0			ng/L	0.0224	1					
Perfluoro-2-methoxyacetic acid (PFMOAA)	Xh	0.522			ng/L	0.0224	1					
Perfluoro-3-methoxypropanoic acid (PFMOPrA)	Xh	10.6			ng/L	0.0224	1					
Perfluoro-4-methoxybutanic acid (PFMOBA)	Xh	34.4			ng/L	0.0224	1					
PFOA, PFOS by LC-MS/MS "As Received"												
2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-propanoic acid (PFPrOPrA)	h	38.8	0.739	2.24	ng/L	0.0224	1	JLS	12/18/17	2112	1724946	2
Fluorotelomer sulfonate 8:2 (8:2 FTS)	Uh	ND	1.48	4.30	ng/L	0.0224	1					
Perfluorobutanesulfonate (PFBS)	h	4.18	0.739	1.99	ng/L	0.0224	1					
Perfluorobutyric acid (PFBA)	h	17.5	0.739	2.24	ng/L	0.0224	1					
Perfluorodecanesulfonate (PFDS)	Uh	ND	0.739	2.17	ng/L	0.0224	1					
Perfluorodecanoic acid (PFDA)	Jh	1.10	0.739	2.24	ng/L	0.0224	1					
Perfluorododecanoic acid (PFDoA)	Uh	ND	0.739	2.24	ng/L	0.0224	1					
Perfluoroheptanesulfonate (PFHpS)	Uh	ND	0.739	2.13	ng/L	0.0224	1					
Perfluoroheptanoic acid (PFHpA)	h	23.0	0.739	2.24	ng/L	0.0224	1					
Perfluorohexanesulfonate (PFHxS)	h	4.12	0.739	2.04	ng/L	0.0224	1					
Perfluorohexanoic acid (PFHxA)	h	34.4	0.739	2.24	ng/L	0.0224	1					
Perfluorononanesulfonate (PFNS)	Uh	ND	0.739	2.15	ng/L	0.0224	1					
Perfluorononanoic acid (PFNA)	Jh	1.70	0.739	2.24	ng/L	0.0224	1					
Perfluorooctanesulfonamide (PFOSA)	Uh	ND	0.739	2.08	ng/L	0.0224	1					
Perfluorooctanesulfonate (PFOS)	Bh	5.53	0.739	2.24	ng/L	0.0224	1					
Perfluorooctanoic acid (PFOA)	h	8.64	0.739	2.24	ng/L	0.0224	1					
Perfluoropentanesulfonate (PFPeS)	Jh	0.767	0.739	2.11	ng/L	0.0224	1					
Perfluoropentanoic acid (PFPeA)	h	44.1	0.739	2.24	ng/L	0.0224	1					
Perfluorotetradecanoic acid (PFTeDA)	Uh	ND	0.739	2.24	ng/L	0.0224	1					

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## Certificate of Analysis

Report Date: December 21, 2017

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

Leland, North Carolina 28451

Contact: Bob Walker  
Project: Sample Analysis

Client Sample ID: GST/BPS

Sample ID: 439610002

Project: H2GO00117

Client ID: H2GO001

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

#### PFOA, PFOS by LC-MS/MS "As Received"

Perfluorotridecanoic acid (PFTTrDA)	Uh	ND	0.739	2.24	ng/L	0.0224	1					
Perfluoroundecanoic acid (PFUdA)	Uh	ND	0.739	2.24	ng/L	0.0224	1					
Fluorotelomer sulfonate 4:2 (4:2 FTS)	Uh	ND	7.39	21.1	ng/L	0.0224	5	JLS	12/19/17	1034	1724946	3
Fluorotelomer sulfonate 6:2 (6:2 FTS)	Uh	ND	7.39	21.3	ng/L	0.0224	5					

### Semi-Volatile-GC/MS

#### EPA 522 1,4-Dioxane in Liquid "As Received"

1,4-Dioxane		5.21			ug/L	0.020	1	JMB3	12/13/17	0533	1723304	4
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The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 522	EPA 522 Prep 1,4-Dioxane	SJ	12/12/17	1000	1723303
EPA 537	PFCs Extraction in Drinking Water	GXC1	12/08/17	1200	1724945

The following Analytical Methods were performed:

Method	Description	Analyst	Comments
1	EPA 537		
2	EPA 537		
3	EPA 537		
4	EPA 522		

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
1,4-Dioxane-d8	EPA 522 1,4-Dioxane in Liquid "As Received"	4.15 ug/L	4.00	104	(70%-130%)

### 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: December 21, 2017

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

Leland, North Carolina 28451

Contact: Bob Walker  
Project: Sample Analysis

Client Sample ID:	GST/BPS	Project:	H2GO00117
Sample ID:	439610003	Client ID:	H2GO001
Matrix:	Drinking Water (Potable)		
Collect Date:	29-NOV-17 14:10		
Receive Date:	08-DEC-17		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
LCMSMS PFCs												
NC 6 PFCs by LC-MS/MS "As Received"												
Nafion Byproduct 1	UX	ND			ng/L	0.0199	1	JLS	12/18/17	2128	1724946	1
Nafion Byproduct 2	UX	ND			ng/L	0.0199	1					
Perfluoro(3,5,7,9-tetraoxadecanoic) acid (PFO4DA)	UX	ND			ng/L	0.0199	1					
Perfluoro(3,5,7-trioxaoctanoic) acid (PFO3OA)	UX	ND			ng/L	0.0199	1					
Perfluoro(3,5-dioxahexanoic) acid (PFO2HxA)	UX	ND			ng/L	0.0199	1					
Perfluoro-2-methoxyacetic acid (PFMOAA)	UX	ND			ng/L	0.0199	1					
Perfluoro-3-methoxypropanoic acid (PFMOPrA)	UX	ND			ng/L	0.0199	1					
Perfluoro-4-methoxybutanic acid (PFMOBA)	UX	ND			ng/L	0.0199	1					
PFOA, PFOS by LC-MS/MS "As Received"												
2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-propanoic acid (PFPrOPrA)	U	ND	0.657	1.99	ng/L	0.0199	1	JLS	12/18/17	2128	1724946	2
Fluorotelomer sulfonate 4:2 (4:2 FTS)	U	ND	1.31	3.74	ng/L	0.0199	1					
Fluorotelomer sulfonate 6:2 (6:2 FTS)	U	ND	1.31	3.78	ng/L	0.0199	1					
Fluorotelomer sulfonate 8:2 (8:2 FTS)	U	ND	1.31	3.82	ng/L	0.0199	1					
Perfluorobutanesulfonate (PFBS)	U	ND	0.657	1.77	ng/L	0.0199	1					
Perfluorobutyric acid (PFBA)	U	ND	0.657	1.99	ng/L	0.0199	1					
Perfluorodecanesulfonate (PFDS)	U	ND	0.657	1.93	ng/L	0.0199	1					
Perfluorodecanoic acid (PFDA)	U	ND	0.657	1.99	ng/L	0.0199	1					
Perfluorododecanoic acid (PFDoA)	U	ND	0.657	1.99	ng/L	0.0199	1					
Perfluoroheptanesulfonate (PFHpS)	U	ND	0.657	1.89	ng/L	0.0199	1					
Perfluoroheptanoic acid (PFHpA)	U	ND	0.657	1.99	ng/L	0.0199	1					
Perfluorohexanesulfonate (PFHxS)	U	ND	0.657	1.81	ng/L	0.0199	1					
Perfluorohexanoic acid (PFHxA)	U	ND	0.657	1.99	ng/L	0.0199	1					
Perfluorononanesulfonate (PFNS)	U	ND	0.657	1.91	ng/L	0.0199	1					
Perfluorononanoic acid (PFNA)	U	ND	0.657	1.99	ng/L	0.0199	1					
Perfluorooctanesulfonamide (PFOSA)	U	ND	0.657	1.85	ng/L	0.0199	1					
Perfluorooctanesulfonate (PFOS)	BJ	0.829	0.657	1.99	ng/L	0.0199	1					
Perfluorooctanoic acid (PFOA)	U	ND	0.657	1.99	ng/L	0.0199	1					

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

Leland, North Carolina 28451

Contact: Bob Walker  
Project: Sample Analysis

Client Sample ID:	GST/BPS	Project:	H2GO00117
Sample ID:	439610003	Client ID:	H2GO001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
LCMSMS PFCs												
PFOA, PFOS by LC-MS/MS "As Received"												
Perfluoropentanesulfonate (PFPeS)	U	ND	0.657	1.87	ng/L	0.0199	1					
Perfluoropentanoic acid (PFPeA)	U	ND	0.657	1.99	ng/L	0.0199	1					
Perfluorotetradecanoic acid (PFTeDA)	U	ND	0.657	1.99	ng/L	0.0199	1					
Perfluorotridecanoic acid (PFTeDA)	U	ND	0.657	1.99	ng/L	0.0199	1					
Perfluoroundecanoic acid (PFUdA)	U	ND	0.657	1.99	ng/L	0.0199	1					

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 537	PFCs Extraction in Drinking Water	GXC1	12/08/17	1200	1724945

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 537	
2	EPA 537	

### 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: December 21, 2017

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

Leland, North Carolina 28451

Contact: Bob Walker  
Project: Sample Analysis

Client Sample ID:	GST/BPS	Project:	H2GO00117
Sample ID:	439610004	Client ID:	H2GO001
Matrix:	Drinking Water (Potable)		
Collect Date:	29-NOV-17 14:10		
Receive Date:	08-DEC-17		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
LCMSMS PFCs												
NC 6 PFCs by LC-MS/MS "As Received"												
Nafion Byproduct 1	X	0.779			ng/L	0.021	1	JLS	12/18/17	2143	1724946	1
Nafion Byproduct 2	X	3.73			ng/L	0.021	1					
Perfluoro(3,5,7,9-tetraoxadecanoic) acid (PFO4DA)	X	1.44			ng/L	0.021	1					
Perfluoro(3,5,7-trioxaoctanoic) acid (PFO3OA)	X	4.41			ng/L	0.021	1					
Perfluoro(3,5-dioxahexanoic) acid (PFO2HxA)	X	13.9			ng/L	0.021	1					
Perfluoro-2-methoxyacetic acid (PFMOAA)	X	0.489			ng/L	0.021	1					
Perfluoro-3-methoxypropanoic acid (PFMOPrA)	X	10.3			ng/L	0.021	1					
Perfluoro-4-methoxybutanoic acid (PFMOBA)	X	27.1			ng/L	0.021	1					
PFOA, PFOS by LC-MS/MS "As Received"												
2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-propanoic acid (PFPrOPrA)		49.0	0.694	2.10	ng/L	0.021	1	JLS	12/18/17	2143	1724946	2
Fluorotelomer sulfonate 6:2 (6:2 FTS)	U	ND	1.39	4.00	ng/L	0.021	1					
Fluorotelomer sulfonate 8:2 (8:2 FTS)	U	ND	1.39	4.04	ng/L	0.021	1					
Perfluorobutanesulfonate (PFBS)		5.05	0.694	1.87	ng/L	0.021	1					
Perfluorobutyric acid (PFBA)		24.3	0.694	2.10	ng/L	0.021	1					
Perfluorodecanesulfonate (PFDS)	U	ND	0.694	2.04	ng/L	0.021	1					
Perfluorodecanoic acid (PFDA)	J	1.46	0.694	2.10	ng/L	0.021	1					
Perfluorododecanoic acid (PFDoA)	U	ND	0.694	2.10	ng/L	0.021	1					
Perfluoroheptanesulfonate (PFHpS)	U	ND	0.694	2.00	ng/L	0.021	1					
Perfluoroheptanoic acid (PFHpA)		30.0	0.694	2.10	ng/L	0.021	1					
Perfluorohexanesulfonate (PFHxS)		5.39	0.694	1.91	ng/L	0.021	1					
Perfluorohexanoic acid (PFHxA)		61.6	0.694	2.10	ng/L	0.021	1					
Perfluorononanesulfonate (PFNS)	U	ND	0.694	2.02	ng/L	0.021	1					
Perfluorononanoic acid (PFNA)		2.30	0.694	2.10	ng/L	0.021	1					
Perfluorooctanesulfonamide (PFOSA)	U	ND	0.694	1.96	ng/L	0.021	1					
Perfluorooctanesulfonate (PFOS)	B	7.39	0.694	2.10	ng/L	0.021	1					
Perfluorooctanoic acid (PFOA)		13.5	0.694	2.10	ng/L	0.021	1					
Perfluoropentanesulfonate (PFPeS)	J	0.948	0.694	1.98	ng/L	0.021	1					
Perfluoropentanoic acid (PFPeA)		69.4	0.694	2.10	ng/L	0.021	1					

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## Certificate of Analysis

Report Date: December 21, 2017

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

Leland, North Carolina 28451

Contact: Bob Walker  
Project: Sample Analysis

Client Sample ID: GST/BPS

Sample ID: 439610004

Project: H2GO00117

Client ID: H2GO001

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

#### PFOA, PFOS by LC-MS/MS "As Received"

Perfluorotetradecanoic acid (PFTeDA)	U	ND	0.694	2.10	ng/L	0.021	1					
Perfluorotridecanoic acid (PFTTrDA)	U	ND	0.694	2.10	ng/L	0.021	1					
Perfluoroundecanoic acid (PFUdA)	U	ND	0.694	2.10	ng/L	0.021	1					
Fluorotelomer sulfonate 4:2 (4:2 FTS)	U	ND	6.94	19.8	ng/L	0.021	5	JLS	12/19/17	1049	1724946	3

### Semi-Volatile-GC/MS

#### EPA 522 1,4-Dioxane in Liquid "As Received"

1,4-Dioxane		5.72			ug/L	0.020	1	JMB3	12/13/17	0637	1723304	4
-------------	--	------	--	--	------	-------	---	------	----------	------	---------	---

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 522	EPA 522 Prep 1,4-Dioxane	SJ	12/12/17	1000	1723303
EPA 537	PFCs Extraction in Drinking Water	GXC1	12/08/17	1200	1724945

The following Analytical Methods were performed:

Method	Description	Analyst	Comments
1	EPA 537		
2	EPA 537		
3	EPA 537		
4	EPA 522		

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
1,4-Dioxane-d8	EPA 522 1,4-Dioxane in Liquid "As Received"	3.98 ug/L	4.00	100	(70%-130%)

### 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: December 21, 2017

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

Contact: Bob Walker

Workorder: 439610

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Perfluorinated Compounds</b>											
Batch	1724946										
QC1203935165	LCS										
2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-propanoic acid (PFPrOPrA)	19.9			19.8	ng/L		100	(70%-130%)	JLS	12/18/17	20:27
Fluorotelomer sulfonate 4:2 (4:2 FTS)	18.6			20.0	ng/L		108	(70%-130%)			
Fluorotelomer sulfonate 6:2 (6:2 FTS)	18.9			21.0	ng/L		111	(70%-130%)			
Fluorotelomer sulfonate 8:2 (8:2 FTS)	19.1			21.9	ng/L		115	(70%-130%)			
Perfluorobutanesulfonate (PFBS)	17.6			18.2	ng/L		103	(70%-130%)			
Perfluorobutyric acid (PFBA)	19.9			23.6	ng/L		119	(70%-130%)			
Perfluorodecanesulfonate (PFDS)	19.2			16.6	ng/L		87	(70%-130%)			
Perfluorodecanoic acid (PFDA)	19.9			24.0	ng/L		121	(70%-130%)			
Perfluorododecanoic acid (PFDoA)	19.9			21.0	ng/L		106	(70%-130%)			
Perfluoroheptanesulfonate (PFHpS)	18.9			18.9	ng/L		100	(70%-130%)			
Perfluoroheptanoic acid (PFHpA)	19.9			21.9	ng/L		110	(70%-130%)			
Perfluorohexanesulfonate (PFHxS)	19.9			24.1	ng/L		121	(70%-130%)			
Perfluorohexanoic acid (PFHxA)	19.9			23.9	ng/L		120	(70%-130%)			

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## QC Summary

Workorder: 439610

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Perfluorinated Compounds</b>											
Batch 1724946											
Perfluorononanesulfonate (PFNS)	19.1			18.9	ng/L		99	(70%-130%)	JLS	12/18/17	20:27
Perfluorononanoic acid (PFNA)	19.9			23.1	ng/L		116	(70%-130%)			
Perfluorooctanesulfonamide (PFOSA)	18.4			20.4	ng/L		111	(70%-130%)			
Perfluorooctanesulfonate (PFOS)	19.9		B	18.8	ng/L		95	(70%-130%)			
Perfluorooctanoic acid (PFOA)	19.9			22.0	ng/L		111	(70%-130%)			
Perfluoropentanesulfonate (PFPeS)	19.9			24.5	ng/L		124	(70%-130%)			
Perfluoropentanoic acid (PFPeA)	19.9			25.0	ng/L		126	(70%-130%)			
Perfluorotetradecanoic acid (PFTeDA)	19.9			22.5	ng/L		114	(70%-130%)			
Perfluorotridecanoic acid (PFTrDA)	19.9			20.5	ng/L		103	(70%-130%)			
Perfluoroundecanoic acid (PFUdA)	19.9			21.4	ng/L		108	(70%-130%)			
QC1203935166 LCSD											
2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-propanoic acid (PFPrOPrA)	19.8			22.1	ng/L	11	112	(0%-30%)		12/18/17	20:42
Fluorotelomer sulfonate 4:2 (4:2 FTS)	18.5			21.2	ng/L	6	115	(0%-30%)			
Fluorotelomer sulfonate 6:2 (6:2 FTS)	18.8			19.7	ng/L	6	105	(0%-30%)			
Fluorotelomer sulfonate 8:2 (8:2 FTS)	19.0			25.2	ng/L	14	132 *	(0%-30%)			
Perfluorobutanesulfonate (PFBS)	17.5			19.4	ng/L	7	111	(0%-30%)			

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## QC Summary

Workorder: 439610

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Perfluorinated Compounds</b>											
Batch	1724946										
Perfluorobutyric acid (PFBA)	19.8			23.6	ng/L	0	119	(0%-30%)	JLS	12/18/17	20:42
Perfluorodecanesulfonate (PFDS)	19.1			20.2	ng/L	20	106	(0%-30%)			
Perfluorodecanoic acid (PFDA)	19.8			21.9	ng/L	9	111	(0%-30%)			
Perfluorododecanoic acid (PFDoA)	19.8			23.3	ng/L	11	118	(0%-30%)			
Perfluoroheptanesulfonate (PFHpS)	18.8			21.1	ng/L	11	112	(0%-30%)			
Perfluoroheptanoic acid (PFHpA)	19.8			20.8	ng/L	5	105	(0%-30%)			
Perfluorohexanesulfonate (PFHxS)	19.8			23.4	ng/L	3	118	(0%-30%)			
Perfluorohexanoic acid (PFHxA)	19.8			24.8	ng/L	4	125	(0%-30%)			
Perfluorononanesulfonate (PFNS)	19.0			19.8	ng/L	5	104	(0%-30%)			
Perfluorononanoic acid (PFNA)	19.8			20.8	ng/L	10	105	(0%-30%)			
Perfluorooctanesulfonamide (PFOSA)	18.3			22.8	ng/L	11	125	(0%-30%)			
Perfluorooctanesulfonate (PFOS)	19.8		B	21.2	ng/L	12	107	(0%-30%)			
Perfluorooctanoic acid (PFOA)	19.8			25.3	ng/L	14	128	(0%-30%)			
Perfluoropentanesulfonate (PFPeS)	19.8			22.7	ng/L	8	114	(0%-30%)			
Perfluoropentanoic acid (PFPeA)	19.8			21.7	ng/L	14	109	(0%-30%)			

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## QC Summary

Workorder: 439610

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Perfluorinated Compounds</b>											
Batch 1724946											
Perfluorotetradecanoic acid (PFTeDA)	19.8			19.5	ng/L	14	99	(0%-30%)	JLS	12/18/17	20:42
Perfluorotridecanoic acid (PFTrDA)	19.8			20.5	ng/L	0	104	(0%-30%)			
Perfluoroundecanoic acid (PFUdA)	19.8			24.3	ng/L	12	123	(0%-30%)			
QC1203935164 MB											
2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-propanoic acid (PFPrOPrA)			U	ND	ng/L					12/18/17	20:11
Fluorotelomer sulfonate 4:2 (4:2 FTS)			U	ND	ng/L						
Fluorotelomer sulfonate 6:2 (6:2 FTS)			U	ND	ng/L						
Fluorotelomer sulfonate 8:2 (8:2 FTS)			U	ND	ng/L						
Nafion Byproduct 1			UX	ND	ng/L						
Nafion Byproduct 2			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 (PFMOPrA)			UX	ND	ng/L						
Perfluoro-4-methoxybutanic acid (PFMOBA)			UX	ND	ng/L						

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## QC Summary

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Perfluorinated Compounds</b>											
Batch	1724946										
Perfluorobutanesulfonate (PFBS)			U	ND	ng/L				JLS	12/18/17	20:11
Perfluorobutyric acid (PFBA)			U	ND	ng/L						
Perfluorodecanesulfonate (PFDS)			U	ND	ng/L						
Perfluorodecanoic acid (PFDA)			U	ND	ng/L						
Perfluorododecanoic acid (PFDoA)			U	ND	ng/L						
Perfluoroheptanesulfonate (PFHpS)			U	ND	ng/L						
Perfluoroheptanoic acid (PFHpA)			U	ND	ng/L						
Perfluorohexanesulfonate (PFHxS)			U	ND	ng/L						
Perfluorohexanoic acid (PFHxA)			U	ND	ng/L						
Perfluorononanesulfonate (PFNS)			U	ND	ng/L						
Perfluorononanoic acid (PFNA)			U	ND	ng/L						
Perfluorooctanesulfonamide (PFOSA)			U	ND	ng/L						
Perfluorooctanesulfonate (PFOS)			J	0.963	ng/L						
Perfluorooctanoic acid (PFOA)			U	ND	ng/L						
Perfluoropentanesulfonate (PFPeS)			U	ND	ng/L						

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## QC Summary

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Perfluorinated Compounds</b>											
Batch	1724946										
Perfluoropentanoic acid (PFPeA)			U	ND	ng/L				JLS	12/18/17	20:11
Perfluorotetradecanoic acid (PFTeDA)			U	ND	ng/L						
Perfluorotridecanoic acid (PFTTrDA)			U	ND	ng/L						
Perfluoroundecanoic acid (PFUdA)			U	ND	ng/L						
<b>Semi-Volatile-GC/MS</b>											
Batch	1723304										
QC1203930892	LCS										
1,4-Dioxane	4.00			3.85	ug/L		96	(70%-130%)	JMB3	12/12/17	15:50
**1,4-Dioxane-d8	4.00			4.09	ug/L		102	(70%-130%)			
QC1203930891	MB										
1,4-Dioxane			U	ND	ug/L					12/12/17	15:23
**1,4-Dioxane-d8	4.00			3.48	ug/L		87	(70%-130%)			
QC1203930893	438687001	MS									
1,4-Dioxane	4.00	41.8		53.5	ug/L		N/A	(70%-130%)		12/13/17	09:00
**1,4-Dioxane-d8	4.00	4.50		5.14	ug/L		129	(70%-130%)			
QC1203930894	438687001	MSD									
1,4-Dioxane	4.00	41.8		52.0	ug/L	3	N/A	(0%-30%)		12/13/17	09:26
**1,4-Dioxane-d8	4.00	4.50		5.05	ug/L		126	(70%-130%)			

### Notes:

The Qualifiers in this report are defined as follows:

\*\* Analyte is a surrogate compound



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## QC Summary

Workorder: 439610

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<	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	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										
P	Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, the difference is >70%.										
Q	One or more quality control criteria have not been met. Refer to the applicable narrative or DER.										
R	Sample results are rejected										
U	Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.										
UJ	Compound cannot be extracted										
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier										
Y	QC Samples were not spiked with this compound										
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.										
h	Preparation or preservation holding time was exceeded										

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 (H2GO)**  
**SDG #: 439610**

## **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:** 1723304 and 1723303

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
439610002	GST/BPS
439610004	GST/BPS
1203930891	Method Blank (MB)
1203930892	Laboratory Control Sample (LCS)
1203930893	438687001(NonSDG) Matrix Spike (MS)
1203930894	438687001(NonSDG) Matrix Spike Duplicate (MSD)

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.

### **Technical Information**

#### **Sample Dilutions**

Samples 1203930893 (Non SDG 438687001MS) and 1203930894 (Non SDG 438687001MSD) were diluted due to the presence of one or more over-range target analytes.

### **Miscellaneous Information**

#### **Manual Integrations**

Samples (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
1203930893 (Non SDG 438687001MS)	Tetrahydrofuran-d8	Result 100ug/L
1203930894 (Non SDG 438687001MSD)	Tetrahydrofuran-d8	Result 100ug/L
439610002 (GST/BPS)	Tetrahydrofuran-d8	Result 10ug/L

## **LCMSMS-Misc**

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

**Analytical Method:** EPA 537

**Analytical Procedure:** GL-OA-E-076 REV# 4

**Analytical Batches:** 1724946 and 1724945

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
439610001	GST/BPS
439610002	GST/BPS
439610003	GST/BPS
439610004	GST/BPS
1203935164	Method Blank (MB)
1203935165	Laboratory Control Sample (LCS)
1203935166	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**

**Surrogate Recoveries**

Not all surrogate recoveries were within acceptable limits for the following sample. The sample was diluted to due to matrix interference. As a result, the surrogates fell outside of the acceptance range. 439610004 (GST/BPS).

**Laboratory Control Sample (LCS) Recovery**

The LCS and/or LCSD 1203935166 (LCSD) 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.

**Internal Standard (ISTD) Acceptance**

The internal standard associated with Fluorotelomer Sulfonate 4:2 (4:2 FTS) and /or Fluorotelomer Sulfonate 6:2 (6:2 FTS) recovered outside of the acceptance criteria for the samples listed below. The samples were reanalyzed re-analyzed at a dilution to minimize the effects. The diluted results were reported. 439610002 (GST/BPS) and 439610004 (GST/BPS).

**Technical Information**

**Holding Time Specifications**

Not all samples in this SDG met the specified holding time requirements. The following samples were received by the laboratory after the recommended holding time had expired. 439610001 (GST/BPS) and 439610002 (GST/BPS).

**Sample Dilutions**

The following samples and/or QC were diluted due to matrix interference. 439610002 (GST/BPS) and 439610004 (GST/BPS).

Analyte	439610	
	002	004

Fluorotelomer sulfonate 4:2 (4:2 FTS)	5X	5X
Fluorotelomer sulfonate 6:2 (6:2 FTS)	5X	1X

### **Miscellaneous Information**

#### **Additional Comments**

Results reported with the X qualifier are estimated concentrations and were obtained the GenX calibration curve because authentic standards are not available at this time.

#### **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.

[illegible]

**SAMPLE RECEIPT & REVIEW FORM**

Client: <u>H260</u>		SDG/AR/COC/Work Order: <u>439610</u>	
Received By: <u>ZKW</u>		Date Received: <u>12/8/17</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>4158 5142 1480</u>	
Suspected Hazard Information	Yes <input type="checkbox"/> No <input type="checkbox"/>	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.	
Shipped as a DOT Hazardous?	<input checked="" type="checkbox"/>	Hazard Class Shipped: _____ UN#: _____	
COC/Samples marked or classified as radioactive?	<input checked="" type="checkbox"/>	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): <u>0</u> <b>CPM</b> / mR/Hr Classified as: Rad 1    Rad 2    Rad 3	
Is package, COC, and/or Samples marked HAZ?	<input checked="" type="checkbox"/>	If yes, select Hazards below, and contact the GEL Safety Group. <input type="checkbox"/> PCB's <input type="checkbox"/> Flammable <input type="checkbox"/> Foreign Soil <input type="checkbox"/> RCRA <input type="checkbox"/> Asbestos <input type="checkbox"/> Beryllium <input type="checkbox"/> 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 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 type="checkbox"/>	<input type="checkbox"/>	
3 Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	<input checked="" type="checkbox"/>	<input 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 <span style="float: right;">TEMP: <u>2°C</u></span>
4 Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Temperature Device Serial #: <u>IR3-16</u> Secondary Temperature Device Serial # (If Applicable):
5 Sample containers intact and sealed?	<input checked="" type="checkbox"/>	<input 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 type="checkbox"/>	<input type="checkbox"/>	Sample ID's and Containers Affected: If Preservation added, Lot#:
7 Do any samples require Volatile Analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	If Yes, Are Encores or Soil Kits present? Yes___ No___ (If yes, take to VOA Freezer) Do VOA vials contain acid preservation? Yes___ No___ N/A___ (If unknown, select No) <input checked="" type="checkbox"/> VOA vials free of headspace? Yes___ No___ N/A___ Sample ID's and containers affected:
8 Samples received within holding time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ID's and tests affected:
9 Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sample ID's and containers affected:
10 Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sample ID's affected:
11 Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sample ID's affected:
12 Are sample containers identifiable as GEL provided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13 COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials MEH Date 12/11/17 Page 1 of 1

**List of current GEL Certifications as of 21 December 2017**

<b>State</b>	<b>Certification</b>
Alaska	UST-0110
Arkansas	88-0651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
Delaware	SC00012
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 Chemistry	SC00012
Idaho Radiochemistry	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	90129
Kentucky Wastewater	90129
Louisiana NELAP	03046 (AI33904)
Louisiana SDWA	LA170010
Maryland	270
Massachusetts	M-SC012
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122018-1
New Hampshire NELAP	205415
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	9904
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S.Carolina Radchem	10120002
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-17-12
Utah NELAP	SC000122017-25
Vermont	VT87156
Virginia NELAP	460202
Washington	C780
West Virginia	997404