

## LABORATORY REPORT

If you have any questions concerning this report, please do not hesitate to call us at (800) 332-4345 or (574) 233-4777.

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## STATE CERTIFICATION LIST

State	Certification	State	Certification
Alabama	40700	Missouri	880
Alaska	IN00035	Montana	CERT0026
Arizona	AZ0432	Nebraska	NE-OS-05-04
Arkansas	IN00035	Nevada	IN00035
California	2920	New Hampshire*	2124
Colorado	IN035	New Jersey*	IN598
Colorado Radiochemistry	IN035	New Mexico	IN00035
Connecticut	PH-0132	New York*	11398
Delaware	IN035	North Carolina	18700
Florida*	E87775	North Dakota	R-035
Georgia	929	Ohio	87775
Hawaii	IN035	Oklahoma	D9508
Idaho	IN00035	Oregon (Primary AB)*	4074-001
Illinois*	200001	Pennsylvania*	68-00466
Illinois Microbiology	17767	Puerto Rico	IN00035
Illinois Radiochemistry	IN00035	Rhode Island	LAO00343
Indiana Chemistry	C-71-01	South Carolina	95005
Indiana Microbiology	M-76-07	South Dakota	IN00035
Iowa	098	Tennessee	TN02973
Kansas*	E-10233	Texas*	T104704187-15-8
Kentucky	90056	Texas/TCEQ	TX207
Louisiana*	LA180008	Utah*	IN00035
Maine	IN00035	Vermont	VT-8775
Maryland	209	Virginia*	460275
Massachusetts	M-IN035	Washington	C837
Michigan	9926	West Virginia	9927 C
Minnesota*	018-999-338	Wisconsin	999766900
Mississippi	IN035	Wyoming	IN035
EPA	IN00035		

\*NELAP/TNI Recognized Accreditation Bodies

110 South Hill Street  
 South Bend, IN 46617  
 Tel: (574) 233-4777  
 Fax: (574) 233-8207  
 1 800 332 4345

## Laboratory Report

Client: Cary/Apex WTP  
 Attn: Rachel Monschein  
 1400 Wimberly Road  
 Apex, NC 27523

Report: 430571  
 Priority: Standard Written  
 Status: Final  
 PWS ID: NC0392020

Sample Information					
EEA ID #	Client ID	Method	Collected Date / Time	Collected By:	Received Date / Time
4064595	Raw Water Intake (Wet Well)	L402	09/20/18 14:20	Client	09/21/18 08:30
4064596	Filter Effluent	L402	09/20/18 14:00	Client	09/21/18 08:30
4064597	IX Resin-Purolite	L402	09/20/18 13:57	Client	09/21/18 08:30

### Report Summary

Detailed quantitative results are presented on the following pages. The results presented relate only to the samples provided for analysis.

We appreciate the opportunity to provide you with this analysis. If you have any questions concerning this report, please do not hesitate to call Joseph Mattheis at (574) 233-4777.

*Note: This report may not be reproduced, except in full, without written approval from EEA.*

 Account Manager

Authorized Signature

Title

10/03/2018

Date

Client Name: Cary/Apex WTP

Report #: 430571

Sampling Point: Raw Water Intake (Wet Well)

PWS ID: NC0392020

EEA Methods									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID #
120226-60-0	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
757124-22-4	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
27619-97-2	6:2 Fluorotelomer sulfonic acid (6:2 FTS)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
39108-34-4	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
958445-44-8	ADONA	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
73606-19-6	F-53B Major	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
83329-89-9	F-53B Minor	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
13252-13-6	GenX	L402	---	5.0	< 5.0	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
4151-50-2	N-ethylperfluorooctane sulfonamide (NEtFOSA)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
1691-99-2	N-ethylperfluorooctane sulfonamidoethanol	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
31506-32-8	N-methylperfluorooctane sulfonamide (NMeFOSA)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
24448-09-7	N-methylperfluorooctane sulfonamidoethanol	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
375-73-5	Perfluorobutanesulfonic acid (PFBS)	L402	---	2.0	<b>3.2</b>	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
375-22-4	Perfluorobutanoic acid (PFBA)	L402	---	5.0	<b>14</b>	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
335-76-2	Perfluorodecanoic acid (PFDA)	L402	---	2.0	<b>2.3</b>	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
375-85-9	Perfluoroheptanoic acid (PFHpA)	L402	---	2.0	<b>22</b>	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	L402	---	2.0	<b>3.3</b>	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
307-24-4	Perfluorohexanoic acid (PFHxA)	L402	---	2.0	<b>28</b>	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
307-55-1	Perfluorododecanoic acid (PFDoA)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
375-95-1	Perfluorononanoic acid (PFNA)	L402	---	2.0	<b>2.2</b>	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	L402	---	2.0	<b>19</b>	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
2991-50-6	N-ethyl Perfluorooctanesulfonamidoacetic acid	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
2355-31-9	N-methyl Perfluorooctanesulfonamidoacetic acid	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
335-67-1	Perfluorooctanoic acid (PFOA)	L402	---	2.0	<b>12</b>	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
2058-94-8	Perfluoroundecanoic acid (PFUnA)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
NA	Perfluorododecanesulfonic acid (PFDoS)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
335-77-3	Perfluorodecanesulfonic acid (PFDS)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
375-92-8	Perfluoroheptanesulfonic acid (PFHpS)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
67905-19-5	Perfluorohexadecanoic acid (PFHxDA)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
151772-58-6	Perfluoro-2-methoxyethoxyacetic acid	L402	---	5.0	< 5.0	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
801212-59-9	Perfluoro-4-isopropoxybutanoic acid	L402	---	5.0	< 5.0	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
863090-89-5	Perfluoro-4-methoxybutanoic acid (PFMOBA)	L402	---	5.0	< 5.0	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
377-73-1	Perfluoro-3-methoxypropanoic acid (PFMOPrA)	L402	---	5.0	< 5.0	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
68259-12-1	Perfluorononanesulfonic acid (PFNS)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
754-91-6	Perfluorooctane sulfonamide (PFOSA)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
2706-90-3	Perfluoropentanoic acid (PFPeA)	L402	---	2.0	<b>27</b>	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
2706-91-4	Perfluoropentanesulfonic acid (PFPeS)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 01:59	4064595
376-06-7	Perfluorotetradecanoic acid (PFTeDA)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 01:59	4064595

Sampling Point: Filter Effluent

PWS ID: NC0392020

EEA Methods									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID #
120226-60-0	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
757124-22-4	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
27619-97-2	6:2 Fluorotelomer sulfonic acid (6:2 FTS)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
39108-34-4	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
958445-44-8	ADONA	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
73606-19-6	F-53B Major	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
83329-89-9	F-53B Minor	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
13252-13-6	GenX	L402	---	5.0	< 5.0	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
4151-50-2	N-ethylperfluorooctane sulfonamide (NEtFOSA)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
1691-99-2	N-ethylperfluorooctane sulfonamidoethanol	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
31506-32-8	N-methylperfluorooctane sulfonamide (NMeFOSA)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
24448-09-7	N-methylperfluorooctane sulfonamidoethanol	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
375-73-5	Perfluorobutanesulfonic acid (PFBS)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
375-22-4	Perfluorobutanoic acid (PFBA)	L402	---	5.0	<b>15</b>	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
335-76-2	Perfluorodecanoic acid (PFDA)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
375-85-9	Perfluoroheptanoic acid (PFHpA)	L402	---	2.0	<b>6.1</b>	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
307-24-4	Perfluorohexanoic acid (PFHxA)	L402	---	2.0	<b>17</b>	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
307-55-1	Perfluorododecanoic acid (PFDoA)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
375-95-1	Perfluorononanoic acid (PFNA)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
2991-50-6	N-ethyl Perfluorooctanesulfonamidoacetic acid	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
2355-31-9	N-methyl Perfluorooctanesulfonamidoacetic acid	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
335-67-1	Perfluorooctanoic acid (PFOA)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
2058-94-8	Perfluoroundecanoic acid (PFUnA)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
NA	Perfluorododecanesulfonic acid (PFDoS)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
335-77-3	Perfluorodecanesulfonic acid (PFDS)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
375-92-8	Perfluoroheptanesulfonic acid (PFHpS)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
67905-19-5	Perfluorohexadecanoic acid (PFHxDA)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
151772-58-6	Perfluoro-2-methoxyethoxyacetic acid	L402	---	5.0	< 5.0	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
801212-59-9	Perfluoro-4-isopropoxybutanoic acid	L402	---	5.0	< 5.0	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
863090-89-5	Perfluoro-4-methoxybutanoic acid (PFMOBA)	L402	---	5.0	< 5.0	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
377-73-1	Perfluoro-3-methoxypropanoic acid (PFMOPrA)	L402	---	5.0	< 5.0	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
68259-12-1	Perfluorononanesulfonic acid (PFNS)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
754-91-6	Perfluorooctane sulfonamide (PFOSA)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
2706-90-3	Perfluoropentanoic acid (PFPeA)	L402	---	2.0	<b>25</b>	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
2706-91-4	Perfluoropentanesulfonic acid (PFPeS)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:25	4064596
376-06-7	Perfluorotetradecanoic acid (PFTeDA)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:25	4064596

Sampling Point: IX Resin-Purolite

PWS ID: NC0392020

EEA Methods									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID #
120226-60-0	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
757124-22-4	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
27619-97-2	6:2 Fluorotelomer sulfonic acid (6:2 FTS)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
39108-34-4	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
958445-44-8	ADONA	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
73606-19-6	F-53B Major	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
83329-89-9	F-53B Minor	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
13252-13-6	GenX	L402	---	5.0	< 5.0	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
4151-50-2	N-ethylperfluorooctane sulfonamide (NEtFOSA)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
1691-99-2	N-ethylperfluorooctane sulfonamidoethanol	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
31506-32-8	N-methylperfluorooctane sulfonamide (NMeFOSA)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
24448-09-7	N-methylperfluorooctane sulfonamidoethanol	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
375-73-5	Perfluorobutanesulfonic acid (PFBS)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
375-22-4	Perfluorobutanoic acid (PFBA)	L402	---	5.0	17	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
335-76-2	Perfluorodecanoic acid (PFDA)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
375-85-9	Perfluoroheptanoic acid (PFHpA)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
307-24-4	Perfluorohexanoic acid (PFHxA)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
307-55-1	Perfluorododecanoic acid (PFDoA)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
375-95-1	Perfluorononanoic acid (PFNA)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
2991-50-6	N-ethyl Perfluorooctanesulfonamidoacetic acid	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
2355-31-9	N-methyl Perfluorooctanesulfonamidoacetic acid	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
335-67-1	Perfluorooctanoic acid (PFOA)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
2058-94-8	Perfluoroundecanoic acid (PFUnA)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
NA	Perfluorododecanesulfonic acid (PFDoS)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
335-77-3	Perfluorodecanesulfonic acid (PFDS)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
375-92-8	Perfluoroheptanesulfonic acid (PFHpS)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
67905-19-5	Perfluorohexadecanoic acid (PFHxDA)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
151772-58-6	Perfluoro-2-methoxyethoxyacetic acid	L402	---	5.0	< 5.0	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
801212-59-9	Perfluoro-4-isopropoxybutanoic acid	L402	---	5.0	< 5.0	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
863090-89-5	Perfluoro-4-methoxybutanoic acid (PFMOBA)	L402	---	5.0	< 5.0	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
377-73-1	Perfluoro-3-methoxypropanoic acid (PFMOPrA)	L402	---	5.0	< 5.0	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
68259-12-1	Perfluorononanesulfonic acid (PFNS)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
754-91-6	Perfluorooctane sulfonamide (PFOSA)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
2706-90-3	Perfluoropentanoic acid (PFPeA)	L402	---	2.0	5.9	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
2706-91-4	Perfluoropentanesulfonic acid (PFPeS)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:51	4064597
376-06-7	Perfluorotetradecanoic acid (PFTeDA)	L402	---	2.0	< 2.0	ng/L	09/28/18 08:30	09/30/18 02:51	4064597

† EEA has demonstrated it can achieve these report limits in reagent water, but can not document them in all sample matrices.

Reg Limit Type:	MCL	SMCL	AL
Symbol:	*	^	!

## Lab Definitions

**Continuing Calibration Check Standard (CCC) / Continuing Calibration Verification (CCV) / Initial Calibration Verification Standard (ICV) / Initial Performance Check (IPC)** - is a standard containing one or more of the target analytes that is prepared from the same standards used to calibrate the instrument. This standard is used to verify the calibration curve at the beginning of each analytical sequence, and may also be analyzed throughout and at the end of the sequence. The concentration of continuing standards may be varied, when prescribed by the reference method, so that the range of the calibration curve is verified on a regular basis. CCL, CCM, and CCH are the CCC standards at low, mid, and high concentration levels, respectively.

**Internal Standards (IS)** - are pure compounds with properties similar to the analytes of interest, which are added to field samples or extracts, calibration standards, and quality control standards at a known concentration. They are used to measure the relative responses of the analytes of interest and surrogates in the sample, calibration standard or quality control standard.

**Laboratory Duplicate (LD)** - is a field sample aliquot taken from the same sample container in the laboratory and analyzed separately using identical procedures. Analysis of laboratory duplicates provides a measure of the precision of the laboratory procedures.

**Laboratory Fortified Blank (LFB) / Laboratory Control Sample (LCS)** - is an aliquot of reagent water to which known concentrations of the analytes of interest are added. The LFB is analyzed exactly the same as the field samples. LFBs are used to determine whether the method is in control. FBL, FBM, and FBH are the LFB samples at low, mid, and high concentration levels, respectively.

**Laboratory Method Blank (LMB) / Laboratory Reagent Blank (LRB)** - is a sample of reagent water included in the sample batch analyzed in the same way as the associated field samples. The LMB is used to determine if method analytes or other background contamination have been introduced during the preparation or analytical procedure. The LMB is analyzed exactly the same as the field samples.

**Laboratory Trip Blank (LTB) / Field Reagent Blank (FRB)** - is a sample of laboratory reagent water placed in a sample container in the laboratory and treated as a field sample, including storage, preservation, and all analytical procedures. The FRB/LTB container follows the collection bottles to and from the collection site, but the FRB/LTB is not opened at any time during the trip. The FRB/LTB is primarily a travel blank used to verify that the samples were not contaminated during shipment.

**Matrix Spike Duplicate Sample (MSD) / Laboratory Fortified Sample Matrix Duplicate (LFSMD)** - is a sample aliquot taken from the same field sample source as the Matrix Spike Sample to which known quantities of the analytes of interest are added in the laboratory. The MSD is analyzed exactly the same as the field samples. Analysis of the MSD provides a measure of the precision of the laboratory procedures in a specific matrix. SDL, SDM, and SDH / LFSMDL, LFSMDM, and LFSMDH are the MSD or LFSMD at low, mid, and high concentration levels, respectively.

**Matrix Spike Sample (MS) / Laboratory Fortified Sample Matrix (LFSM)** - is a sample aliquot taken from field sample source to which known quantities of the analytes of interest are added in the laboratory. The MS is analyzed exactly the same as the field samples. The purpose is to demonstrate recovery of the analytes from a sample matrix to determine if the specific matrix contributes bias to the analytical results. MSL, MSM, and MSH / LFSML, LFSMM, and LFSMH are the MS or LFSM at low, mid, and high concentration levels, respectively.

**Quality Control Standard (QCS) / Second Source Calibration Verification (SSCV)** - is a solution containing known concentrations of the analytes of interest prepared from a source different from the source of the calibration standards. The solution is obtained from a second manufacturer or lot if the lot can be demonstrated by the manufacturer as prepared independently from other lots. The QCS sample is analyzed using the same procedures as field samples. The QCS is used as a check on the calibration standards used in the method on a routine basis.

**Reporting Limit Check (RLC) / Initial Calibration Check Standard (ICCS)** - is a procedural standard that is analyzed each day to evaluate instrument performance at or below the minimum reporting limit (MRL).

**Surrogate Standard (SS) / Surrogate Analyte (SUR)** - is a pure compound with properties similar to the analytes of interest, which is highly unlikely to be found in any field sample, that is added to the field samples, calibration standards, blanks and quality control standards before sample preparation. The SS is used to evaluate the efficiency of the sample preparation process.



Eaton Analytical

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CHAIN OF CUSTODY RECORD

REPORT TO: **Shaded area for EEA use only**

Rachel Monschien  
1400 Wimberly Rd  
Apex, NC 27523

TOWN OF CARY FINANCE: A.P  
P.O. BOX 8005  
CARY, NC 27512-8005

SAMPLER (Signature): *[Signature]*

COMPLIANCE MONITORING: Yes No  
X

TEST NAME: JORDAN LAKE

POPULATION SERVED: >100,000

PWS ID #: NC0392020

STATE (sample origin): NC

PROJECT NAME: PFAS'S

LAB Number	COLLECTION		SAMPLING SITE	TEST NAME	CHLORINATED		# OF CONTAINERS	MATRIX CODE	TURNAROUND TIME
	DATE	TIME AM PM			YES	NO			
1	9-20-18	2:20	RAW WATER INTAKE (WET WELL)	PHV	X	X	2	DW SW	
2	↓	2:00	FILTER EFFLUENT	PHV	X		2	DW SW	
3	↓	11:57 A.M.	IX Resin - Purolite	PHV	X	X	2	DW SW	
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									

RELINQUISHED BY: (Signature) *[Signature]* DATE: 9-20-18 TIME: 2:10 AM

RECEIVED BY: (Signature) *[Signature]* DATE: 9/20/18 TIME: 2:40 AM

RELINQUISHED BY: (Signature) *[Signature]* DATE: 9/20/18 TIME: 4:00 AM

RECEIVED BY: (Signature) *[Signature]* DATE: 9-21-18 TIME: 08:30 AM

RECEIVED FOR LABORATORY BY: *[Signature]* DATE: 9-21-18

LAB COMMENTS: LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT

CONDITIONS UPON RECEIPT (check one):  
 Iced: Wet/Blue \_\_\_\_\_ Ambient \_\_\_\_\_ °C Upon Receipt \_\_\_\_\_ N/A  
 1.4

MATRIX CODES:  
 DW-DRINKING WATER  
 RW-REAGENT WATER  
 GW-GROUND WATER  
 EW-EXPOSURE WATER  
 SW-SURFACE WATER  
 PW-POOL WATER  
 WW-WASTE WATER

TURN-AROUND TIME (TAT) - SURCHARGES:  
 SW = Standard Written: (15 working days) 0%  
 RV\* = Rush Verbal: (5 working days) 50%  
 RW\* = Rush Written: (5 working days) 75%

IV\* = Immediate Verbal: (3 working days) 100%  
 IW\* = Immediate Written: (3 working days) 125%  
 SP\* = Weekend, Holiday CALL  
 STAT\* = Less than 48 hours CALL

Samples received unannounced with less than 48 hours holding time remaining may be subject to additional charges.

06-LO-F0435 Issue 4.0 Effective Date: 2014-05-01