

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: C.T. Male Associates
 Attn: Kirk Moline
 50 Century Hill Drive
 Latham, NY 12110

Report: 406079
 Priority: Standard Written
 Status: Final

Project: 14.4756

SUMMARY OF DETECTIONS

Parameter	Method	Result	Units	Run #
Perfluoroheptanoic acid (PFHpA)	537	12	ng/L	238468
Perfluorohexanoic acid (PFHxA)	537	11	ng/L	238468
Perfluorooctane sulfonate (PFOS)	537	3.1	ng/L	238468
Perfluorooctanoic acid (PFOA)	537	540	ng/L	238468

Note: 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 Kelly Blackburn at (574) 233-4777.

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Dana M. Smith Reporter

Reviewed By *Kelly Blackburn* Title *ASM*

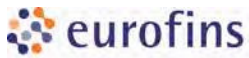
Finalized By _____ Title _____

01/15/2018

Date

01/16/2018

Date



Eaton Analytical

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

Laboratory Report

Client: C.T. Male Associates

Attn: Kirk Moline
50 Century Hill Drive
Latham, NY 12110

Report: 406079
Priority: Standard Written
Status: Final
PWS ID: Not Supplied
Lab ELAP #: 11398

Sample Information					
EEA ID #	Client ID	Method	Collected Date / Time	Collected By:	Received Date / Time
3848530	GAC Influent	537	01/04/18 09:55	Client	01/08/18 09:00
3848531	GAC Midfluent	537	01/04/18 10:00	Client	01/08/18 09:00
3848532	GAC Effluent	537	01/04/18 10:05	Client	01/08/18 09:00
3848533	FTB	537	01/04/18 10:10	Client	01/08/18 09:00
3848534	LTB 12-27-17	537	01/04/18 00:00	EEA	01/08/18 09:00

Report Summary

Project: 14.4756

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 Kelly Blackburn at (574) 233-4777.

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Kelly Blackburn ASM

01/16/2018

Authorized Signature

Title

Date

Client Name: C.T. Male Associates

Report #: 406079

Sampling Point: GAC Influent

PWS ID: Not Supplied

EEA Methods									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID #
375-73-5	Perfluorobutanesulfonic acid (PFBS) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/09/18 23:34	3848530
335-76-2	Perfluorodecanoic acid (PFDA) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/09/18 23:34	3848530
375-85-9	Perfluoroheptanoic acid (PFHpA) \$	537	---	2.0	12	ng/L	01/09/18 07:58	01/09/18 23:34	3848530
355-46-4	Perfluorohexanesulfonic acid (PFHxS) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/09/18 23:34	3848530
307-24-4	Perfluorohexanoic acid (PFHxA) \$	537	---	2.0	11	ng/L	01/09/18 07:58	01/09/18 23:34	3848530
307-55-1	Perfluorolauric acid (PFDoA) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/09/18 23:34	3848530
376-06-7	Perfluoromyristic acid (PFTA) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/09/18 23:34	3848530
375-95-1	Perfluorononanoic acid (PFNA) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/09/18 23:34	3848530
1763-23-1	Perfluorooctane sulfonate (PFOS)	537	---	2.0	3.1	ng/L	01/09/18 07:58	01/09/18 23:34	3848530
335-67-1	Perfluorooctanoic acid (PFOA)	537	---	2.0	540	ng/L	01/09/18 07:58	01/10/18 12:12	3848530
72629-94-8	Perfluorotridecanoic acid (PFTrDA) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/09/18 23:34	3848530
2058-94-8	Perfluoroundecanoic acid (PFUnA) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/09/18 23:34	3848530

\$ The state of origin does not offer certification for this parameter.

Sampling Point: GAC Midfluent

PWS ID: Not Supplied

EEA Methods									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID #
375-73-5	Perfluorobutanesulfonic acid (PFBS) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/09/18 23:51	3848531
335-76-2	Perfluorodecanoic acid (PFDA) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/09/18 23:51	3848531
375-85-9	Perfluoroheptanoic acid (PFHpA) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/09/18 23:51	3848531
355-46-4	Perfluorohexanesulfonic acid (PFHxS) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/09/18 23:51	3848531
307-24-4	Perfluorohexanoic acid (PFHxA) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/09/18 23:51	3848531
307-55-1	Perfluorolauric acid (PFDoA) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/09/18 23:51	3848531
376-06-7	Perfluoromyristic acid (PFTA) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/09/18 23:51	3848531
375-95-1	Perfluorononanoic acid (PFNA) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/09/18 23:51	3848531
1763-23-1	Perfluorooctane sulfonate (PFOS)	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/09/18 23:51	3848531
335-67-1	Perfluorooctanoic acid (PFOA)	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/09/18 23:51	3848531
72629-94-8	Perfluorotridecanoic acid (PFTrDA) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/09/18 23:51	3848531
2058-94-8	Perfluoroundecanoic acid (PFUnA) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/09/18 23:51	3848531

\$ The state of origin does not offer certification for this parameter.

Sampling Point: GAC Effluent

PWS ID: Not Supplied

EEA Methods									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID #
375-73-5	Perfluorobutanesulfonic acid (PFBS) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/10/18 00:25	3848532
335-76-2	Perfluorodecanoic acid (PFDA) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/10/18 00:25	3848532
375-85-9	Perfluoroheptanoic acid (PFHpA) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/10/18 00:25	3848532
355-46-4	Perfluorohexanesulfonic acid (PFHxS) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/10/18 00:25	3848532
307-24-4	Perfluorohexanoic acid (PFHxA) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/10/18 00:25	3848532
307-55-1	Perfluorolauric acid (PFDoA) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/10/18 00:25	3848532
376-06-7	Perfluoromyristic acid (PFTA) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/10/18 00:25	3848532
375-95-1	Perfluorononanoic acid (PFNA) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/10/18 00:25	3848532
1763-23-1	Perfluorooctane sulfonate (PFOS)	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/10/18 00:25	3848532
335-67-1	Perfluorooctanoic acid (PFOA)	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/10/18 00:25	3848532
72629-94-8	Perfluorotridecanoic acid (PFTrDA) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/10/18 00:25	3848532
2058-94-8	Perfluoroundecanoic acid (PFUnA) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/10/18 00:25	3848532

\$ The state of origin does not offer certification for this parameter.

Sampling Point: FTB

PWS ID: Not Supplied

EEA Methods									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID #
375-73-5	Perfluorobutanesulfonic acid (PFBS) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/10/18 00:58	3848533
335-76-2	Perfluorodecanoic acid (PFDA) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/10/18 00:58	3848533
375-85-9	Perfluoroheptanoic acid (PFHpA) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/10/18 00:58	3848533
355-46-4	Perfluorohexanesulfonic acid (PFHxS) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/10/18 00:58	3848533
307-24-4	Perfluorohexanoic acid (PFHxA) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/10/18 00:58	3848533
307-55-1	Perfluorolauric acid (PFDoA) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/10/18 00:58	3848533
376-06-7	Perfluoromyristic acid (PFTA) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/10/18 00:58	3848533
375-95-1	Perfluorononanoic acid (PFNA) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/10/18 00:58	3848533
1763-23-1	Perfluorooctane sulfonate (PFOS)	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/10/18 00:58	3848533
335-67-1	Perfluorooctanoic acid (PFOA)	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/10/18 00:58	3848533
72629-94-8	Perfluorotridecanoic acid (PFTrDA) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/10/18 00:58	3848533
2058-94-8	Perfluoroundecanoic acid (PFUnA) \$	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/10/18 00:58	3848533

\$ The state of origin does not offer certification for this parameter.

Sampling Point: LTB 12-27-17

PWS ID: Not Supplied

EEA Methods									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID #
375-73-5	Perfluorobutanesulfonic acid (PFBS)	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/10/18 01:15	3848534
335-76-2	Perfluorodecanoic acid (PFDA)	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/10/18 01:15	3848534
375-85-9	Perfluoroheptanoic acid (PFHpA)	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/10/18 01:15	3848534
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/10/18 01:15	3848534
307-24-4	Perfluorohexanoic acid (PFHxA)	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/10/18 01:15	3848534
307-55-1	Perfluorolauric acid (PFDoA)	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/10/18 01:15	3848534
376-06-7	Perfluoromyristic acid (PFTA)	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/10/18 01:15	3848534
375-95-1	Perfluorononanoic acid (PFNA)	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/10/18 01:15	3848534
1763-23-1	Perfluorooctane sulfonate (PFOS)	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/10/18 01:15	3848534
335-67-1	Perfluorooctanoic acid (PFOA)	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/10/18 01:15	3848534
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/10/18 01:15	3848534
2058-94-8	Perfluoroundecanoic acid (PFUnA)	537	---	2.0	< 2.0	ng/L	01/09/18 07:58	01/10/18 01:15	3848534

† 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.