

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	Montana	CERT0026
Alaska	IN00035	Nebraska	E87775
Arizona	AZ0432	Nevada	IN00035
Arkansas	IN00035	New Hampshire*	2124
California	2920	New Mexico	IN00035
Colorado	IN035	New Jersey*	IN598
Colorado Radiochemistry	IN035	New York*	11398
Connecticut	PH-0132	North Carolina	18700
Delaware	IN035	North Dakota	R-035
Florida*	E87775	Ohio	87775
Georgia	929	Oklahoma	D9508
Hawaii	IN035	Oregon (Primary AB)*	4074-001
Idaho	IN00035/E87775	Pennsylvania*	68-00466
Illinois*	200001	Puerto Rico	IN00035
Illinois Microbiology	200001	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*	LA160002	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
Missouri	880		

*NELAP/TNI Recognized Accreditation Bodies

NELAC NARRATIVE PAGE

Client: North Penn Water Authority

Report #: 369552NP


Eurofins Eaton Analytical, Inc. is a NELAP accredited laboratory. All reported results meet the requirements of the NELAC standards, unless otherwise noted.

EEA contact person: Jim Vernon

NELAP requires complete reporting of deviations from method requirements, regardless of the suspected impact on the data. Quality control failures not reported within the report summary are noted here.

There were no quality control failures.

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		08/29/2016
Authorized Signature	Title	Date

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

Laboratory Report

Client: North Penn Water Authority
 Attn: Heidi L. Palmer
 144B Park Ave.
 Chalfont, PA 18914

Report: 369552
 Priority: Standard Written
 Status: Final
 PWS ID: PA1090141
 PA Lab ID: 68466

Sample Information					
EEA ID #	Client ID	Method	Collected Date / Time	Collected By:	Received Date / Time
3515886	NP-73 (EP 101)	537	08/08/16 10:05	Client	08/09/16 09:45
3515887	NP-74 (EP 102)	537	08/08/16 10:15	Client	08/09/16 09:45
3515888	FTB	537	08/08/16 10:05	Client	08/09/16 09:45

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 Jim Vernon at (574) 233-4777.

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Authorized Signature

Title

08/29/2016

Date

Client Name: North Penn Water Authority
 Report #: 369552

Sampling Point: NP-73 (EP 101)

PWS ID: PA1090141

EEA Methods									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID #
375-73-5	Perfluorobutanesulfonic acid (PFBS)	537	---	9.0	< 9.0	ng/L	08/17/16 08:10	08/18/16 04:37	3515886
375-85-9	Perfluoroheptanoic acid (PFHpA)	537	---	1.0	3.9	ng/L	08/17/16 08:10	08/18/16 04:37	3515886
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	537	---	3.0	21	ng/L	08/17/16 08:10	08/18/16 04:37	3515886
375-95-1	Perfluorononanoic acid (PFNA)	537	---	2.0	< 2.0	ng/L	08/17/16 08:10	08/18/16 04:37	3515886
1763-23-1	Perfluorooctane sulfonate (PFOS)	537	---	4.0	57	ng/L	08/17/16 08:10	08/18/16 04:37	3515886
335-67-1	Perfluorooctanoic acid (PFOA)	537	---	2.0	8.0	ng/L	08/17/16 08:10	08/18/16 04:37	3515886

Sampling Point: NP-74 (EP 102)

PWS ID: PA1090141

EEA Methods									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID #
375-73-5	Perfluorobutanesulfonic acid (PFBS)	537	---	9.0	< 9.0	ng/L	08/17/16 08:10	08/18/16 11:16	3515887
375-85-9	Perfluoroheptanoic acid (PFHpA)	537	---	1.0	5.2	ng/L	08/17/16 08:10	08/18/16 11:16	3515887
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	537	---	3.0	31	ng/L	08/17/16 08:10	08/18/16 11:16	3515887
375-95-1	Perfluorononanoic acid (PFNA)	537	---	2.0	< 2.0	ng/L	08/17/16 08:10	08/18/16 11:16	3515887
1763-23-1	Perfluorooctane sulfonate (PFOS)	537	---	4.0	110	ng/L	08/17/16 08:10	08/18/16 11:16	3515887
335-67-1	Perfluorooctanoic acid (PFOA)	537	---	2.0	7.1	ng/L	08/17/16 08:10	08/18/16 11:16	3515887

Sampling Point: FTB

PWS ID: PA1090141

EEA Methods									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID #
375-73-5	Perfluorobutanesulfonic acid (PFBS)	537	---	9.0	< 9.0	ng/L	08/17/16 08:10	08/18/16 05:08	3515888
375-85-9	Perfluoroheptanoic acid (PFHpA)	537	---	1.0	< 1.0	ng/L	08/17/16 08:10	08/18/16 05:08	3515888
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	537	---	3.0	< 3.0	ng/L	08/17/16 08:10	08/18/16 05:08	3515888
375-95-1	Perfluorononanoic acid (PFNA)	537	---	2.0	< 2.0	ng/L	08/17/16 08:10	08/18/16 05:08	3515888
1763-23-1	Perfluorooctane sulfonate (PFOS)	537	---	4.0	< 4.0	ng/L	08/17/16 08:10	08/18/16 05:08	3515888
335-67-1	Perfluorooctanoic acid (PFOA)	537	---	2.0	< 2.0	ng/L	08/17/16 08:10	08/18/16 05:08	3515888

† 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

110 S. Hill Street
South Bend, IN 46617
T: 1.800.332.4345
F: 1.574.233.8207

Order # 302001
Batch # 369552

www.eatonanalytical.com

Shaded area for EEA use only

REPORT TO: Heidi Palmer

hpalmer@npwa.org

BILL TO: North Penn Water Authority

300 Forty Foot Rd., Lansdale, PA 19446

CHAIN OF CUSTODY RECORD

Page 1 of 1

LAB Number	DATE	TIME	AM	PM	COLLECTION	SAMPLER (Signature)	COMPLIANCE MONITORING		POPULATION SERVED	PWS ID #	STATE (sample origin)	PROJECT NAME	PO#	# OF CONTAINERS	MATRIX CODE	TURNAROUND TIME
							Yes	No								
1	8/8/16	1005	✓		NP-73 (EP 101)	<i>H. Palmer</i>		No	PA	1090141	PA		11803	2	DW	
2	8/8/16	1015	✓		NP-74 (EP 102)			X	Ground					2	DW	
3	8/8/16	1005	✓		FTB											
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																

RELINQUISHED BY: (Signature)	DATE	TIME	AM	PM	RECEIVED BY: (Signature)	DATE	TIME	AM	PM	LAB COMMENTS
<i>H. Palmer</i>	8/8/16	1125	AM		<i>H. Palmer</i>	8/8/16	1125	AM		
<i>H. Palmer</i>	8/8/16	1605	AM							

MATRIX CODES:	TURN-AROUND TIME (TAT) - SURCHARGES	CONDITIONS UPON RECEIPT (check one):	°C Upon Receipt
DW-DRINKING WATER RW-REAGENT WATER GW-GROUND WATER EW-EXPOSURE WATER SW-SURFACE WATER PW-POOL WATER WW-WASTE WATER	SW = Standard Written: (15 working days) 0% RW = Rush Written: (5 working days) 50% RW = Rush Written: (5 working days) 75%	100% Immediate Verbal: (3 working days) 125% Immediate Written: (3 working days) CALL SP* = Weekend, Holiday CALL STAT* = Less than 48 hours	Ice <input checked="" type="checkbox"/> Ambient <input type="checkbox"/> 2.6

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

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

Sample analysis will be provided according to the standard EEA Water Services Terms, which are available upon request. Any other terms proposed by Customer are deemed material alterations and are rejected unless expressly agreed to in writing by EEA.