



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)

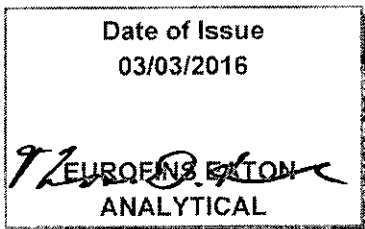


AT-1807

Laboratory Report

for

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



Report: 569134
Project: PFC
Group: PFC Monitoring Horsham

TDF: Thomas.D.French
Project Manager

- * 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	CA00006-2016
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 *	LA16003	Washington	C838
Maine	CA0006	West Virginia	9943 C
Maryland	224	-----	-----
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-C1 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/DCBP 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
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ⁻ 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 #: 569134
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 **February 18, 2016** at **1120**. 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
201601020354	Horsham Well # 17 @537	02/12/2016 0920
201601020353	Horsham Well # 10 @537	02/12/2016 1030
201601020355	Horsham Well # 21 @537	02/12/2016 0840

Test Description

@537 -- Perfluorinated Alkyl Acids



Eaton Analytical

CHAIN OF CUSTODY RECORD

569134

750 Royal Oaks Drive, Suite 100
Monrovia, CA 91016-3629

Phone: 626 386 1100
Fax: 626 386 1101

800 566 LABS (800 566 5227)

EUROFINS EATON ANALYTICAL USE ONLY:

LOGIN COMMENTS: _____

SAMPLES CHECKED AGAINST COC BY: VP

SAMPLES LOGGED IN BY: AD

SAMPLE TEMP RECEIVED AT:

Colton / No. California / Arizona _____ °C (Compliance: 4 ± 2 °C)

Monrovia 3.4 °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: _____

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

TO BE COMPLETED BY SAMPLER:

COMPANY/AGENCY NAME: Aqua Pennsylvania, Inc.		PROJECT CODE:		COMPLIANCE SAMPLES <input type="checkbox"/>		NON-COMPLIANCE SAMPLES <input checked="" type="checkbox"/>		(check for yes)		(check for yes)			
EEA CLIENT CODE:		COC ID:		SAMPLE GROUP: Aqua pennsylvania, Inc.		REGULATION INVOLVED:		Type of samples (circle one):		ROUTINE SPECIAL CONFIRMATION (eg. SDWA, Phase V, NPDES, FDA,...)			
TAT requested: rush by adv notice only		STD <input checked="" type="checkbox"/> 1 wk _____ 3 day _____ 2 day _____ 1 day _____		SEE ATTACHED BOTTLE ORDER FOR ANALYSES <input type="checkbox"/>		(check for yes), <u>OR</u>		list ANALYSES REQUIRED (enter number of bottles sent for each test for each sample)					
SAMPLE DATE	SAMPLE TIME	SAMPLE ID	CLIENT LAB ID	MATRIX*	FIELD DATA	FIELD DATA	EPA 537					SAMPLER COMMENTS	
2/12/16	0920	Horsham Well #17		RGW			X						Raw Water
2/12/16	1030	Horsham Well #10		RGW			X						Raw Water
2/12/16	0840	Horsham Well #21		RGW			X						Raw Water
													Not for UCMR3

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

SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
SAMPLED BY: _____	BP	Aqua Pennsylvania, Inc.	1/19/2016	
RELINQUISHED BY: _____	BP	Aqua Pennsylvania, Inc.	1/19/2016	1500
RECEIVED BY: <u>[Signature]</u>	Michael Senft	Aqua Pennsylvania, Inc.	1/19/2016	1500
RELINQUISHED BY: _____	Michael Senft	Aqua Pennsylvania, Inc.	1/19/2016	1630
RECEIVED BY: <u>[Signature]</u>	<u>R. Senft</u>	<u>EPA</u>	<u>2/18/16</u>	<u>1120</u>

1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

Eurofins

Enlon Analytical

INTERNAL CHAIN OF CUSTODY RECORD

COMPANY NAME / EEA CLIENT CODE: AQUA PENN	PROJECT CODE:
---	---------------

SAMPLE TEMP RECEIVED:

SAMPLES REC'D DAY OF COLLECTION?

IR Gun ID = 518A (Observation= 3.7 °C) (Corr.Factor -0.3 °C) (Final = 3.4 °C)

TYPE OF ICE: Real Synthetic No Ice CONDITION OF ICE: Frozen Partially Frozen Thawed N/A

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

Compliance Acceptance Criteria:

- 1) Chemistry: ≤ 6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥ 10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If over temp is not confirmed, then record each temperature of each quadrant

1 = (Observation= _____ °C) (Corr.Factor _____ °C) (Final = _____ °C)	2 = (Observation= _____ °C) (Corr.Factor _____ °C) (Final = _____ °C)
3 = (Observation= _____ °C) (Corr.Factor _____ °C) (Final = _____ °C)	4 = (Observation= _____ °C) (Corr.Factor _____ °C) (Final = _____ °C)

- 4) UCMR3: 524.3: (Observation= _____ °C) (Corr.Factor _____ °C) (Final = _____ °C)
(non-GLEC)
522: (Observation= _____ °C) (Corr.Factor _____ °C) (Final = _____ °C)

≤ 10°C if received within 48 hours of sample collection (not the same business day); ≤ 6°C if received after 48 hours of sample collection. Measure temperature for each method above.

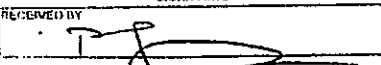
- 5) LT2: Giardia /Cryptosporidium: <20 °C, not frozen (received after 8 hours of sample collection)
E. Coli: < 10°C, not frozen (if received after 2 hours of sample collection)

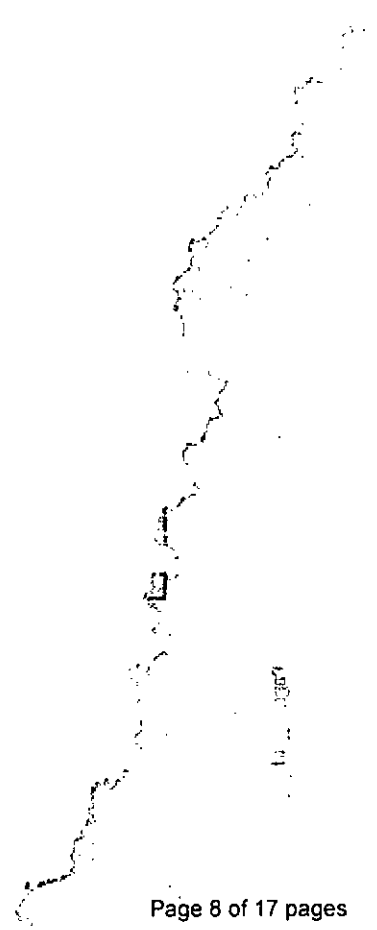
Giardia/Crypto: (Observation= _____ °C) (Corr.Factor _____ °C) (Final = _____ °C)

E.Coli: (Observation= _____ °C) (Corr.Factor _____ °C) (Final = _____ °C)

- 6) Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

Note: If samples are over temp, let the ASMS know. ASMS will determine whether to proceed with analysis or not.

SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
		Eurofins Enlon Analytical		



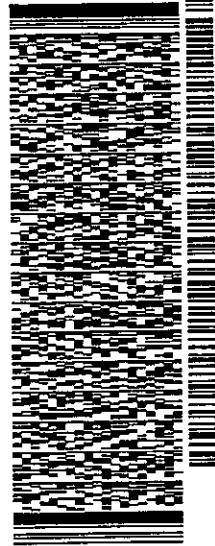
ORIGIN:IDHWAYA (610) 645-1176
MICHAEL SEWFT
AQUA
702 WEST LANCASTER AVENUE
BRNNA MAR, PA 19010
UNITED STATES US

SHIP DATE: 17FEB16
ACTWGT: 10.00 LB
CAD: 100091330/N/ET/3730
DIMS: 24x13x14 IN
BILL RECIPIENT

TO LOGIN

MWH AMERICAS, INC.,
750 ROYAL OAKS DRIVE
SUITE 100
MONROVIA CA 91016
(626) 386-1100 REF: UCMQ3
INV: 15-3031 DEPT: 15-3031
PO

540J1870777ZF



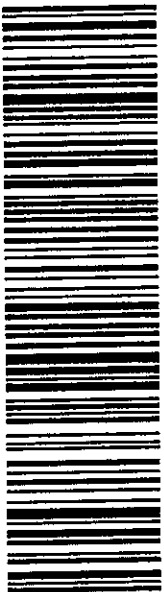
J18101010104014

THU - 18 FEB 3:00P

STANDARD OVERNIGHT

TRK# 7756 7064 0684
0201

NH WHPA 91016
CA-US 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.



Eaton Analytical

Laboratory Comments
Report: 569134

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)

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

The Comments Report may be blank if there are no comments for this report.



Eaton Analytical

Laboratory Hits
Report: 569134

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)

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

Samples Received on:
02/18/2016 1120

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
201601020353 Horsham Well # 10						
03/01/2016 18:56	Perfluorobutanesulfonic acid		0.0073		ug/L	0.0025
03/01/2016 18:56	Perfluoroheptanoic acid		0.0030		ug/L	0.0025
03/01/2016 18:56	Perfluorohexanesulfonic acid		0.020		ug/L	0.0025
03/01/2016 18:56	Perfluorohexanoic acid		0.0074		ug/L	0.0025
03/01/2016 18:56	Perfluorooctanesulfonic acid		0.019		ug/L	0.0025
03/01/2016 18:56	Perfluorooctanoic acid		0.014		ug/L	0.0025
201601020354 Horsham Well # 17						
03/01/2016 19:17	Perfluorobutanesulfonic acid		0.0077		ug/L	0.0025
03/01/2016 19:17	Perfluoroheptanoic acid		0.0065		ug/L	0.0025
03/01/2016 19:17	Perfluorohexanesulfonic acid		0.036		ug/L	0.0025
03/01/2016 19:17	Perfluorohexanoic acid		0.015		ug/L	0.0025
03/01/2016 19:17	Perfluorooctanesulfonic acid		0.050		ug/L	0.0025
03/01/2016 19:17	Perfluorooctanoic acid		0.020		ug/L	0.0025
201601020355 Horsham Well # 21						
03/01/2016 19:38	Perfluorobutanesulfonic acid		0.0048		ug/L	0.0025
03/01/2016 19:38	Perfluoroheptanoic acid		0.0025		ug/L	0.0025
03/01/2016 19:38	Perfluorohexanesulfonic acid		0.0043		ug/L	0.0025
03/01/2016 19:38	Perfluorohexanoic acid		0.0044		ug/L	0.0025
03/01/2016 19:38	Perfluorooctanesulfonic acid		0.0051		ug/L	0.0025
03/01/2016 19:38	Perfluorooctanoic acid		0.0084		ug/L	0.0025

SUMMARY OF POSITIVE DATA ONLY



Eaton Analytical

Laboratory Data
Report: 569134

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)

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

Samples Received on:
02/18/2016 1120

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution	
Horsham Well # 10 (201601020353)					Sampled on 02/12/2016 1030				
EPA 537 - Perfluorinated Alkyl Acids									
2/23/2016	03/01/2016	18:56 894492	(EPA 537)	Perfluorobutanesulfonic acid	0.0073	ug/L	0.0025	1	
2/23/2016	03/01/2016	18:56 894492	(EPA 537)	Perfluorodecanoic acid	ND	ug/L	0.0025	1	
2/23/2016	03/01/2016	18:56 894492	(EPA 537)	Perfluorododecanoic acid	ND	ug/L	0.0025	1	
2/23/2016	03/01/2016	18:56 894492	(EPA 537)	Perfluoroheptanoic acid	0.0030	ug/L	0.0025	1	
2/23/2016	03/01/2016	18:56 894492	(EPA 537)	Perfluorohexanesulfonic acid	0.020	ug/L	0.0025	1	
2/23/2016	03/01/2016	18:56 894492	(EPA 537)	Perfluorohexanoic acid	0.0074	ug/L	0.0025	1	
2/23/2016	03/01/2016	18:56 894492	(EPA 537)	Perfluorononanoic acid	ND	ug/L	0.0025	1	
2/23/2016	03/01/2016	18:56 894492	(EPA 537)	Perfluorooctanesulfonic acid	0.019	ug/L	0.0025	1	
2/23/2016	03/01/2016	18:56 894492	(EPA 537)	Perfluorooctanoic acid	0.014	ug/L	0.0025	1	
2/23/2016	03/01/2016	18:56 894492	(EPA 537)	Perfluorotetradecanoic acid	ND	ug/L	0.0025	1	
2/23/2016	03/01/2016	18:56 894492	(EPA 537)	Perfluorotridecanoic acid	ND	ug/L	0.0025	1	
2/23/2016	03/01/2016	18:56 894492	(EPA 537)	Perfluoroundecanoic acid	ND	ug/L	0.0025	1	
2/23/2016	03/01/2016	18:56 894492	(EPA 537)	13C-PFDA	97	%		1	
2/23/2016	03/01/2016	18:56 894492	(EPA 537)	13C-PFHxA	83	%		1	
2/23/2016	03/01/2016	18:56 894492	(EPA 537)	13C-PFOA	137	%		1	
2/23/2016	03/01/2016	18:56 894492	(EPA 537)	13C-PFOS	116	%		1	
Horsham Well # 17 (201601020354)					Sampled on 02/12/2016 0920				
EPA 537 - Perfluorinated Alkyl Acids									
2/23/2016	03/01/2016	19:17 894492	(EPA 537)	Perfluorobutanesulfonic acid	0.0077	ug/L	0.0025	1	
2/23/2016	03/01/2016	19:17 894492	(EPA 537)	Perfluorodecanoic acid	ND	ug/L	0.0025	1	
2/23/2016	03/01/2016	19:17 894492	(EPA 537)	Perfluorododecanoic acid	ND	ug/L	0.0025	1	
2/23/2016	03/01/2016	19:17 894492	(EPA 537)	Perfluoroheptanoic acid	0.0065	ug/L	0.0025	1	
2/23/2016	03/01/2016	19:17 894492	(EPA 537)	Perfluorohexanesulfonic acid	0.036	ug/L	0.0025	1	
2/23/2016	03/01/2016	19:17 894492	(EPA 537)	Perfluorohexanoic acid	0.015	ug/L	0.0025	1	
2/23/2016	03/01/2016	19:17 894492	(EPA 537)	Perfluorononanoic acid	ND	ug/L	0.0025	1	
2/23/2016	03/01/2016	19:17 894492	(EPA 537)	Perfluorooctanesulfonic acid	0.050	ug/L	0.0025	1	
2/23/2016	03/01/2016	19:17 894492	(EPA 537)	Perfluorooctanoic acid	0.020	ug/L	0.0025	1	
2/23/2016	03/01/2016	19:17 894492	(EPA 537)	Perfluorotetradecanoic acid	ND	ug/L	0.0025	1	
2/23/2016	03/01/2016	19:17 894492	(EPA 537)	Perfluorotridecanoic acid	ND	ug/L	0.0025	1	
2/23/2016	03/01/2016	19:17 894492	(EPA 537)	Perfluoroundecanoic acid	ND	ug/L	0.0025	1	
2/23/2016	03/01/2016	19:17 894492	(EPA 537)	13C-PFDA	93	%		1	
2/23/2016	03/01/2016	19:17 894492	(EPA 537)	13C-PFHxA	87	%		1	
2/23/2016	03/01/2016	19:17 894492	(EPA 537)	13C-PFOA	138	%		1	

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



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)

Laboratory Data
Report: 569134

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

Samples Received on:
02/18/2016 1120

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
2/23/2016	03/01/2016	19:17 894492	(EPA 537)	13C-PFOS	124	%		1
Horsham Well # 21 (201601020355)						Sampled on 02/12/2016 0840		
EPA 537 - Perfluorinated Alkyl Acids								
2/23/2016	03/01/2016	19:38 894492	(EPA 537)	Perfluorobutanesulfonic acid	0.0048	ug/L	0.0025	1
2/23/2016	03/01/2016	19:38 894492	(EPA 537)	Perfluorodecanoic acid	ND	ug/L	0.0025	1
2/23/2016	03/01/2016	19:38 894492	(EPA 537)	Perfluorododecanoic acid	ND	ug/L	0.0025	1
2/23/2016	03/01/2016	19:38 894492	(EPA 537)	Perfluoroheptanoic acid	0.0025	ug/L	0.0025	1
2/23/2016	03/01/2016	19:38 894492	(EPA 537)	Perfluorohexanesulfonic acid	0.0043	ug/L	0.0025	1
2/23/2016	03/01/2016	19:38 894492	(EPA 537)	Perfluorohexanoic acid	0.0044	ug/L	0.0025	1
2/23/2016	03/01/2016	19:38 894492	(EPA 537)	Perfluorononanoic acid	ND	ug/L	0.0025	1
2/23/2016	03/01/2016	19:38 894492	(EPA 537)	Perfluorooctanesulfonic acid	0.0051	ug/L	0.0025	1
2/23/2016	03/01/2016	19:38 894492	(EPA 537)	Perfluorooctanoic acid	0.0084	ug/L	0.0025	1
2/23/2016	03/01/2016	19:38 894492	(EPA 537)	Perfluorotetradecanoic acid	ND	ug/L	0.0025	1
2/23/2016	03/01/2016	19:38 894492	(EPA 537)	Perfluorotridecanoic acid	ND	ug/L	0.0025	1
2/23/2016	03/01/2016	19:38 894492	(EPA 537)	Perfluoroundecanoic acid	ND	ug/L	0.0025	1
2/23/2016	03/01/2016	19:38 894492	(EPA 537)	13C-PFDA	97	%		1
2/23/2016	03/01/2016	19:38 894492	(EPA 537)	13C-PFHxA	87	%		1
2/23/2016	03/01/2016	19:38 894492	(EPA 537)	13C-PFOA	136	%		1
2/23/2016	03/01/2016	19:38 894492	(EPA 537)	13C-PFOS	121	%		1

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



Eaton Analytical

Laboratory
QC Summary: 569134

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)

Aqua Pennsylvania, Inc.

QC Ref # 894492 - Perfluorinated Alkyl Acids

Analysis Date: 03/01/2016

201601020353	Horsham Well # 10
201601020354	Horsham Well # 17
201601020355	Horsham Well # 21

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



Eaton Analytical

Laboratory QC
Report: 569134

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)

Aqua Pennsylvania, Inc.

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
QC Ref# 894492 - Perfluorinated Alkyl Acids by EPA 537						Analysis Date: 03/01/2016			
LCS1	13C-PFDA (S)			106	%	106	(70-130)		
LCS2	13C-PFDA (S)			89.9	%	90	(70-130)		
MBLK	13C-PFDA (S)			101	%	101	(70-130)		
MRL_CHK	13C-PFDA (S)			94.6	%	95	(70-130)		
MS1_201602170611	13C-PFDA (S)			92.3	%	92	(70-130)		
MSD1_201602170611	13C-PFDA (S)			89.2	%	89	(70-130)		
LCS1	13C-PFHxA (S)			95.6	%	96	(70-130)		
LCS2	13C-PFHxA (S)			82.5	%	82	(70-130)		
MBLK	13C-PFHxA (S)			93.1	%	93	(70-130)		
MRL_CHK	13C-PFHxA (S)			89.9	%	90	(70-130)		
MS1_201602170611	13C-PFHxA (S)			84.4	%	84	(70-130)		
MSD1_201602170611	13C-PFHxA (S)			85.3	%	85	(70-130)		
LCS1	13C-PFOA (I)			114	%	114	(50-150)		
LCS2	13C-PFOA (I)			137	%	137	(50-150)		
MBLK	13C-PFOA (I)			117	%	117	(50-150)		
MRL_CHK	13C-PFOA (I)			121	%	121	(50-150)		
MS1_201602170611	13C-PFOA (I)			133	%	133	(50-150)		
MSD1_201602170611	13C-PFOA (I)			136	%	136	(50-150)		
LCS1	13C-PFOS (I)			111	%	111	(50-150)		
LCS2	13C-PFOS (I)			127	%	127	(50-150)		
MBLK	13C-PFOS (I)			119	%	119	(50-150)		
MRL_CHK	13C-PFOS (I)			118	%	118	(50-150)		
MS1_201602170611	13C-PFOS (I)			116	%	116	(50-150)		
MSD1_201602170611	13C-PFOS (I)			121	%	121	(50-150)		
LCS1	Perfluorobutanesulfonic acid		0.022	0.0171	ug/L	77	(70-130)		
LCS2	Perfluorobutanesulfonic acid		0.022	0.0194	ug/L	87	(70-130)	30	13
MBLK	Perfluorobutanesulfonic acid			<0.00074	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid		0.0022	0.00199	ug/L	90	(50-150)		
MS1_201602170611	Perfluorobutanesulfonic acid	ND	0.022	0.0208	ug/L	94	(70-130)		
MSD1_201602170611	Perfluorobutanesulfonic acid	ND	0.022	0.0194	ug/L	87	(70-130)	30	7.0
LCS1	Perfluorodecanoic acid		0.025	0.0190	ug/L	76	(70-130)		
LCS2	Perfluorodecanoic acid		0.025	0.0201	ug/L	80	(70-130)	30	5.6
MBLK	Perfluorodecanoic acid			<0.00083	ug/L				
MRL_CHK	Perfluorodecanoic acid		0.0025	0.00211	ug/L	84	(50-150)		
MS1_201602170611	Perfluorodecanoic acid	ND	0.025	0.0214	ug/L	85	(70-130)		
MSD1_201602170611	Perfluorodecanoic acid	ND	0.025	0.0200	ug/L	80	(70-130)	30	6.8

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.

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)

Aqua Pennsylvania, Inc.

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
LCS1	Perfluorododecanoic acid		0.025	0.0202	ug/L	81	(70-130)		
LCS2	Perfluorododecanoic acid		0.025	0.0212	ug/L	85	(70-130)	30	4.3
MBLK	Perfluorododecanoic acid			<0.00083	ug/L				
MRL_CHK	Perfluorododecanoic acid		0.0025	0.00233	ug/L	93	(50-150)		
MS1_201602170611	Perfluorododecanoic acid	ND	0.025	0.0212	ug/L	85	(70-130)		
MSD1_201602170611	Perfluorododecanoic acid	ND	0.025	0.0196	ug/L	79	(70-130)	30	7.8
LCS1	Perfluoroheptanoic acid		0.025	0.0179	ug/L	72	(70-130)		
LCS2	Perfluoroheptanoic acid		0.025	0.0192	ug/L	77	(70-130)	30	7.0
MBLK	Perfluoroheptanoic acid			<0.00083	ug/L				
MRL_CHK	Perfluoroheptanoic acid		0.0025	0.00197	ug/L	79	(50-150)		
MS1_201602170611	Perfluoroheptanoic acid	ND	0.025	0.0180	ug/L	71	(70-130)		
MSD1_201602170611	Perfluoroheptanoic acid	ND	0.025	0.0185	ug/L	73	(70-130)	30	2.7
LCS1	Perfluorohexanesulfonic acid		0.024	0.0173	ug/L	73	(70-130)		
LCS2	Perfluorohexanesulfonic acid		0.024	0.0205	ug/L	87	(70-130)	30	17
MBLK	Perfluorohexanesulfonic acid			<0.00079	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid		0.0024	0.00194	ug/L	82	(50-150)		
MS1_201602170611	Perfluorohexanesulfonic acid	ND	0.024	0.0202	ug/L	86	(70-130)		
MSD1_201602170611	Perfluorohexanesulfonic acid	ND	0.024	0.0195	ug/L	82	(70-130)	30	4.0
LCS1	Perfluorohexanoic acid		0.025	0.0197	ug/L	79	(70-130)		
LCS2	Perfluorohexanoic acid		0.025	0.0210	ug/L	84	(70-130)	30	6.4
MBLK	Perfluorohexanoic acid			<0.00083	ug/L				
MRL_CHK	Perfluorohexanoic acid		0.0025	0.00219	ug/L	88	(50-150)		
MS1_201602170611	Perfluorohexanoic acid	ND	0.025	0.0219	ug/L	86	(70-130)		
MSD1_201602170611	Perfluorohexanoic acid	ND	0.025	0.0218	ug/L	85	(70-130)	30	0.46
LCS1	Perfluorononanoic acid		0.025	0.0179	ug/L	72	(70-130)		
LCS2	Perfluorononanoic acid		0.025	0.0192	ug/L	77	(70-130)	30	7.0
MBLK	Perfluorononanoic acid			<0.00083	ug/L				
MRL_CHK	Perfluorononanoic acid		0.0025	0.00200	ug/L	80	(50-150)		
MS1_201602170611	Perfluorononanoic acid	ND	0.025	0.0193	ug/L	76	(70-130)		
MSD1_201602170611	Perfluorononanoic acid	ND	0.025	0.0188	ug/L	74	(70-130)	30	2.1
LCS1	Perfluorooctanesulfonic acid		0.024	0.0170	ug/L	71	(70-130)		
LCS2	Perfluorooctanesulfonic acid		0.024	0.0216	ug/L	90	(70-130)	30	24
MBLK	Perfluorooctanesulfonic acid			<0.0008	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid		0.0024	0.00186	ug/L	77	(50-150)		
MS1_201602170611	Perfluorooctanesulfonic acid	ND	0.024	0.0216	ug/L	90	(70-130)		
MSD1_201602170611	Perfluorooctanesulfonic acid	ND	0.024	0.0203	ug/L	85	(70-130)	30	6.2
LCS1	Perfluorooctanoic acid		0.025	0.0181	ug/L	73	(70-130)		
LCS2	Perfluorooctanoic acid		0.025	0.0193	ug/L	77	(70-130)	30	6.4

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.



Eaton Analytical

Laboratory QC
Report: 569134

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)

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	0.00234	ug/L	94	(50-150)		
MS1_201602170611	Perfluorooctanoic acid	ND	0.025	0.0207	ug/L	77	(70-130)		
MSD1_201602170611	Perfluorooctanoic acid	ND	0.025	0.0206	ug/L	77	(70-130)	30	0.48
LCS1	Perfluorotetradecanoic acid		0.025	0.0176	ug/L	71	(70-130)		
LCS2	Perfluorotetradecanoic acid		0.025	0.0182	ug/L	73	(70-130)	30	3.4
MBLK	Perfluorotetradecanoic acid			<0.00083	ug/L				
MRL_CHK	Perfluorotetradecanoic acid		0.0025	0.00197	ug/L	79	(50-150)		
MS1_201602170611	Perfluorotetradecanoic acid	ND	0.025	0.0206	ug/L	82	(70-130)		
MSD1_201602170611	Perfluorotetradecanoic acid	ND	0.025	0.0186	ug/L	74	(70-130)	30	10
LCS1	Perfluorotridecanoic acid		0.025	0.0180	ug/L	72	(70-130)		
LCS2	Perfluorotridecanoic acid		0.025	0.0186	ug/L	75	(70-130)	30	3.3
MBLK	Perfluorotridecanoic acid			<0.00083	ug/L				
MRL_CHK	Perfluorotridecanoic acid		0.0025	0.00199	ug/L	80	(50-150)		
MS1_201602170611	Perfluorotridecanoic acid	ND	0.025	0.0196	ug/L	79	(70-130)		
MSD1_201602170611	Perfluorotridecanoic acid	ND	0.025	0.0183	ug/L	73	(70-130)	30	6.9
LCS1	Perfluoroundecanoic acid		0.025	0.0194	ug/L	78	(70-130)		
LCS2	Perfluoroundecanoic acid		0.025	0.0203	ug/L	81	(70-130)	30	4.5
MBLK	Perfluoroundecanoic acid			<0.00083	ug/L				
MRL_CHK	Perfluoroundecanoic acid		0.0025	0.00222	ug/L	89	(50-150)		
MS1_201602170611	Perfluoroundecanoic acid	ND	0.025	0.0211	ug/L	85	(70-130)		
MSD1_201602170611	Perfluoroundecanoic acid	ND	0.025	0.0194	ug/L	78	(70-130)	30	8.4

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.