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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.

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*	LA170006	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

Revision date: 08/28/2017

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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: 403092
Priority: Standard Written
Status: Final
PWS ID: NC0392020

Sample Information

EEA ID #	Client ID	Method	Collected Date / Time	Collected By:	Received Date / Time
3823200	Wet Well (RawWaterIntake)	537	11/16/17 09:00	Client	11/17/17 09:30
3823201	Finished Tap	537	11/16/17 08:45	Client	11/17/17 09:30
3823202	3025 Austin Pond	537	11/16/17 08:55	Client	11/17/17 09:30
3823203	1532 Furlong Loop	537	11/16/17 09:15	Client	11/17/17 09:30

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.

Authorized Signature | Title | 12/04/2017 Date

Client Name: Cary/Apex WTP
Report #: 403092

Client Name: Cary/Apex WTP Report #: 403092

Sampling Point: Wet Well (RawWaterIntake) PWS ID: NC0392020

EEA Methods									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID #
2991-50-6	N-ethyl Perfluorooctanesulfonamidoacetic acid (N	537	---	2.0	< 2.0	ng/L	11/29/17 08:00	11/29/17 22:28	3823200
2355-31-9	N-methyl Perfluorooctanesulfonamidoacetic acid	537	---	2.0	< 2.0	ng/L	11/29/17 08:00	11/29/17 22:28	3823200
375-73-5	Perfluorobutanesulfonic acid (PFBS)	537	---	2.0	**4.5**	ng/L	11/29/17 08:00	11/29/17 22:28	3823200
335-76-2	Perfluorodecanoic acid (PFDA)	537	---	2.0	**2.8**	ng/L	11/29/17 08:00	11/29/17 22:28	3823200
375-85-9	Perfluoroheptanoic acid (PFHpA)	537	---	2.0	**22**	ng/L	11/29/17 08:00	11/29/17 22:28	3823200
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	537	---	2.0	**3.3**	ng/L	11/29/17 08:00	11/29/17 22:28	3823200
307-24-4	Perfluorohexanoic acid (PFHxA)	537	---	2.0	**34**	ng/L	11/29/17 08:00	11/29/17 22:28	3823200
307-55-1	Perfluorolauric acid (PFDoA)	537	---	2.0	< 2.0	ng/L	11/29/17 08:00	11/29/17 22:28	3823200
376-06-7	Perfluoromyristic acid (PFTA)	537	---	2.0	< 2.0	ng/L	11/29/17 08:00	11/29/17 22:28	3823200
375-95-1	Perfluorononanoic acid (PFNA)	537	---	2.0	**3.5**	ng/L	11/29/17 08:00	11/29/17 22:28	3823200
1763-23-1	Perfluorooctane sulfonate (PFOS)	537	---	2.0	**11**	ng/L	11/29/17 08:00	11/29/17 22:28	3823200
335-67-1	Perfluorooctanoic acid (PFOA)	537	---	2.0	**15**	ng/L	11/29/17 08:00	11/29/17 22:28	3823200
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	537	---	2.0	< 2.0	ng/L	11/29/17 08:00	11/29/17 22:28	3823200
2058-94-8	Perfluoroundecanoic acid (PFUnA)	537	---	2.0	< 2.0	ng/L	11/29/17 08:00	11/29/17 22:28	3823200

Sampling Point: Finished Tap PWS ID: NC0392020

EEA Methods									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID #
2991-50-6	N-ethyl Perfluorooctanesulfonamidoacetic acid (N	537	---	2.0	< 2.0	ng/L	11/29/17 08:00	11/29/17 21:54	3823201
2355-31-9	N-methyl Perfluorooctanesulfonamidoacetic acid	537	---	2.0	< 2.0	ng/L	11/29/17 08:00	11/29/17 21:54	3823201
375-73-5	Perfluorobutanesulfonic acid (PFBS)	537	---	2.0	**3.6**	ng/L	11/29/17 08:00	11/29/17 21:54	3823201
335-76-2	Perfluorodecanoic acid (PFDA)	537	---	2.0	< 2.0	ng/L	11/29/17 08:00	11/29/17 21:54	3823201
375-85-9	Perfluoroheptanoic acid (PFHpA)	537	---	2.0	**16**	ng/L	11/29/17 08:00	11/29/17 21:54	3823201
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	537	---	2.0	< 2.0	ng/L	11/29/17 08:00	11/29/17 21:54	3823201
307-24-4	Perfluorohexanoic acid (PFHxA)	537	---	2.0	**28**	ng/L	11/29/17 08:00	11/29/17 21:54	3823201
307-55-1	Perfluorolauric acid (PFDoA)	537	---	2.0	< 2.0	ng/L	11/29/17 08:00	11/29/17 21:54	3823201
376-06-7	Perfluoromyristic acid (PFTA)	537	---	2.0	< 2.0	ng/L	11/29/17 08:00	11/29/17 21:54	3823201
375-95-1	Perfluorononanoic acid (PFNA)	537	---	2.0	< 2.0	ng/L	11/29/17 08:00	11/29/17 21:54	3823201
1763-23-1	Perfluorooctane sulfonate (PFOS)	537	---	2.0	**4.0**	ng/L	11/29/17 08:00	11/29/17 21:54	3823201
335-67-1	Perfluorooctanoic acid (PFOA)	537	---	2.0	**9.6**	ng/L	11/29/17 08:00	11/29/17 21:54	3823201
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	537	---	2.0	< 2.0	ng/L	11/29/17 08:00	11/29/17 21:54	3823201
2058-94-8	Perfluoroundecanoic acid (PFUnA)	537	---	2.0	< 2.0	ng/L	11/29/17 08:00	11/29/17 21:54	3823201

Client Name: Cary/Apex WTP Report #: 403092

Sampling Point: 3025 Austin Pond PWS ID: NC0392020

EEA Methods									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID #
2991-50-6	N-ethyl Perfluorooctanesulfonamidoacetic acid (N	537	---	2.0	< 2.0	ng/L	11/29/17 08:00	11/29/17 22:11	3823202
2355-31-9	N-methyl Perfluorooctanesulfonamidoacetic acid	537	---	2.0	< 2.0	ng/L	11/29/17 08:00	11/29/17 22:11	3823202
375-73-5	Perfluorobutanesulfonic acid (PFBS)	537	---	2.0	**3.8**	ng/L	11/29/17 08:00	11/29/17 22:11	3823202
335-76-2	Perfluorodecanoic acid (PFDA)	537	---	2.0	< 2.0	ng/L	11/29/17 08:00	11/29/17 22:11	3823202
375-85-9	Perfluoroheptanoic acid (PFHpA)	537	---	2.0	**16**	ng/L	11/29/17 08:00	11/29/17 22:11	3823202
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	537	---	2.0	< 2.0	ng/L	11/29/17 08:00	11/29/17 22:11	3823202
307-24-4	Perfluorohexanoic acid (PFHxA)	537	---	2.0	**28**	ng/L	11/29/17 08:00	11/29/17 22:11	3823202
307-55-1	Perfluorolauric acid (PFDoA)	537	---	2.0	< 2.0	ng/L	11/29/17 08:00	11/29/17 22:11	3823202
376-06-7	Perfluoromyristic acid (PFTA)	537	---	2.0	< 2.0	ng/L	11/29/17 08:00	11/29/17 22:11	3823202
375-95-1	Perfluorononanoic acid (PFNA)	537	---	2.0	< 2.0	ng/L	11/29/17 08:00	11/29/17 22:11	3823202
1763-23-1	Perfluorooctane sulfonate (PFOS)	537	---	2.0	**3.9**	ng/L	11/29/17 08:00	11/29/17 22:11	3823202
335-67-1	Perfluorooctanoic acid (PFOA)	537	---	2.0	**9.5**	ng/L	11/29/17 08:00	11/29/17 22:11	3823202
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	537	---	2.0	< 2.0	ng/L	11/29/17 08:00	11/29/17 22:11	3823202
2058-94-8	Perfluoroundecanoic acid (PFUnA)	537	---	2.0	< 2.0	ng/L	11/29/17 08:00	11/29/17 22:11	3823202

Sampling Point: 1532 Furlong Loop PWS ID: NC0392020

EEA Methods									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID #
2991-50-6	N-ethyl Perfluorooctanesulfonamidoacetic acid (N	537	---	2.0	< 2.0	ng/L	11/29/17 08:00	11/29/17 22:45	3823203
2355-31-9	N-methyl Perfluorooctanesulfonamidoacetic acid	537	---	2.0	< 2.0	ng/L	11/29/17 08:00	11/29/17 22:45	3823203
375-73-5	Perfluorobutanesulfonic acid (PFBS)	537	---	2.0	**3.9**	ng/L	11/29/17 08:00	11/29/17 22:45	3823203
335-76-2	Perfluorodecanoic acid (PFDA)	537	---	2.0	< 2.0	ng/L	11/29/17 08:00	11/29/17 22:45	3823203
375-85-9	Perfluoroheptanoic acid (PFHpA)	537	---	2.0	**16**	ng/L	11/29/17 08:00	11/29/17 22:45	3823203
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	537	---	2.0	< 2.0	ng/L	11/29/17 08:00	11/29/17 22:45	3823203
307-24-4	Perfluorohexanoic acid (PFHxA)	537	---	2.0	**28**	ng/L	11/29/17 08:00	11/29/17 22:45	3823203
307-55-1	Perfluorolauric acid (PFDoA)	537	---	2.0	< 2.0	ng/L	11/29/17 08:00	11/29/17 22:45	3823203
376-06-7	Perfluoromyristic acid (PFTA)	537	---	2.0	< 2.0	ng/L	11/29/17 08:00	11/29/17 22:45	3823203
375-95-1	Perfluorononanoic acid (PFNA)	537	---	2.0	< 2.0	ng/L	11/29/17 08:00	11/29/17 22:45	3823203
1763-23-1	Perfluorooctane sulfonate (PFOS)	537	---	2.0	**3.9**	ng/L	11/29/17 08:00	11/29/17 22:45	3823203
335-67-1	Perfluorooctanoic acid (PFOA)	537	---	2.0	**9.4**	ng/L	11/29/17 08:00	11/29/17 22:45	3823203
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	537	---	2.0	< 2.0	ng/L	11/29/17 08:00	11/29/17 22:45	3823203
2058-94-8	Perfluoroundecanoic acid (PFUnA)	537	---	2.0	< 2.0	ng/L	11/29/17 08:00	11/29/17 22:45	3823203

† 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.

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Order # 329624
Batch # 403092

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Shaded area for EEA use only

CHAIN OF CUSTODY RECORD

Page 1 of 1

REPORT TO: Rachel Monschein, 1400 Wimberly Rd, Apex, NC 27523

BILL TO: Town of Cary Finance, A.P., P.O Box 8005, Cary, NC 27512-8005

SAMPLER (Signature): Dan Brook

COMPLIANCE MONITORING: Yes ☐ No ✓

PWS ID #: NC0392020

POPULATION SERVED: >100,000

STATE (sample origin): NC

SOURCE WATER: Jordan Lake

PROJECT NAME: PFC, CRA537

PO#:

	LAB Number	COLLECTION DATE	COLLECTION TIME	AM	PM	SAMPLING SITE	TEST NAME	SAMPLE REMARKS	CHLORINATED YES	CHLORINATED NO	# OF CONTAINERS	MATRIX CODE	TURNAROUND TIME
1	3823,200	11-16-17	9:00A	X		Wet Well (Raw Water Intake)	PFC	CI-Ass		✓	1	DW	SW
2	201	↓	8:45A	X		Finished Tap	↓	↓	✓		1	DW	SW
3	202	↓	8:55A	X		3025 Austin Pond	↓	↓	✓		2	DW	SW
4	203	↓	9:15A	X		1532 Furlong Loop	↓	↓	✓		2	DW	SW
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													

RELINQUISHED BY:(Signature)	DATE	TIME	RECEIVED BY:(Signature)	DATE	TIME
Dan Brook	11-16-17	1005 AM PM	Erin Lee	11-16-17	10:05 AM PM
RELINQUISHED BY:(Signature)	DATE	TIME	RECEIVED BY:(Signature)	DATE	TIME
		AM PM			AM PM
RELINQUISHED BY:(Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY:	DATE	TIME
		AM PM	Stephanie Lyon	11-17-17	0930 AM PM

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

LAB COMMENTS

CONDITIONS UPON RECEIPT (check one): X Iced: Wet/Blue ____ Ambient 0.6 °C Upon Receipt____ N/A

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

* Please call, expedited service not available for all testing

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

Eurofins Eaton Analytical
Run Log

Run ID: **237174** Method: **537**

Type	Sample Id	Sample Site	Matrix	Instrument ID	Analysis Date	Calibration File
CCL	3828518		OS	FL	11/29/2017 19:40	112917M537b-FL-PFC14.mdb
LRB	3828507		RW	FL	11/29/2017 20:14	112917M537b-FL-PFC14.mdb
RLC	3828914		RW	FL	11/29/2017 20:30	112917M537b-FL-PFC14.mdb
FBM	3828508		RW	FL	11/29/2017 20:47	112917M537b-FL-PFC14.mdb
FS	3823200	Wet Well (RawWaterIntake)	DW	FL	11/29/2017 22:28	112917M537b-FL-PFC14.mdb
CCM	3828519		OS	FL	11/30/2017 01:16	112917M537b-FL-PFC14.mdb

QC Summary Report

Sample Type	Analyte	Method	MRL	Client ID	Result Flag	Amount	Target	Units	% Recovery	Recovery Limits	RPD	RPD Limit	Dil Factor	Extracted	Analyzed	EEA ID #
CCL	IS-NMeFOSAA-d3	537	N/A	---		963291.00	963291	ng/L	100	50 - 150	---	---	1.0	11/20/2017 14:07	11/29/2017 19:40	3828518
CCL	IS-PFOA-13C2	537	N/A	---		2156120.00	2156120	ng/L	100	50 - 150	---	---	1.0	11/20/2017 14:07	11/29/2017 19:40	3828518
CCL	IS-PFOS-13C4	537	N/A	---		370131.00	370131	ng/L	100	50 - 150	---	---	1.0	11/20/2017 14:07	11/29/2017 19:40	3828518
CCL	SS-NEtFOSAA-d5	537	N/A	---		206.6220	200	ng/L	103	70 - 130	---	---	1.0	11/20/2017 14:07	11/29/2017 19:40	3828518
CCL	SS-PFDA-13C2	537	N/A	---		99.7864	100	ng/L	100	70 - 130	---	---	1.0	11/20/2017 14:07	11/29/2017 19:40	3828518
CCL	SS-PFHxA-13C2	537	N/A	---		49.4952	50.0	ng/L	99	70 - 130	---	---	1.0	11/20/2017 14:07	11/29/2017 19:40	3828518
CCL	Perfluorooctanesulfonamidoacetic acid (NEtI	537	2.0	---		2.2463	2.0	ng/L	112	50 - 150	---	---	1.0	11/20/2017 14:07	11/29/2017 19:40	3828518
CCL	Perfluorooctanesulfonamidoacetic acid (NM	537	2.0	---		2.0033	2.0	ng/L	100	50 - 150	---	---	1.0	11/20/2017 14:07	11/29/2017 19:40	3828518
CCL	Perfluorobutanesulfonic acid (PFBS)	537	2.0	---		1.9377	2.0	ng/L	97	50 - 150	---	---	1.0	11/20/2017 14:07	11/29/2017 19:40	3828518
CCL	Perfluorodecanoic acid (PFDA)	537	2.0	---		1.9982	2.0	ng/L	100	50 - 150	---	---	1.0	11/20/2017 14:07	11/29/2017 19:40	3828518
CCL	Perfluoroheptanoic acid (PFHpA)	537	2.0	---		1.9620	2.0	ng/L	98	50 - 150	---	---	1.0	11/20/2017 14:07	11/29/2017 19:40	3828518
CCL	Perfluorohexanesulfonic acid (PFHxS)	537	2.0	---		1.9261	2.0	ng/L	96	50 - 150	---	---	1.0	11/20/2017 14:07	11/29/2017 19:40	3828518
CCL	Perfluorohexanoic acid (PFHxA)	537	2.0	---		1.9864	2.0	ng/L	99	50 - 150	---	---	1.0	11/20/2017 14:07	11/29/2017 19:40	3828518
CCL	Perfluorolauric acid (PFDoA)	537	2.0	---		2.0517	2.0	ng/L	103	50 - 150	---	---	1.0	11/20/2017 14:07	11/29/2017 19:40	3828518
CCL	Perfluoromyristic acid (PFTA)	537	2.0	---		1.9813	2.0	ng/L	99	50 - 150	---	---	1.0	11/20/2017 14:07	11/29/2017 19:40	3828518
CCL	Perfluorononanoic acid (PFNA)	537	2.0	---		2.0567	2.0	ng/L	103	50 - 150	---	---	1.0	11/20/2017 14:07	11/29/2017 19:40	3828518
CCL	Perfluorooctane sulfonate (PFOS)	537	2.0	---		1.9263	2.0	ng/L	96	50 - 150	---	---	1.0	11/20/2017 14:07	11/29/2017 19:40	3828518
CCL	Perfluorooctanoic acid (PFOA)	537	2.0	---		2.0162	2.0	ng/L	101	50 - 150	---	---	1.0	11/20/2017 14:07	11/29/2017 19:40	3828518
CCL	Perfluorotridecanoic acid (PFTrDA)	537	2.0	---		1.9938	2.0	ng/L	100	50 - 150	---	---	1.0	11/20/2017 14:07	11/29/2017 19:40	3828518
CCL	Perfluoroundecanoic acid (PFUnA)	537	2.0	---		2.0486	2.0	ng/L	102	50 - 150	---	---	1.0	11/20/2017 14:07	11/29/2017 19:40	3828518
LRB	IS-NMeFOSAA-d3	537	N/A	---		970075.00	963291	ng/L	101	50 - 150	---	---	0.85	11/29/2017 08:00	11/29/2017 20:14	3828507
LRB	IS-PFOA-13C2	537	N/A	---		2248440.00	2156120	ng/L	104	50 - 150	---	---	0.85	11/29/2017 08:00	11/29/2017 20:14	3828507
LRB	IS-PFOS-13C4	537	N/A	---		373395.00	370131	ng/L	101	50 - 150	---	---	0.85	11/29/2017 08:00	11/29/2017 20:14	3828507
LRB	SS-NEtFOSAA-d5	537	N/A	---		151.4730	200	ng/L	89	70 - 130	---	---	0.85	11/29/2017 08:00	11/29/2017 20:14	3828507
LRB	SS-PFDA-13C2	537	N/A	---		78.8395	100	ng/L	93	70 - 130	---	---	0.85	11/29/2017 08:00	11/29/2017 20:14	3828507
LRB	SS-PFHxA-13C2	537	N/A	---		40.5574	50.0	ng/L	95	70 - 130	---	---	0.85	11/29/2017 08:00	11/29/2017 20:14	3828507
LRB	Perfluorooctanesulfonamidoacetic acid (NEtI	537	2.0	---	<	2.0		ng/L	---	---	---	---	0.85	11/29/2017 08:00	11/29/2017 20:14	3828507
LRB	Perfluorooctanesulfonamidoacetic acid (NM	537	2.0	---	<	2.0		ng/L	---	---	---	---	0.85	11/29/2017 08:00	11/29/2017 20:14	3828507
LRB	Perfluorobutanesulfonic acid (PFBS)	537	2.0	---	<	2.0		ng/L	---	---	---	---	0.85	11/29/2017 08:00	11/29/2017 20:14	3828507
LRB	Perfluorodecanoic acid (PFDA)	537	2.0	---	<	2.0		ng/L	---	---	---	---	0.85	11/29/2017 08:00	11/29/2017 20:14	3828507
LRB	Perfluoroheptanoic acid (PFHpA)	537	2.0	---	<	2.0		ng/L	---	---	---	---	0.85	11/29/2017 08:00	11/29/2017 20:14	3828507
LRB	Perfluorohexanesulfonic acid (PFHxS)	537	2.0	---	<	2.0		ng/L	---	---	---	---	0.85	11/29/2017 08:00	11/29/2017 20:14	3828507
LRB	Perfluorohexanoic acid (PFHxA)	537	2.0	---	<	2.0		ng/L	---	---	---	---	0.85	11/29/2017 08:00	11/29/2017 20:14	3828507
LRB	Perfluorolauric acid (PFDoA)	537	2.0	---	<	2.0		ng/L	---	---	---	---	0.85	11/29/2017 08:00	11/29/2017 20:14	3828507
LRB	Perfluoromyristic acid (PFTA)	537	2.0	---	<	2.0		ng/L	---	---	---	---	0.85	11/29/2017 08:00	11/29/2017 20:14	3828507
LRB	Perfluorononanoic acid (PFNA)	537	2.0	---	<	2.0		ng/L	---	---	---	---	0.85	11/29/2017 08:00	11/29/2017 20:14	3828507
LRB	Perfluorooctane sulfonate (PFOS)	537	2.0	---	<	2.0		ng/L	---	---	---	---	0.85	11/29/2017 08:00	11/29/2017 20:14	3828507
LRB	Perfluorooctanoic acid (PFOA)	537	2.0	---	<	2.0		ng/L	---	---	---	---	0.85	11/29/2017 08:00	11/29/2017 20:14	3828507
LRB	Perfluorotridecanoic acid (PFTrDA)	537	2.0	---	<	2.0		ng/L	---	---	---	---	0.85	11/29/2017 08:00	11/29/2017 20:14	3828507
LRB	Perfluoroundecanoic acid (PFUnA)	537	2.0	---	<	2.0		ng/L	---	---	---	---	0.85	11/29/2017 08:00	11/29/2017 20:14	3828507

QC Summary Report (cont.)

Sample Type	Analyte	Method	MRL	Client ID	Result Flag	Amount	Target	Units	% Recovery	Recovery Limits	RPD	RPD Limit	Dil Factor	Extracted	Analyzed	EEA ID #
RLC	IS-NMeFOSAA-d3	537	N/A	---		968920.00	963291	ng/L	101	50 - 150	---	---	1.0	11/27/2017 08:10	11/29/2017 20:30	3828914
RLC	IS-PFOA-13C2	537	N/A	---		2257150.00	2156120	ng/L	105	50 - 150	---	---	1.0	11/27/2017 08:10	11/29/2017 20:30	3828914
RLC	IS-PFOS-13C4	537	N/A	---		376267.00	370131	ng/L	102	50 - 150	---	---	1.0	11/27/2017 08:10	11/29/2017 20:30	3828914
RLC	SS-NEtFOSAA-d5	537	N/A	---		187.0560	200	ng/L	94	70 - 130	---	---	1.0	11/27/2017 08:10	11/29/2017 20:30	3828914
RLC	SS-PFDA-13C2	537	N/A	---		92.9902	100	ng/L	93	70 - 130	---	---	1.0	11/27/2017 08:10	11/29/2017 20:30	3828914
RLC	SS-PFHxA-13C2	537	N/A	---		47.7821	50.0	ng/L	96	70 - 130	---	---	1.0	11/27/2017 08:10	11/29/2017 20:30	3828914
RLC	Perfluorooctanesulfonamidoacetic acid (NEtI	537	2.0	---		1.8105	2.0	ng/L	91	50 - 150	---	---	1.0	11/27/2017 08:10	11/29/2017 20:30	3828914
RLC	Perfluorooctanesulfonamidoacetic acid (NM	537	2.0	---		1.6550	2.0	ng/L	83	50 - 150	---	---	1.0	11/27/2017 08:10	11/29/2017 20:30	3828914
RLC	Perfluorobutanesulfonic acid (PFBS)	537	2.0	---		1.9088	2.0	ng/L	95	50 - 150	---	---	1.0	11/27/2017 08:10	11/29/2017 20:30	3828914
RLC	Perfluorodecanoic acid (PFDA)	537	2.0	---		1.8152	2.0	ng/L	91	50 - 150	---	---	1.0	11/27/2017 08:10	11/29/2017 20:30	3828914
RLC	Perfluoroheptanoic acid (PFHpA)	537	2.0	---		1.8786	2.0	ng/L	94	50 - 150	---	---	1.0	11/27/2017 08:10	11/29/2017 20:30	3828914
RLC	Perfluorohexanesulfonic acid (PFHxS)	537	2.0	---		1.9645	2.0	ng/L	98	50 - 150	---	---	1.0	11/27/2017 08:10	11/29/2017 20:30	3828914
RLC	Perfluorohexanoic acid (PFHxA)	537	2.0	---		1.9105	2.0	ng/L	96	50 - 150	---	---	1.0	11/27/2017 08:10	11/29/2017 20:30	3828914
RLC	Perfluorolauric acid (PFDoA)	537	2.0	---		1.8343	2.0	ng/L	92	50 - 150	---	---	1.0	11/27/2017 08:10	11/29/2017 20:30	3828914
RLC	Perfluoromyristic acid (PFTA)	537	2.0	---		1.6865	2.0	ng/L	84	50 - 150	---	---	1.0	11/27/2017 08:10	11/29/2017 20:30	3828914
RLC	Perfluorononanoic acid (PFNA)	537	2.0	---		2.0564	2.0	ng/L	103	50 - 150	---	---	1.0	11/27/2017 08:10	11/29/2017 20:30	3828914
RLC	Perfluorooctane sulfonate (PFOS)	537	2.0	---		1.8911	2.0	ng/L	95	50 - 150	---	---	1.0	11/27/2017 08:10	11/29/2017 20:30	3828914
RLC	Perfluorooctanoic acid (PFOA)	537	2.0	---		1.9934	2.0	ng/L	100	50 - 150	---	---	1.0	11/27/2017 08:10	11/29/2017 20:30	3828914
RLC	Perfluorotridecanoic acid (PFTrDA)	537	2.0	---		1.7642	2.0	ng/L	88	50 - 150	---	---	1.0	11/27/2017 08:10	11/29/2017 20:30	3828914
RLC	Perfluoroundecanoic acid (PFUnA)	537	2.0	---		1.8065	2.0	ng/L	90	50 - 150	---	---	1.0	11/27/2017 08:10	11/29/2017 20:30	3828914
FBM	IS-NMeFOSAA-d3	537	N/A	---		962299.00	963291	ng/L	100	50 - 150	---	---	1.0	11/29/2017 08:00	11/29/2017 20:47	3828508
FBM	IS-PFOA-13C2	537	N/A	---		2212980.00	2156120	ng/L	103	50 - 150	---	---	1.0	11/29/2017 08:00	11/29/2017 20:47	3828508
FBM	IS-PFOS-13C4	537	N/A	---		376215.00	370131	ng/L	102	50 - 150	---	---	1.0	11/29/2017 08:00	11/29/2017 20:47	3828508
FBM	SS-NEtFOSAA-d5	537	N/A	---		179.3670	200	ng/L	90	70 - 130	---	---	1.0	11/29/2017 08:00	11/29/2017 20:47	3828508
FBM	SS-PFDA-13C2	537	N/A	---		93.0823	100	ng/L	93	70 - 130	---	---	1.0	11/29/2017 08:00	11/29/2017 20:47	3828508
FBM	SS-PFHxA-13C2	537	N/A	---		47.9411	50.0	ng/L	96	70 - 130	---	---	1.0	11/29/2017 08:00	11/29/2017 20:47	3828508
FBM	Perfluorooctanesulfonamidoacetic acid (NEtI	537	2.0	---		92.3386	100	ng/L	92	70 - 130	---	---	1.0	11/29/2017 08:00	11/29/2017 20:47	3828508
FBM	Perfluorooctanesulfonamidoacetic acid (NM	537	2.0	---		91.1050	100	ng/L	91	70 - 130	---	---	1.0	11/29/2017 08:00	11/29/2017 20:47	3828508
FBM	Perfluorobutanesulfonic acid (PFBS)	537	2.0	---		97.8929	100	ng/L	98	70 - 130	---	---	1.0	11/29/2017 08:00	11/29/2017 20:47	3828508
FBM	Perfluorodecanoic acid (PFDA)	537	2.0	---		93.0366	100	ng/L	93	70 - 130	---	---	1.0	11/29/2017 08:00	11/29/2017 20:47	3828508
FBM	Perfluoroheptanoic acid (PFHpA)	537	2.0	---		94.4753	100	ng/L	94	70 - 130	---	---	1.0	11/29/2017 08:00	11/29/2017 20:47	3828508
FBM	Perfluorohexanesulfonic acid (PFHxS)	537	2.0	---		98.6774	100	ng/L	99	70 - 130	---	---	1.0	11/29/2017 08:00	11/29/2017 20:47	3828508
FBM	Perfluorohexanoic acid (PFHxA)	537	2.0	---		94.0712	100	ng/L	94	70 - 130	---	---	1.0	11/29/2017 08:00	11/29/2017 20:47	3828508
FBM	Perfluorolauric acid (PFDoA)	537	2.0	---		88.6460	100	ng/L	89	70 - 130	---	---	1.0	11/29/2017 08:00	11/29/2017 20:47	3828508
FBM	Perfluoromyristic acid (PFTA)	537	2.0	---		84.3079	100	ng/L	84	70 - 130	---	---	1.0	11/29/2017 08:00	11/29/2017 20:47	3828508
FBM	Perfluorononanoic acid (PFNA)	537	2.0	---		96.4042	100	ng/L	96	70 - 130	---	---	1.0	11/29/2017 08:00	11/29/2017 20:47	3828508
FBM	Perfluorooctane sulfonate (PFOS)	537	2.0	---		94.5931	100	ng/L	95	70 - 130	---	---	1.0	11/29/2017 08:00	11/29/2017 20:47	3828508
FBM	Perfluorooctanoic acid (PFOA)	537	2.0	---		96.9892	100	ng/L	97	70 - 130	---	---	1.0	11/29/2017 08:00	11/29/2017 20:47	3828508
FBM	Perfluorotridecanoic acid (PFTrDA)	537	2.0	---		86.7862	100	ng/L	87	70 - 130	---	---	1.0	11/29/2017 08:00	11/29/2017 20:47	3828508
FBM	Perfluoroundecanoic acid (PFUnA)	537	2.0	---		90.7063	100	ng/L	91	70 - 130	---	---	1.0	11/29/2017 08:00	11/29/2017 20:47	3828508
FS	IS-NMeFOSAA-d3	537	N/A	Wet Well (RawWaterIntake)		968701.00	963291	ng/L	101	50 - 150	---	---	0.89	11/29/2017 08:00	11/29/2017 22:28	3823200

QC Summary Report (cont.)

Sample Type	Analyte	Method	MRL	Client ID	Result Flag	Amount	Target	Units	% Recovery	Recovery Limits	RPD	RPD Limit	Dil Factor	Extracted	Analyzed	EEA ID #
FS	IS-PFOA-13C2	537	N/A	Wet Well (RawWaterIntake)		2286160.00	2156120	ng/L	106	50 - 150	---	---	0.89	11/29/2017 08:00	11/29/2017 22:28	3823200
FS	IS-PFOS-13C4	537	N/A	Wet Well (RawWaterIntake)		384073.00	370131	ng/L	104	50 - 150	---	---	0.89	11/29/2017 08:00	11/29/2017 22:28	3823200
FS	SS-NEtFOSAA-d5	537	N/A	Wet Well (RawWaterIntake)		168.4790	200	ng/L	95	70 - 130	---	---	0.89	11/29/2017 08:00	11/29/2017 22:28	3823200
FS	SS-PFDA-13C2	537	N/A	Wet Well (RawWaterIntake)		80.2583	100	ng/L	90	70 - 130	---	---	0.89	11/29/2017 08:00	11/29/2017 22:28	3823200
FS	SS-PFHxA-13C2	537	N/A	Wet Well (RawWaterIntake)		46.2120	50.0	ng/L	104	70 - 130	---	---	0.89	11/29/2017 08:00	11/29/2017 22:28	3823200
FS	Perfluorooctanesulfonamidoacetic acid (NEtI	537	2.0	Wet Well (RawWaterIntake)	<	2.0		ng/L	---	---	---	---	0.89	11/29/2017 08:00	11/29/2017 22:28	3823200
FS	Perfluorooctanesulfonamidoacetic acid (NM	537	2.0	Wet Well (RawWaterIntake)	<	2.0		ng/L	---	---	---	---	0.89	11/29/2017 08:00	11/29/2017 22:28	3823200
FS	Perfluorobutanesulfonic acid (PFBS)	537	2.0	Wet Well (RawWaterIntake)		4.5		ng/L	---	---	---	---	0.89	11/29/2017 08:00	11/29/2017 22:28	3823200
FS	Perfluorodecanoic acid (PFDA)	537	2.0	Wet Well (RawWaterIntake)		2.8		ng/L	---	---	---	---	0.89	11/29/2017 08:00	11/29/2017 22:28	3823200
FS	Perfluoroheptanoic acid (PFHpA)	537	2.0	Wet Well (RawWaterIntake)		22		ng/L	---	---	---	---	0.89	11/29/2017 08:00	11/29/2017 22:28	3823200
FS	Perfluorohexanesulfonic acid (PFHxS)	537	2.0	Wet Well (RawWaterIntake)		3.3		ng/L	---	---	---	---	0.89	11/29/2017 08:00	11/29/2017 22:28	3823200
FS	Perfluorohexanoic acid (PFHxA)	537	2.0	Wet Well (RawWaterIntake)		34		ng/L	---	---	---	---	0.89	11/29/2017 08:00	11/29/2017 22:28	3823200
FS	Perfluorolauric acid (PFDoA)	537	2.0	Wet Well (RawWaterIntake)	<	2.0		ng/L	---	---	---	---	0.89	11/29/2017 08:00	11/29/2017 22:28	3823200
FS	Perfluoromyristic acid (PFTA)	537	2.0	Wet Well (RawWaterIntake)	<	2.0		ng/L	---	---	---	---	0.89	11/29/2017 08:00	11/29/2017 22:28	3823200
FS	Perfluorononanoic acid (PFNA)	537	2.0	Wet Well (RawWaterIntake)		3.5		ng/L	---	---	---	---	0.89	11/29/2017 08:00	11/29/2017 22:28	3823200
FS	Perfluorooctane sulfonate (PFOS)	537	2.0	Wet Well (RawWaterIntake)		11		ng/L	---	---	---	---	0.89	11/29/2017 08:00	11/29/2017 22:28	3823200
FS	Perfluorooctanoic acid (PFOA)	537	2.0	Wet Well (RawWaterIntake)		15		ng/L	---	---	---	---	0.89	11/29/2017 08:00	11/29/2017 22:28	3823200
FS	Perfluorotridecanoic acid (PFTrDA)	537	2.0	Wet Well (RawWaterIntake)	<	2.0		ng/L	---	---	---	---	0.89	11/29/2017 08:00	11/29/2017 22:28	3823200
FS	Perfluoroundecanoic acid (PFUnA)	537	2.0	Wet Well (RawWaterIntake)	<	2.0		ng/L	---	---	---	---	0.89	11/29/2017 08:00	11/29/2017 22:28	3823200
CCM	IS-NMeFOSAA-d3	537	N/A	---		969903.00	969903	ng/L	100	50 - 150	---	---	1.0	11/20/2017 14:07	11/30/2017 01:16	3828519
CCM	IS-PFOA-13C2	537	N/A	---		2191240.00	2191240	ng/L	100	50 - 150	---	---	1.0	11/20/2017 14:07	11/30/2017 01:16	3828519
CCM	IS-PFOS-13C4	537	N/A	---		377372.00	377372	ng/L	100	50 - 150	---	---	1.0	11/20/2017 14:07	11/30/2017 01:16	3828519
CCM	SS-NEtFOSAA-d5	537	N/A	---		200.9960	200	ng/L	100	70 - 130	---	---	1.0	11/20/2017 14:07	11/30/2017 01:16	3828519
CCM	SS-PFDA-13C2	537	N/A	---		99.4215	100	ng/L	99	70 - 130	---	---	1.0	11/20/2017 14:07	11/30/2017 01:16	3828519
CCM	SS-PFHxA-13C2	537	N/A	---		49.4139	50.0	ng/L	99	70 - 130	---	---	1.0	11/20/2017 14:07	11/30/2017 01:16	3828519
CCM	Perfluorooctanesulfonamidoacetic acid (NEtI	537	2.0	---		98.2063	100	ng/L	98	70 - 130	---	---	1.0	11/20/2017 14:07	11/30/2017 01:16	3828519
CCM	Perfluorooctanesulfonamidoacetic acid (NM	537	2.0	---		96.3060	100	ng/L	96	70 - 130	---	---	1.0	11/20/2017 14:07	11/30/2017 01:16	3828519
CCM	Perfluorobutanesulfonic acid (PFBS)	537	2.0	---		95.9133	100	ng/L	96	70 - 130	---	---	1.0	11/20/2017 14:07	11/30/2017 01:16	3828519
CCM	Perfluorodecanoic acid (PFDA)	537	2.0	---		96.5943	100	ng/L	97	70 - 130	---	---	1.0	11/20/2017 14:07	11/30/2017 01:16	3828519
CCM	Perfluoroheptanoic acid (PFHpA)	537	2.0	---		94.9367	100	ng/L	95	70 - 130	---	---	1.0	11/20/2017 14:07	11/30/2017 01:16	3828519
CCM	Perfluorohexanesulfonic acid (PFHxS)	537	2.0	---		95.7018	100	ng/L	96	70 - 130	---	---	1.0	11/20/2017 14:07	11/30/2017 01:16	3828519
CCM	Perfluorohexanoic acid (PFHxA)	537	2.0	---		94.5485	100	ng/L	95	70 - 130	---	---	1.0	11/20/2017 14:07	11/30/2017 01:16	3828519
CCM	Perfluorolauric acid (PFDoA)	537	2.0	---		96.1128	100	ng/L	96	70 - 130	---	---	1.0	11/20/2017 14:07	11/30/2017 01:16	3828519
CCM	Perfluoromyristic acid (PFTA)	537	2.0	---		94.7443	100	ng/L	95	70 - 130	---	---	1.0	11/20/2017 14:07	11/30/2017 01:16	3828519
CCM	Perfluorononanoic acid (PFNA)	537	2.0	---		97.8016	100	ng/L	98	70 - 130	---	---	1.0	11/20/2017 14:07	11/30/2017 01:16	3828519
CCM	Perfluorooctane sulfonate (PFOS)	537	2.0	---		95.7767	100	ng/L	96	70 - 130	---	---	1.0	11/20/2017 14:07	11/30/2017 01:16	3828519
CCM	Perfluorooctanoic acid (PFOA)	537	2.0	---		96.2742	100	ng/L	96	70 - 130	---	---	1.0	11/20/2017 14:07	11/30/2017 01:16	3828519
CCM	Perfluorotridecanoic acid (PFTrDA)	537	2.0	---		95.4282	100	ng/L	95	70 - 130	---	---	1.0	11/20/2017 14:07	11/30/2017 01:16	3828519
CCM	Perfluoroundecanoic acid (PFUnA)	537	2.0	---		94.9871	100	ng/L	95	70 - 130	---	---	1.0	11/20/2017 14:07	11/30/2017 01:16	3828519

Sample Type Key

Type (Abbr.)	Sample Type	Type (Abbr.)	Sample Type
CCL	Continuing Calibration Low		
CCM	Continuing Calibration Mid		
FS	Field Sample		
FBM	Fortified Blank Mid		
LRB	Laboratory Reagent Blank		
RLC	Reporting Level Check		

END OF REPORT