

# Report of Analysis

<b>Client Sample ID:</b>	20SA-SWCP-0605		
<b>Lab Sample ID:</b>	FA75759-1	<b>Date Sampled:</b>	06/05/20
<b>Matrix:</b>	AQ - Water	<b>Date Received:</b>	06/10/20
<b>Method:</b>	EPA 537M QSM5.3 B-15 EPA 537 MOD	<b>Percent Solids:</b>	n/a
<b>Project:</b>	1202416		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q50695.D	1	06/22/20 10:25	NAF	06/19/20 09:00	OP80766	S2Q749
Run #2							

	Initial Volume	Final Volume
Run #1	260 ml	1.0 ml
Run #2		

EPA 537.1 Method List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
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**PERFLUOROALKYL CARBOXYLIC ACIDS**

307-24-4	Perfluorohexanoic acid	0.0019 U	0.0038	0.0019	0.00096	ug/l	
375-85-9	Perfluoroheptanoic acid	0.0019 U	0.0038	0.0019	0.00096	ug/l	
335-67-1	Perfluorooctanoic acid	0.0019 U	0.0038	0.0019	0.00096	ug/l	
375-95-1	Perfluorononanoic acid	0.0019 U	0.0038	0.0019	0.00096	ug/l	
335-76-2	Perfluorodecanoic acid	0.0019 U	0.0038	0.0019	0.00096	ug/l	
2058-94-8	Perfluoroundecanoic acid	0.0019 U	0.0038	0.0019	0.00096	ug/l	
307-55-1	Perfluorododecanoic acid	0.0019 U	0.0038	0.0019	0.0014	ug/l	
72629-94-8	Perfluorotridecanoic acid	0.0019 U	0.0038	0.0019	0.00096	ug/l	
376-06-7	Perfluorotetradecanoic acid	0.0019 U	0.0038	0.0019	0.00096	ug/l	

**PERFLUOROALKYL SULFONATES**

375-73-5	Perfluorobutanesulfonic acid	0.0019 U	0.0038	0.0019	0.00096	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0019 U	0.0038	0.0019	0.00096	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0019 U	0.0038	0.0019	0.0014	ug/l	

**PERFLUOROCTANESULFONAMIDOACETIC ACIDS**

2355-31-9	MeFOSAA	0.0077 U	0.019	0.0077	0.0038	ug/l	
2991-50-6	EtFOSAA	0.0077 U	0.019	0.0077	0.0038	ug/l	

**NEXT GENERATION PFAS ANALYTES**

13252-13-6	HFPO-DA (GenX)	0.0096 U	0.019	0.0096	0.0048	ug/l	
919005-14-4	ADONA	0.0038 U	0.0077	0.0038	0.0019	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0038 U	0.0077	0.0038	0.0019	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0038 U	0.0077	0.0038	0.0019	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
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	13C5-PFHxA	86%		50-150%
	13C4-PFHpA	86%		50-150%
	13C8-PFOA	89%		50-150%
	13C9-PFNA	89%		50-150%

U = Not detected      LOD = Limit of Detection      J = Indicates an estimated value  
 LOQ = Limit of Quantitation      DL = Detection Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> 20SA-SWCP-0605	
<b>Lab Sample ID:</b> FA75759-1	<b>Date Sampled:</b> 06/05/20
<b>Matrix:</b> AQ - Water	<b>Date Received:</b> 06/10/20
<b>Method:</b> EPA 537M QSM5.3 B-15 EPA 537 MOD	<b>Percent Solids:</b> n/a
<b>Project:</b> 1202416	

**EPA 537.1 Method List**

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C6-PFDA	87%		50-150%
	13C7-PFUnDA	86%		50-150%
	13C2-PFDoDA	84%		50-150%
	13C2-PFTeDA	82%		50-150%
	13C3-PFBS	84%		50-150%
	13C3-PFHxS	83%		50-150%
	13C8-PFOS	82%		50-150%
	d3-MeFOSAA	92%		50-150%
	13C3-HFPO-DA	93%		50-150%

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U = Not detected      LOD = Limit of Detection      J = Indicates an estimated value  
 LOQ = Limit of Quantitation      DL = Detection Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b>	20SA-KS-0605		
<b>Lab Sample ID:</b>	FA75759-2	<b>Date Sampled:</b>	06/05/20
<b>Matrix:</b>	AQ - Water	<b>Date Received:</b>	06/10/20
<b>Method:</b>	EPA 537M QSM5.3 B-15 EPA 537 MOD	<b>Percent Solids:</b>	n/a
<b>Project:</b>	1202416		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q50709.D	1	06/22/20 13:52	NAF	06/19/20 09:00	OP80766	S2Q749
Run #2							

	Initial Volume	Final Volume
Run #1	270 ml	1.0 ml
Run #2		

EPA 537.1 Method List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
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**PERFLUOROALKYL CARBOXYLIC ACIDS**

307-24-4	Perfluorohexanoic acid	0.0019 U	0.0037	0.0019	0.00093	ug/l	
375-85-9	Perfluoroheptanoic acid	0.0019 U	0.0037	0.0019	0.00093	ug/l	
335-67-1	Perfluorooctanoic acid	0.0019 U	0.0037	0.0019	0.00093	ug/l	
375-95-1	Perfluorononanoic acid	0.0019 U	0.0037	0.0019	0.00093	ug/l	
335-76-2	Perfluorodecanoic acid	0.0019 U	0.0037	0.0019	0.00093	ug/l	
2058-94-8	Perfluoroundecanoic acid	0.0019 U	0.0037	0.0019	0.00093	ug/l	
307-55-1	Perfluorododecanoic acid	0.0019 U	0.0037	0.0019	0.0014	ug/l	
72629-94-8	Perfluorotridecanoic acid	0.0019 U	0.0037	0.0019	0.00093	ug/l	
376-06-7	Perfluorotetradecanoic acid	0.0019 U	0.0037	0.0019	0.00093	ug/l	

**PERFLUOROALKYL SULFONATES**

375-73-5	Perfluorobutanesulfonic acid	0.0019 U	0.0037	0.0019	0.00093	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0019 U	0.0037	0.0019	0.00093	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0019 U	0.0037	0.0019	0.0014	ug/l	

**PERFLUOROCTANESULFONAMIDOACETIC ACIDS**

2355-31-9	MeFOSAA	0.0074 U	0.019	0.0074	0.0037	ug/l	
2991-50-6	EtFOSAA	0.0074 U	0.019	0.0074	0.0037	ug/l	

**NEXT GENERATION PFAS ANALYTES**

13252-13-6	HFPO-DA (GenX)	0.0093 U	0.019	0.0093	0.0046	ug/l	
919005-14-4	ADONA	0.0037 U	0.0074	0.0037	0.0019	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0037 U	0.0074	0.0037	0.0019	ug/l	
763051-92-9	11Cl-PF3OUds (F-53B Minor)	0.0037 U	0.0074	0.0037	0.0019	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
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	13C5-PFHxA	103%		50-150%
	13C4-PFHpA	102%		50-150%
	13C8-PFOA	105%		50-150%
	13C9-PFNA	107%		50-150%

U = Not detected      LOD = Limit of Detection      J = Indicates an estimated value  
 LOQ = Limit of Quantitation      DL = Detection Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> 20SA-KS-0605		<b>Date Sampled:</b> 06/05/20
<b>Lab Sample ID:</b> FA75759-2		<b>Date Received:</b> 06/10/20
<b>Matrix:</b> AQ - Water		<b>Percent Solids:</b> n/a
<b>Method:</b> EPA 537M QSM5.3 B-15 EPA 537 MOD		
<b>Project:</b> 1202416		

**EPA 537.1 Method List**

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C6-PFDA	100%		50-150%
	13C7-PFUnDA	95%		50-150%
	13C2-PFDoDA	90%		50-150%
	13C2-PFTeDA	104%		50-150%
	13C3-PFBS	96%		50-150%
	13C3-PFHxS	99%		50-150%
	13C8-PFOS	99%		50-150%
	d3-MeFOSAA	107%		50-150%
	13C3-HFPO-DA	104%		50-150%

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U = Not detected      LOD = Limit of Detection      J = Indicates an estimated value  
 LOQ = Limit of Quantitation      DL = Detection Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b>	20SA-PW-01-0605		
<b>Lab Sample ID:</b>	FA75759-3	<b>Date Sampled:</b>	06/05/20
<b>Matrix:</b>	AQ - Water	<b>Date Received:</b>	06/10/20
<b>Method:</b>	EPA 537M QSM5.3 B-15 EPA 537 MOD	<b>Percent Solids:</b>	n/a
<b>Project:</b>	1202416		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q50710.D	1	06/22/20 14:07	NAF	06/19/20 09:00	OP80766	S2Q749
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2		

EPA 537.1 Method List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
<b>PERFLUOROALKYLCARBOXYLIC ACIDS</b>							
307-24-4	Perfluorohexanoic acid	0.0020 U	0.0040	0.0020	0.0010	ug/l	
375-85-9	Perfluoroheptanoic acid	0.0020 U	0.0040	0.0020	0.0010	ug/l	
335-67-1	Perfluorooctanoic acid	0.0020 U	0.0040	0.0020	0.0010	ug/l	
375-95-1	Perfluorononanoic acid	0.0020 U	0.0040	0.0020	0.0010	ug/l	
335-76-2	Perfluorodecanoic acid	0.0020 U	0.0040	0.0020	0.0010	ug/l	
2058-94-8	Perfluoroundecanoic acid	0.0020 U	0.0040	0.0020	0.0010	ug/l	
307-55-1	Perfluorododecanoic acid	0.0020 U	0.0040	0.0020	0.0015	ug/l	
72629-94-8	Perfluorotridecanoic acid	0.0020 U	0.0040	0.0020	0.0010	ug/l	
376-06-7	Perfluorotetradecanoic acid	0.0020 U	0.0040	0.0020	0.0010	ug/l	
<b>PERFLUOROALKYLSULFONATES</b>							
375-73-5	Perfluorobutanesulfonic acid	0.0020 U	0.0040	0.0020	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0020 U	0.0040	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0020 U	0.0040	0.0020	0.0015	ug/l	
<b>PERFLUOROCTANESULFONAMIDOACETIC ACIDS</b>							
2355-31-9	MeFOSAA	0.0080 U	0.020	0.0080	0.0040	ug/l	
2991-50-6	EtFOSAA	0.0080 U	0.020	0.0080	0.0040	ug/l	
<b>NEXT GENERATION PFAS ANALYTES</b>							
13252-13-6	HFPO-DA (GenX)	0.010 U	0.020	0.010	0.0050	ug/l	
919005-14-4	ADONA	0.0040 U	0.0080	0.0040	0.0020	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0040 U	0.0080	0.0040	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0040 U	0.0080	0.0040	0.0020	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C5-PFHxA	94%		50-150%
	13C4-PFHpA	93%		50-150%
	13C8-PFOA	96%		50-150%
	13C9-PFNA	98%		50-150%

U = Not detected      LOD = Limit of Detection      J = Indicates an estimated value  
 LOQ = Limit of Quantitation      DL = Detection Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> 20SA-PW-01-0605		<b>Date Sampled:</b> 06/05/20
<b>Lab Sample ID:</b> FA75759-3		<b>Date Received:</b> 06/10/20
<b>Matrix:</b> AQ - Water		<b>Percent Solids:</b> n/a
<b>Method:</b> EPA 537M QSM5.3 B-15 EPA 537 MOD		
<b>Project:</b> 1202416		

**EPA 537.1 Method List**

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C6-PFDA	94%		50-150%
	13C7-PFUnDA	90%		50-150%
	13C2-PFDoDA	81%		50-150%
	13C2-PFTeDA	91%		50-150%
	13C3-PFBS	86%		50-150%
	13C3-PFHxS	91%		50-150%
	13C8-PFOS	91%		50-150%
	d3-MeFOSAA	97%		50-150%
	13C3-HFPO-DA	97%		50-150%

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U = Not detected      LOD = Limit of Detection      J = Indicates an estimated value  
 LOQ = Limit of Quantitation      DL = Detection Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b>	20SA-FB-0605		
<b>Lab Sample ID:</b>	FA75759-4	<b>Date Sampled:</b>	06/05/20
<b>Matrix:</b>	AQ - Field Blank Water	<b>Date Received:</b>	06/10/20
<b>Method:</b>	EPA 537M QSM5.3 B-15 EPA 537 MOD	<b>Percent Solids:</b>	n/a
<b>Project:</b>	1202416		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Q50700.D	1	06/22/20 11:39	NAF	06/19/20 09:00	OP80766	S2Q749
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2		

EPA 537.1 Method List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
<b>PERFLUOROALKYL CARBOXYLIC ACIDS</b>							
307-24-4	Perfluorohexanoic acid	0.0020 U	0.0040	0.0020	0.0010	ug/l	
375-85-9	Perfluoroheptanoic acid	0.0020 U	0.0040	0.0020	0.0010	ug/l	
335-67-1	Perfluorooctanoic acid	0.0020 U	0.0040	0.0020	0.0010	ug/l	
375-95-1	Perfluorononanoic acid	0.0020 U	0.0040	0.0020	0.0010	ug/l	
335-76-2	Perfluorodecanoic acid	0.0020 U	0.0040	0.0020	0.0010	ug/l	
2058-94-8	Perfluoroundecanoic acid	0.0020 U	0.0040	0.0020	0.0010	ug/l	
307-55-1	Perfluorododecanoic acid	0.0020 U	0.0040	0.0020	0.0015	ug/l	
72629-94-8	Perfluorotridecanoic acid	0.0020 U	0.0040	0.0020	0.0010	ug/l	
376-06-7	Perfluorotetradecanoic acid	0.0020 U	0.0040	0.0020	0.0010	ug/l	
<b>PERFLUOROALKYL SULFONATES</b>							
375-73-5	Perfluorobutanesulfonic acid	0.0020 U	0.0040	0.0020	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0020 U	0.0040	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0020 U	0.0040	0.0020	0.0015	ug/l	
<b>PERFLUOROOCCTANESULFONAMIDOACETIC ACIDS</b>							
2355-31-9	MeFOSAA	0.0080 U	0.020	0.0080	0.0040	ug/l	
2991-50-6	EtFOSAA	0.0080 U	0.020	0.0080	0.0040	ug/l	
<b>NEXT GENERATION PFAS ANALYTES</b>							
13252-13-6	HFPO-DA (GenX)	0.010 U	0.020	0.010	0.0050	ug/l	
919005-14-4	ADONA	0.0040 U	0.0080	0.0040	0.0020	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0040 U	0.0080	0.0040	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0040 U	0.0080	0.0040	0.0020	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C5-PFHxA	93%		50-150%
	13C4-PFHpA	90%		50-150%
	13C8-PFOA	94%		50-150%
	13C9-PFNA	92%		50-150%

U = Not detected      LOD = Limit of Detection      J = Indicates an estimated value  
 LOQ = Limit of Quantitation      DL = Detection Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> 20SA-FB-0605		<b>Date Sampled:</b> 06/05/20
<b>Lab Sample ID:</b> FA75759-4		<b>Date Received:</b> 06/10/20
<b>Matrix:</b> AQ - Field Blank Water		<b>Percent Solids:</b> n/a
<b>Method:</b> EPA 537M QSM5.3 B-15 EPA 537 MOD		
<b>Project:</b> 1202416		

**EPA 537.1 Method List**

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C6-PFDA	82%		50-150%
	13C7-PFUnDA	79%		50-150%
	13C2-PFD <sub>o</sub> DA	74%		50-150%
	13C2-PFTeDA	69%		50-150%
	13C3-PFBS	89%		50-150%
	13C3-PFHxS	87%		50-150%
	13C8-PFOS	82%		50-150%
	d3-MeFOSAA	88%		50-150%
	13C3-HFPO-DA	103%		50-150%

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U = Not detected      LOD = Limit of Detection      J = Indicates an estimated value  
 LOQ = Limit of Quantitation      DL = Detection Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound