



Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)



AT-1807

Laboratory Report

for

Aqua Pennsylvania, Inc.
762 Lancaster Avenue
Bryn Mawr, PA 19010-3489
Attention: Chuck Hertz
Fax: (610) 645-1164

Date of Issue
10/14/2015

Thomas D. French
EUROFINS EATON
ANALYTICAL

TDF: Thomas.D.French
Project Manager



ORELAP 4034

Report: 541756
Project: PFC
Group: PFC Monitoring Horsham

- * Accredited in accordance with TNI 2009 and ISO/IEC 17025:2005.
- * Laboratory certifies that the test results meet all **TNI 2009 and ISO/IEC 17025:2005** requirements unless noted under the individual analysis.
- * Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.
- * Test results relate only to the sample(s) tested.
- * This report shall not be reproduced except in full, without the written approval of the laboratory.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Mississippi	Certified
-----	-----	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA00006-2015
California-Monrovia-ELAP	2813	New Hampshire *	2959
California-Colton- ELAP	2812	New Jersey *	CA 008
California-Folsom- ELAP	2820	New Mexico	Certified
California-Fresno- ELAP	2966	New York *	11320
Colorado	Certified	North Carolina	06701
Connecticut	PH-0107	North Dakota	R-009
Delaware	CA 006	Oregon (Primary AB) *	ORELAP 4034
Florida *	E871024	Pennsylvania *	68-565
Georgia	947	Rhode Island	LAO00326
Guam	15-003r	South Carolina	87016
Hawaii	Certified	South Dakota	Certified
Idaho	Certified	Tennessee	TN02839
Illinois *	200033	Texas *	T104704230-14-7
Indiana	C-CA-01	Utah *	CA000062015-8
Kansas *	E-10268	Vermont	VT0114
Kentucky	90107	Virginia *	460260
Louisiana *	LA150018	Washington	C838
Maine	CA0006	West Virginia	9943 C
Maryland	224	Wisconsin	998316660
Commonwealth of Northern Marianas Is.	MP0004	Wyoming	8TMS-L
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264

* NELAP/TNI Recognized Accreditation Bodies

ISO 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO 17025 as verified by the ANSI-ASQ National Accreditation Board/ANAB.
Refer to Certificate and scope of accreditation (AT 1807) found at: <http://www.eatonanalytical.com>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
Bicarbonate Alkalinity as HCO3	SM 2320B	x	x	x
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cryptosporidium	EPA 1622, 1623	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli	(MTF/EC+MUG)	x		x
E. Coli	CFR 141.21.(f)(6)(i)	x		x
E. Coli	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Giardia	EPA 1623	x		x
Glyphosate	EPA 547	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	CDC Legionella	x		x
Mercury	EPA 245.1	x	x	x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
NDMA	EPA 521	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphate	SM 4500P E			x
Ortho Phosphorous	SM 4500P E	x		
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Semi-VOC	EPA 625		x	x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ²⁻ D		x	
Sulfite	SM 4500-SO ³⁻ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure (2346)	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2/EPA 524.3	x		x
VOC	EPA 624		x	x
VOC	EPA SW 846 8260	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x

750 Royal Oaks Dr., Ste 100, Monrovia, CA 91016 Tel (626) 386-1100 Fax (626) 386-1101 <http://www.EatonAnalytical.com>



Eaton Analytical

Acknowledgement of Samples Received

Addr: **Aqua Pennsylvania, Inc.**
762 Lancaster Avenue
Bryn Mawr, PA 19010-3489

Client ID: PHILLYSUB
Folder #: 541756
Project: PFC
Sample Group: PFC Monitoring Horsham

Attn: Chuck Hertz
Phone: (610) 645-1145

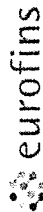
Project Manager: Thomas.D.French
Phone: (480) 778-1558

The following samples were received from you on **September 29, 2015 at 1040**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical.

Sample #	Sample ID	Sample Date
<u>201507040057</u>	Horsham Well # 17	09/24/2015 1000
	@537	
<u>201507040056</u>	Horsham Well # 10	09/24/2015 1215
	@537	
<u>201507040058</u>	Horsham Well # 21	09/24/2015 1040
	@537	

Test Description

@537 -- Perfluorinated Alkyl Acids



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CHAIN OF CUSTODY RECORD

541756

EUROFINS EATON ANALYTICAL USE ONLY:

LOGIN COMMENTS: #461A

SAMPLES CHECKED AGAINST COC BY: WJ

SAMPLE TEMP RECEIVED AT: 5-9-0-2--5-7

SAMPLES LOGGED IN BY: WJ

SAMPLES REC'D DAY OF COLLECTION? (check for yes)

Colton / No. California / Arizona
 Monrovia
°C (Compliance: 4 ± 2 °C)
5-7 °C (Compliance: 4 ± 2 °C)

CONDITION OF BLUE ICE: Frozen Partially Frozen Thawed Wet Ice No Ice

METHOD OF SHIPMENT: Pick-Up / Walk-In / FEDEX UPS / DHL / Area Fast / Top Line / Other: _____

TO BE COMPLETED BY SAMPLER:

COMPANY/AGENCY NAME:

Aqua Pennsylvania, Inc.

PROJECT CODE:

EEA CLIENT CODE:

SAMPLE GROUP:

Aqua Pennsylvania, Inc.

TAT requested: rush by adv notice only

STD_X_ 1 wk ___ 3 day ___ 2 day ___ 1 day ___

SAMPLE DATE	SAMPLE TIME	SAMPLE ID	CLIENT LAB ID	MATRIX	FIELD DATA	FIELD DATA	COMPLIANCE SAMPLES		NON-COMPLIANCE SAMPLES	SAMPLER COMMENTS
							- Requires state forms	REGULATION INVOLVED:		
9/24/15	1000	Horsham Well #17		RGW			<input checked="" type="checkbox"/>		x	Raw Water
9/24/15	1215	Horsham Well #10		RGW			<input checked="" type="checkbox"/>			Raw Water
9/24/15	1040	Horsham Well #21		RGW			<input checked="" type="checkbox"/>			Raw Water
										Not for UCMR3

SEE ATTACHED BOTTLE ORDER FOR ANALYSES

list ANALYSES REQUIRED (enter number of bottles sent for each test for each sample)

* MATRIX TYPES: RSW = Raw Surface Water CFW = Chlor(am)inated Finished Water SO = Soil
RGW = Raw Ground Water FW = Other Finished Water WW = Waste Water BW = Bottled Water SW = Storm Water SL = Sludge
O = Other - Please identify

SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
	BP	Aqua Pennsylvania, Inc.	9/24/15	1440
	Michael Senft	Aqua Pennsylvania, Inc.	9/24/15	1440
	R. Danzig	Aqua Pennsylvania, Inc.	9/28/15	1600 1530
	EGA	EGA	9-29-15	1046

Page 5 of 14 pages
7/29/15 1114 PAGE OF

ORIGIN: D/WAWA (610) 845-1176
MICHAEL SENFT
AQUA
782 WEST LANCASTER AVENUE
UNITED STATES US
BRYN MAWR, PA 19010

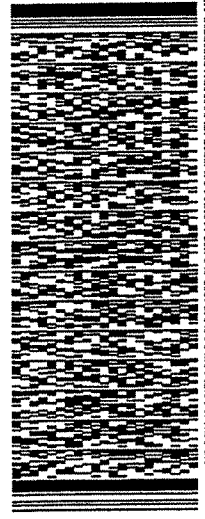
SHIP DATE: 28SEP15
ACT WT: 15.00 LB
C.D.: 100061330/N/ET3670
DIMS: 24X13X14 IN
BILL RECIPIENT

TO LOGIN

MWH AMERICAS, INC.
750 ROYAL OAKS DRIVE
SUITE 100
MONROVIA CA 91016
REF: UCMR3
(626) 386-1100
NV/153031
PO.

DEPT: 153031

539.02970713100

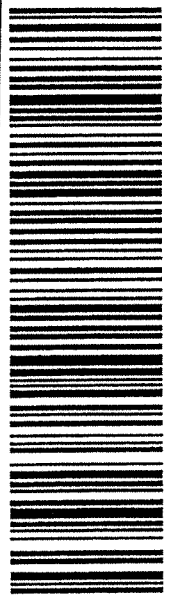


TRK# 7746 0770 5790
0201

TUE - 29 SEP 3:00P
STANDARD OVERNIGHT

NH WHPA

CAUS 91016
BUR



After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.



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750 Royal Oaks Drive, Suite 100
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Laboratory Comments
Report: 541756

Aqua Pennsylvania, Inc.
Chuck Hertz
762 Lancaster Avenue
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Laboratory Hits
Report: 541756

Aqua Pennsylvania, Inc.
Chuck Hertz
762 Lancaster Avenue
Bryn Mawr, PA 19010-3489

Samples Received on:
09/29/2015 1040

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
	201507040056	<u>Horsham Well # 10</u>				
10/08/2015 23:25	Perfluorobutanesulfonic acid		0.0087		ug/L	0.0025
10/08/2015 23:25	Perfluoroheptanoic acid		0.0051		ug/L	0.0025
10/08/2015 23:25	Perfluorohexanesulfonic acid		0.033		ug/L	0.0025
10/08/2015 23:25	Perfluorohexanoic acid		0.011		ug/L	0.0025
10/08/2015 23:25	Perfluorooctanesulfonic acid		0.024		ug/L	0.0025
10/08/2015 23:25	Perfluorooctanoic acid		0.025		ug/L	0.0025
	201507040057	<u>Horsham Well # 17</u>				
10/08/2015 23:46	Perfluorobutanesulfonic acid		0.010		ug/L	0.0025
10/08/2015 23:46	Perfluoroheptanoic acid		0.0097		ug/L	0.0025
10/08/2015 23:46	Perfluorohexanesulfonic acid		0.050		ug/L	0.0025
10/08/2015 23:46	Perfluorohexanoic acid		0.019		ug/L	0.0025
10/08/2015 23:46	Perfluorooctanesulfonic acid		0.069		ug/L	0.0025
10/08/2015 23:46	Perfluorooctanoic acid		0.030		ug/L	0.0025
	201507040058	<u>Horsham Well # 21</u>				
10/09/2015 00:07	Perfluorobutanesulfonic acid		0.0048		ug/L	0.0025
10/09/2015 00:07	Perfluoroheptanoic acid		0.0034		ug/L	0.0025
10/09/2015 00:07	Perfluorohexanesulfonic acid		0.0048		ug/L	0.0025
10/09/2015 00:07	Perfluorohexanoic acid		0.0049		ug/L	0.0025
10/09/2015 00:07	Perfluorooctanesulfonic acid		0.0057		ug/L	0.0025
10/09/2015 00:07	Perfluorooctanoic acid		0.011		ug/L	0.0025

SUMMARY OF POSITIVE DATA ONLY



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Laboratory Data
Report: 541756

Aqua Pennsylvania, Inc.
Chuck Hertz
762 Lancaster Avenue
Bryn Mawr, PA 19010-3489

Samples Received on:
09/29/2015 1040

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
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Horsham Well # 10 (201507040056)

Sampled on 09/24/2015 1215

EPA 537 - Perfluorinated Alkyl Acids

10/5/2015	10/08/2015	23:25	867086	(EPA 537)	Perfluorobutanesulfonic acid	0.0087	ug/L	0.0025	1
10/5/2015	10/08/2015	23:25	867086	(EPA 537)	Perfluorodecanoic acid	ND	ug/L	0.0025	1
10/5/2015	10/08/2015	23:25	867086	(EPA 537)	Perfluorododecanoic acid	ND	ug/L	0.0025	1
10/5/2015	10/08/2015	23:25	867086	(EPA 537)	Perfluoroheptanoic acid	0.0051	ug/L	0.0025	1
10/5/2015	10/08/2015	23:25	867086	(EPA 537)	Perfluorohexanesulfonic acid	0.033	ug/L	0.0025	1
10/5/2015	10/08/2015	23:25	867086	(EPA 537)	Perfluorohexanoic acid	0.011	ug/L	0.0025	1
10/5/2015	10/08/2015	23:25	867086	(EPA 537)	Perfluorononanoic acid	ND	ug/L	0.0025	1
10/5/2015	10/08/2015	23:25	867086	(EPA 537)	Perfluorooctanesulfonic acid	0.024	ug/L	0.0025	1
10/5/2015	10/08/2015	23:25	867086	(EPA 537)	Perfluorooctanoic acid	0.025	ug/L	0.0025	1
10/5/2015	10/08/2015	23:25	867086	(EPA 537)	Perfluorotetradecanoic acid	ND	ug/L	0.0025	1
10/5/2015	10/08/2015	23:25	867086	(EPA 537)	Perfluorotridecanoic acid	ND	ug/L	0.0025	1
10/5/2015	10/08/2015	23:25	867086	(EPA 537)	Perfluoroundecanoic acid	ND	ug/L	0.0025	1
10/5/2015	10/08/2015	23:25	867086	(EPA 537)	13C-PFDA	85	%		1
10/5/2015	10/08/2015	23:25	867086	(EPA 537)	13C-PFHxA	97	%		1
10/5/2015	10/08/2015	23:25	867086	(EPA 537)	13C-PFOA	108	%		1
10/5/2015	10/08/2015	23:25	867086	(EPA 537)	13C-PFOS	99	%		1

Horsham Well # 17 (201507040057)

Sampled on 09/24/2015 1000

EPA 537 - Perfluorinated Alkyl Acids

10/5/2015	10/08/2015	23:46	867086	(EPA 537)	Perfluorobutanesulfonic acid	0.010	ug/L	0.0025	1
10/5/2015	10/08/2015	23:46	867086	(EPA 537)	Perfluorodecanoic acid	ND	ug/L	0.0025	1
10/5/2015	10/08/2015	23:46	867086	(EPA 537)	Perfluorododecanoic acid	ND	ug/L	0.0025	1
10/5/2015	10/08/2015	23:46	867086	(EPA 537)	Perfluoroheptanoic acid	0.0097	ug/L	0.0025	1
10/5/2015	10/08/2015	23:46	867086	(EPA 537)	Perfluorohexanesulfonic acid	0.050	ug/L	0.0025	1
10/5/2015	10/08/2015	23:46	867086	(EPA 537)	Perfluorohexanoic acid	0.019	ug/L	0.0025	1
10/5/2015	10/08/2015	23:46	867086	(EPA 537)	Perfluorononanoic acid	ND	ug/L	0.0025	1
10/5/2015	10/08/2015	23:46	867086	(EPA 537)	Perfluorooctanesulfonic acid	0.069	ug/L	0.0025	1
10/5/2015	10/08/2015	23:46	867086	(EPA 537)	Perfluorooctanoic acid	0.030	ug/L	0.0025	1
10/5/2015	10/08/2015	23:46	867086	(EPA 537)	Perfluorotetradecanoic acid	ND	ug/L	0.0025	1
10/5/2015	10/08/2015	23:46	867086	(EPA 537)	Perfluorotridecanoic acid	ND	ug/L	0.0025	1
10/5/2015	10/08/2015	23:46	867086	(EPA 537)	Perfluoroundecanoic acid	ND	ug/L	0.0025	1
10/5/2015	10/08/2015	23:46	867086	(EPA 537)	13C-PFDA	80	%		1
10/5/2015	10/08/2015	23:46	867086	(EPA 537)	13C-PFHxA	101	%		1
10/5/2015	10/08/2015	23:46	867086	(EPA 537)	13C-PFOA	103	%		1

Rounding on totals after summation.
(c) - indicates calculated results



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Report: 541756

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Chuck Hertz
762 Lancaster Avenue
Bryn Mawr, PA 19010-3489

Samples Received on:
09/29/2015 1040

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
10/5/2015	10/08/2015	23:46	867086	(EPA 537)	13C-PFOS	94	%	1

Horsham Well # 21 (201507040058)

Sampled on 09/24/2015 1040

EPA 537 - Perfluorinated Alkyl Acids

10/5/2015	10/09/2015	00:07	867086	(EPA 537)	Perfluorobutanesulfonic acid	0.0048	ug/L	0.0025	1
10/5/2015	10/09/2015	00:07	867086	(EPA 537)	Perfluorodecanoic acid	ND	ug/L	0.0025	1
10/5/2015	10/09/2015	00:07	867086	(EPA 537)	Perfluorododecanoic acid	ND	ug/L	0.0025	1
10/5/2015	10/09/2015	00:07	867086	(EPA 537)	Perfluoroheptanoic acid	0.0034	ug/L	0.0025	1
10/5/2015	10/09/2015	00:07	867086	(EPA 537)	Perfluorohexanesulfonic acid	0.0048	ug/L	0.0025	1
10/5/2015	10/09/2015	00:07	867086	(EPA 537)	Perfluorohexanoic acid	0.0049	ug/L	0.0025	1
10/5/2015	10/09/2015	00:07	867086	(EPA 537)	Perfluorononanoic acid	ND	ug/L	0.0025	1
10/5/2015	10/09/2015	00:07	867086	(EPA 537)	Perfluorooctanesulfonic acid	0.0057	ug/L	0.0025	1
10/5/2015	10/09/2015	00:07	867086	(EPA 537)	Perfluorooctanoic acid	0.011	ug/L	0.0025	1
10/5/2015	10/09/2015	00:07	867086	(EPA 537)	Perfluorotetradecanoic acid	ND	ug/L	0.0025	1
10/5/2015	10/09/2015	00:07	867086	(EPA 537)	Perfluorotridecanoic acid	ND	ug/L	0.0025	1
10/5/2015	10/09/2015	00:07	867086	(EPA 537)	Perfluoroundecanoic acid	ND	ug/L	0.0025	1
10/5/2015	10/09/2015	00:07	867086	(EPA 537)	13C-PFDA	81	%		1
10/5/2015	10/09/2015	00:07	867086	(EPA 537)	13C-PFHxA	94	%		1
10/5/2015	10/09/2015	00:07	867086	(EPA 537)	13C-PFOA	111	%		1
10/5/2015	10/09/2015	00:07	867086	(EPA 537)	13C-PFOS	101	%		1

Rounding on totals after summation.
(c) - indicates calculated results



Eaton Analytical

Laboratory
QC Summary: 541756

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Aqua Pennsylvania, Inc.

QC Ref # 867086 - Perfluorinated Alkyl Acids

Analysis Date: 10/08/2015

201507040056	Horsham Well # 10
201507040057	Horsham Well # 17
201507040058	Horsham Well # 21

Analyzed by: 1CL
Analyzed by: 1CL
Analyzed by: 1CL



Eaton Analytical

Laboratory QC
Report: 541756

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Aqua Pennsylvania, Inc.

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
QC Ref# 867086 - Perfluorinated Alkyl Acids by EPA 537						Analysis Date: 10/08/2015			
LCS1	13C-PFDA (S)			88.4	%	88	(70-130)		
LCS2	13C-PFDA (S)			88.6	%	89	(70-130)		
MBLK	13C-PFDA (S)			90.6	%	91	(70-130)		
MRL_CHK	13C-PFDA (S)			86.4	%	86	(70-130)		
MS_201510010255	13C-PFDA (S)			94.6	%	95	(70-130)		
MSD_201510010255	13C-PFDA (S)			91.3	%	91	(70-130)		
LCS1	13C-PFHxA (S)			98.3	%	98	(70-130)		
LCS2	13C-PFHxA (S)			101	%	101	(70-130)		
MBLK	13C-PFHxA (S)			96.2	%	96	(70-130)		
MRL_CHK	13C-PFHxA (S)			96.5	%	97	(70-130)		
MS_201510010255	13C-PFHxA (S)			105	%	105	(70-130)		
MSD_201510010255	13C-PFHxA (S)			99.4	%	99	(70-130)		
LCS1	13C-PFOA (I)			106	%	106	(50-150)		
LCS2	13C-PFOA (I)			104	%	104	(50-150)		
MBLK	13C-PFOA (I)			107	%	107	(50-150)		
MRL_CHK	13C-PFOA (I)			112	%	112	(50-150)		
MS_201510010255	13C-PFOA (I)			101	%	101	(50-150)		
MSD_201510010255	13C-PFOA (I)			106	%	106	(50-150)		
LCS1	13C-PFOS (I)			103	%	103	(50-150)		
LCS2	13C-PFOS (I)			102	%	102	(50-150)		
MBLK	13C-PFOS (I)			106	%	106	(50-150)		
MRL_CHK	13C-PFOS (I)			107	%	107	(50-150)		
MS_201510010255	13C-PFOS (I)			101	%	101	(50-150)		
MSD_201510010255	13C-PFOS (I)			101	%	101	(50-150)		
LCS1	Perfluorobutanesulfonic acid		0.022	0.0207	ug/L	93	(70-130)		
LCS2	Perfluorobutanesulfonic acid		0.022	0.0218	ug/L	98	(70-130)	30	5.2
MBLK	Perfluorobutanesulfonic acid			<0.00074	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid		0.0022	0.00200	ug/L	90	(50-150)		
MS_201510010255	Perfluorobutanesulfonic acid	ND	0.0022	0.00216	ug/L	98	(50-150)		
MSD_201510010255	Perfluorobutanesulfonic acid	ND	0.0022	0.00213	ug/L	96	(50-150)	50	1.4
LCS1	Perfluorodecanoic acid		0.025	0.0231	ug/L	92	(70-130)		
LCS2	Perfluorodecanoic acid		0.025	0.0240	ug/L	96	(70-130)	30	4.2
MBLK	Perfluorodecanoic acid			<0.00083	ug/L				
MRL_CHK	Perfluorodecanoic acid		0.0025	0.00226	ug/L	91	(50-150)		
MS_201510010255	Perfluorodecanoic acid	ND	0.0025	0.00255	ug/L	102	(50-150)		
MSD_201510010255	Perfluorodecanoic acid	ND	0.0025	0.00252	ug/L	101	(50-150)	50	1.2

Spike recovery is already corrected for native results.
Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
RPD not calculated for LCS2 when different a concentration than LCS1 is used.
RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
(S) - Indicates surrogate compound.
(I) - Indicates internal standard compound.

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
LCS1	Perfluorododecanoic acid		0.025	0.0232	ug/L	93	(70-130)		
LCS2	Perfluorododecanoic acid		0.025	0.0250	ug/L	100	(70-130)	30	7.5
MBLK	Perfluorododecanoic acid			<0.00083	ug/L				
MRL_CHK	Perfluorododecanoic acid		0.0025	0.00241	ug/L	96	(50-150)		
MS_201510010255	Perfluorododecanoic acid	ND	0.0025	0.00258	ug/L	103	(50-150)		
MSD_201510010255	Perfluorododecanoic acid	ND	0.0025	0.00242	ug/L	97	(50-150)	50	6.4
LCS1	Perfluoroheptanoic acid		0.025	0.0246	ug/L	99	(70-130)		
LCS2	Perfluoroheptanoic acid		0.025	0.0259	ug/L	104	(70-130)	30	5.2
MBLK	Perfluoroheptanoic acid			<0.00083	ug/L				
MRL_CHK	Perfluoroheptanoic acid		0.0025	0.00247	ug/L	99	(50-150)		
MS_201510010255	Perfluoroheptanoic acid	ND	0.0025	0.00286	ug/L	109	(50-150)		
MSD_201510010255	Perfluoroheptanoic acid	ND	0.0025	0.00279	ug/L	106	(50-150)	50	2.8
LCS1	Perfluorohexanesulfonic acid		0.024	0.0223	ug/L	94	(70-130)		
LCS2	Perfluorohexanesulfonic acid		0.024	0.0228	ug/L	96	(70-130)	30	2.2
MBLK	Perfluorohexanesulfonic acid			<0.00079	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid		0.0024	0.00207	ug/L	87	(50-150)		
MS_201510010255	Perfluorohexanesulfonic acid	ND	0.0024	0.00211	ug/L	89	(50-150)		
MSD_201510010255	Perfluorohexanesulfonic acid	ND	0.0024	0.00208	ug/L	88	(50-150)	50	1.4
LCS1	Perfluorohexanoic acid		0.025	0.0239	ug/L	96	(70-130)		
LCS2	Perfluorohexanoic acid		0.025	0.0249	ug/L	100	(70-130)	30	4.1
MBLK	Perfluorohexanoic acid			<0.00083	ug/L				
MRL_CHK	Perfluorohexanoic acid		0.0025	0.00244	ug/L	98	(50-150)		
MS_201510010255	Perfluorohexanoic acid	ND	0.0025	0.00273	ug/L	102	(50-150)		
MSD_201510010255	Perfluorohexanoic acid	ND	0.0025	0.00266	ug/L	99	(50-150)	50	2.6
LCS1	Perfluorononanoic acid		0.025	0.0250	ug/L	100	(70-130)		
LCS2	Perfluorononanoic acid		0.025	0.0258	ug/L	103	(70-130)	30	3.1
MBLK	Perfluorononanoic acid			<0.00083	ug/L				
MRL_CHK	Perfluorononanoic acid		0.0025	0.00241	ug/L	97	(50-150)		
MS_201510010255	Perfluorononanoic acid	ND	0.0025	0.00290	ug/L	112	(50-150)		
MSD_201510010255	Perfluorononanoic acid	ND	0.0025	0.00281	ug/L	108	(50-150)	50	3.1
LCS1	Perfluorooctanesulfonic acid		0.024	0.0220	ug/L	92	(70-130)		
LCS2	Perfluorooctanesulfonic acid		0.024	0.0223	ug/L	93	(70-130)	30	1.4
MBLK	Perfluorooctanesulfonic acid			<0.0008	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid		0.0024	0.00210	ug/L	88	(50-150)		
MS_201510010255	Perfluorooctanesulfonic acid	ND	0.0024	0.00183	ug/L	76	(50-150)		
MSD_201510010255	Perfluorooctanesulfonic acid	ND	0.0024	0.00192	ug/L	80	(50-150)	50	4.8
LCS1	Perfluorooctanoic acid		0.025	0.0252	ug/L	101	(70-130)		
LCS2	Perfluorooctanoic acid		0.025	0.0258	ug/L	103	(70-130)	30	2.4

Spike recovery is already corrected for native results.
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RPD not calculated for LCS2 when different a concentration than LCS1 is used.
RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 541756

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Aqua Pennsylvania, Inc.

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
MBLK	Perfluorooctanoic acid			<0.00083	ug/L				
MRL_CHK	Perfluorooctanoic acid		0.0025	0.00286	ug/L	115	(50-150)		
MS_201510010255	Perfluorooctanoic acid	ND	0.0025	0.00322	ug/L	93	(50-150)		
MSD_201510010255	Perfluorooctanoic acid	ND	0.0025	0.00340	ug/L	101	(50-150)	50	5.4
LCS1	Perfluorotetradecanoic acid		0.025	0.0209	ug/L	84	(70-130)		
LCS2	Perfluorotetradecanoic acid		0.025	0.0219	ug/L	88	(70-130)	30	4.7
MBLK	Perfluorotetradecanoic acid			<0.00083	ug/L				
MRL_CHK	Perfluorotetradecanoic acid		0.0025	0.00201	ug/L	80	(50-150)		
MS_201510010255	Perfluorotetradecanoic acid	ND	0.0025	0.00227	ug/L	88	(50-150)		
MSD_201510010255	Perfluorotetradecanoic acid	ND	0.0025	0.00227	ug/L	88	(50-150)	50	0.0
LCS1	Perfluorotridecanoic acid		0.025	0.0217	ug/L	87	(70-130)		
LCS2	Perfluorotridecanoic acid		0.025	0.0229	ug/L	92	(70-130)	30	5.4
MBLK	Perfluorotridecanoic acid			<0.00083	ug/L				
MRL_CHK	Perfluorotridecanoic acid		0.0025	0.00215	ug/L	86	(50-150)		
MS_201510010255	Perfluorotridecanoic acid	ND	0.0025	0.00240	ug/L	95	(50-150)		
MSD_201510010255	Perfluorotridecanoic acid	ND	0.0025	0.00242	ug/L	96	(50-150)	50	0.83
LCS1	Perfluoroundecanoic acid		0.025	0.0224	ug/L	90	(70-130)		
LCS2	Perfluoroundecanoic acid		0.025	0.0234	ug/L	94	(70-130)	30	4.4
MBLK	Perfluoroundecanoic acid			<0.00083	ug/L				
MRL_CHK	Perfluoroundecanoic acid		0.0025	0.00228	ug/L	91	(50-150)		
MS_201510010255	Perfluoroundecanoic acid	ND	0.0025	0.00258	ug/L	103	(50-150)		
MSD_201510010255	Perfluoroundecanoic acid	ND	0.0025	0.00260	ug/L	104	(50-150)	50	0.77

Spike recovery is already corrected for native results.
Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
RPD not calculated for LCS2 when different a concentration than LCS1 is used.
RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
(S) - Indicates surrogate compound.
(I) - Indicates internal standard compound.