



**Groundwater Sample Results,
Electronic Data Deliverable, Data Validation Report,
and the Sample Location Report, SDG 1800822**

*Naval Weapons Industrial Reserve Plant Bethpage
Bethpage, New York*

August 2019

5.48	8.74	NG_L	NG_L	BPS1-TT-MW309S-FRB-20180425	537_MOD 05/25/18	21:54	N	NA	000	335-67-1	PERFLUOROCTANOIC ACID (PFOA)	TRG	Yes	N	UU	Y	2.99	5.48	8.74
		NG_L	NG_L	BPS1-TT-MW309S-FRB-20180425	537_MOD 05/25/18	21:54	N	NA	000	375-92-8	PERFLUROHEPTANESULFONIC ACID (PFHPS)		TRG	Yes	N	UU	Y	2.99	
5.48	8.74	NG_L	NG_L	BPS1-TT-MW309S-FRB-20180425	537_MOD 05/25/18	21:54	N	NA	000	375-95-1	PERFLUORONONANOIC ACID (PFNA)	TRG	Yes	N	UU	Y	2.99	5.48	8.74
		NG_L	NG_L	BPS1-TT-MW309S-FRB-20180425	537_MOD 05/25/18	21:54	N	NA	000	754-91-6	PERFLUROOCTANE SULFONAMIDE (PFOSA)		TRG	Yes	N	UU	Y	2.99	
5.48	8.74	NG_L	NG_L	BPS1-TT-MW309S-FRB-20180425	537_MOD 05/25/18	21:54	N	NA	000	1763-23-1	PERFLUROOCTANESULFONIC ACID (PFOS)		TRG	Yes	N	UU	Y	2.99	5.48
		NG_L	NG_L	BPS1-TT-MW309S-FRB-20180425	537_MOD 05/25/18	21:54	N	NA	000	335-76-2	PERFLURODECANOIC ACID (PFDA)	TRG	Yes	N	UU	Y	2.99	5.48	8.74
		NG_L	NG_L	BPS1-TT-MW309S-FRB-20180425	537_MOD 05/25/18	21:54	N	NA	000	39108-34-4	8:2 FLUOROTELOMERSULFONIC ACID (8:2FTSA)		TRG	Yes	N	UU	Y	2.99	
5.48	8.74	NG_L	NG_L	BPS1-TT-MW309S-FRB-20180425	537_MOD 05/25/18	21:54	N	NA	000	2355-31-9	MEFOSAA	TRG	Yes	N	UU	Y	2.99	5.48	8.74
		NG_L	NG_L	BPS1-TT-MW309S-FRB-20180425	537_MOD 05/25/18	21:54	N	NA	000	291-50-6	ETFOSAA	TRG	Yes	N	UU	Y	2.99	5.48	8.74
		NG_L	NG_L	BPS1-TT-MW309S-FRB-20180425	537_MOD 05/25/18	21:54	N	NA	000	2058-94-8	PERFLUROUNDECANOIC ACID (PFUNA)		TRG	Yes	N	UU	Y	2.99	5.48
		NG_L	NG_L	BPS1-TT-MW309S-FRB-20180425	537_MOD 05/25/18	21:54	N	NA	000	335-77-3	PERFLURODECANESULFONIC ACID (PFDS)		TRG	Yes	N	UU	Y	2.99	5.48
		NG_L	NG_L	BPS1-TT-MW309S-FRB-20180425	537_MOD 05/25/18	21:54	N	NA	000	307-55-1	PERFLURORODECANOIC ACID (PFDOA)		TRG	Yes	N	UU	Y	2.99	5.48
		NG_L	NG_L	BPS1-TT-MW309S-FRB-20180425	537_MOD 05/25/18	21:54	N	NA	000	72629-94-8	PERFLUROROTRIDECANOIC ACID (PFTRDA)		TRG	Yes	N	UU	Y	2.99	5.48
		NG_L	NG_L	BPS1-TT-MW309S-FRB-20180425	537_MOD 05/25/18	21:54	N	NA	000	376-06-7	PERFLUROROTETRADECANOIC ACID (PFTTA)		TRG	Yes	N	UU	Y	2.99	5.48
		NG_L	NG_L	BPS1-TT-MW309S-FRB-20180425	537_MOD 05/25/18	21:54	N	NA	000	13C3-PFBA	13C3-PFBA	97.1	IS	Yes	Y	Y		PCT_REC	100
		NG_L	NG_L	BPS1-TT-MW309S-FRB-20180425	537_MOD 05/25/18	21:54	N	NA	000	13C3-PFPeA	13C3-PFPEA	92.5	IS	Yes	Y	Y		PCT_REC	
		NG_L	NG_L	BPS1-TT-MW309S-FRB-20180425	537_MOD 05/25/18	21:54	N	NA	000	13C3-PFBS	13C3-PFBS	106	IS	Yes	Y	Y		PCT_REC	100
		NG_L	NG_L	BPS1-TT-MW309S-FRB-20180425	537_MOD 05/25/18	21:54	N	NA	000	13C2-PFHxα	13C2-PFHXA	92.6	IS	Yes	Y	Y		PCT_REC	
		NG_L	NG_L	BPS1-TT-MW309S-FRB-20180425	537_MOD 05/25/18	21:54	N	NA	000	13C4-PFHpα	13C4-PFHPA	96.5	IS	Yes	Y	Y		PCT_REC	
		NG_L	NG_L	BPS1-TT-MW309S-FRB-20180425	537_MOD 05/25/18	21:54	N	NA	000	18O2-PFHxS	18O2-PFHXS	91.6	IS	Yes	Y	Y		PCT_REC	
		NG_L	NG_L	BPS1-TT-MW309S-FRB-20180425	537_MOD 05/25/18	21:54	N	NA	000	13C2-PFOA	13C2-PFOA	87.2	IS	Yes	Y	Y		PCT_REC	100
		NG_L	NG_L	BPS1-TT-MW309S-FRB-20180425	537_MOD 05/25/18	21:54	N	NA	000	13C5-PFNA	13C5-PFNA	75.8	IS	Yes	Y	Y		PCT_REC	100
		NG_L	NG_L	BPS1-TT-MW309S-FRB-20180425	537_MOD 05/25/18	21:54	N	NA	000	13C8-PFOA	13C8-PFOA	33.0	IS	Yes	Y	H	Y		PCT_REC
		NG_L	NG_L	BPS1-TT-MW309S-FRB-20180425	537_MOD 05/25/18	21:54	N	NA	000	STL01054	13C8-PFOS	90.1	IS	Yes	Y	Y		PCT_REC	100
		NG_L	NG_L	BPS1-TT-MW309S-FRB-20180425	537_MOD 05/25/18	21:54	N	NA	000	13C2-PFDA	13C2-PFDA	51.4	IS	Yes	Y	Y		PCT_REC	100
		NG_L	NG_L	BPS1-TT-MW309S-FRB-20180425	537_MOD 05/25/18	21:54	N	NA	000	d3-MeFOSAA	D3-MEFOSAA	54.4	IS	Yes	Y	Y		PCT_REC	
		NG_L	NG_L	BPS1-TT-MW309S-FRB-20180425	537_MOD 05/25/18	21:54	N	NA	000	d5-EtFOSAA	D5-ETFOSAA	60.3	IS	Yes	Y	Y		PCT_REC	
		NG_L	NG_L	BPS1-TT-MW309S-FRB-20180425	537_MOD 05/25/18	21:54	N	NA	000	13C2-PFUnα	13C2-PFUNA	46.1	IS	Yes	Y	H	Y		PCT_REC
		NG_L	NG_L	BPS1-TT-MW309S-FRB-20180425	537_MOD 05/25/18	21:54	N	NA	000	13C2-PFDoα	13C2-PFDOA	58.9	IS	Yes	Y	Y		PCT_REC	
		NG_L	NG_L	BPS1-TT-MW309S-FRB-20180425	537_MOD 05/25/18	21:54	N	NA	000	13C2-PFTeDA	13C2-PFTEDA	60.5	IS	Yes	Y	Y		PCT_REC	
		NG_L	NG_L	BP-TT-AOC22-MW10-FRB-20180424	537_MOD 05/25/18	22:06	N	NA	000	375-22-4	PERFLUROBUTANOIC ACID (PFBA)	TRG	Yes	N	UU	Y	2.88	5.25	8.40
		NG_L	NG_L	BP-TT-AOC22-MW10-FRB-20180424	537_MOD 05/25/18	22:06	N	NA	000	2706-90-3	PERFLUROPENTANOIC ACID (PFPA)	TRG	Yes	N	UU	Y	2.88	5.25	8.40
		NG_L	NG_L	BP-TT-AOC22-MW10-FRB-20180424	537_MOD 05/25/18	22:06	N	NA	000	375-73-5	PERFLUROBUTANESULFONIC ACID (PFBS)		TRG	Yes	N	UU	Y	2.88	
		NG_L	NG_L	BP-TT-AOC22-MW10-FRB-20180424	537_MOD 05/25/18	22:06	N	NA	000	307-24-4	PERFLUROHEXANOIC ACID (PFHXA)	TRG	Yes	N	UU	Y	2.88	5.25	8.40
		NG_L	NG_L	BP-TT-AOC22-MW10-FRB-20180424	537_MOD 05/25/18	22:06	N	NA	000	375-85-9	PERFLUROHEPTANOIC ACID (PFHPA)	TRG	Yes	N	UU	Y	2.88	5.25	8.40
		NG_L	NG_L	BP-TT-AOC22-MW10-FRB-20180424	537_MOD 05/25/18	22:06	N	NA	000	355-46-4	PERFLUROHEXANESULFONIC ACID (PFHXS)		TRG	Yes	N	UU	Y	2.88	
		NG_L	NG_L	BP-TT-AOC22-MW10-FRB-20180424	537_MOD 05/25/18	22:06	N	NA	000	27619-97-2	6:2 FLUOROTELOMERSULFONIC ACID (6:2FTSA)		TRG	Yes	N	UU	Y		
		NG_L	NG_L	BP-TT-AOC22-MW10-FRB-20180424	537_MOD 05/25/18	22:06	N	NA	000	335-67-1	PERFLUROOCTANOIC ACID (PFOA)	TRG	Yes	N	UU	Y	2.88	5.25	8.40
		NG_L	NG_L	BP-TT-AOC22-MW10-FRB-20180424	537_MOD 05/25/18	22:06	N	NA	000	375-92-8	PERFLUROHEPTANESULFONIC ACID (PFHPS)		TRG	Yes	N	UU	Y	2.88	
		NG_L	NG_L	BP-TT-AOC22-MW10-FRB-20180424	537_MOD 05/25/18	22:06	N	NA	000	375-95-1	PERFLURONONANOIC ACID (PFNA)	TRG	Yes	N	UU	Y	2.88	5.25	8.40
		NG_L	NG_L	BP-TT-AOC22-MW10-FRB-20180424	537_MOD 05/25/18	22:06	N	NA	000	754-91-6	PERFLUROOCTANE SULFONAMIDE (PFOSA)		TRG	Yes	N	UU	Y	2.88	
		NG_L	NG_L	BP-TT-AOC22-MW10-FRB-20180424	537_MOD 05/25/18	22:06	N	NA	000	1763-23-1	PERFLUROOCTANESULFONIC ACID (PFOS)		TRG	Yes	N	UU	Y	2.88	
		NG_L	NG_L	BP-TT-AOC22-MW10-FRB-20180424	537_MOD 05/25/18	22:06	N	NA	000	335-76-2	PERFLURODECANOIC ACID (PFDA)	TRG	Yes	N	UU	Y	2.88	5.25	8.40
		NG_L	NG_L	BP-TT-AOC22-MW10-FRB-20180424	537_MOD 05/25/18	22:06	N	NA	000	39108-34-4	8:2 FLUOROTELOMERSULFONIC ACID (8:2FTSA)		TRG	Yes	N	UU	Y		
		NG_L	NG_L	BP-TT-AOC22-MW10-FRB-20180424	537_MOD 05/25/18	22:06	N	NA	000	2355-31-9	MEFOSAA	TRG	Yes	N	UU	Y	2.88	5.25	8.40
		NG_L	NG_L	BP-TT-AOC22-MW10-FRB-20180424	537_MOD 05/25/18	22:06	N	NA	000	291-50-6	ETFOSAA	TRG	Yes	N	UU	Y	2.88	5.25	8.40
		NG_L	NG_L	BP-TT-AOC22-MW10-FRB-20180424	537_MOD 05/25/18	22:06	N	NA	000	2058-94-8	PERFLUROUNDECANOIC ACID (PFUNA)		TRG	Yes	N	UU	Y	2.88	5.25

B8E0038-BS1 537_MOD 40.0 41.0 103	05/25/18 17:21	N	NA 000 1763-23-1	PERFLUOROCTANESULFONIC ACID (PFOS)	41.0	SC	Yes	Y	Y	1.37 2.50 4.00	NG_L	NG_L			
B8E0038-BS1 537_MOD 70 130	05/25/18 17:21	N	NA 000 335-76-2	PERFLUORODECANOIC ACID (PFDA)	42.8	SC	Yes	Y	Y	1.37 2.50 4.00	NG_L	NG_L	40.0 42.8 107		
B8E0038-BS1 537_MOD 40.0 35.7 89.3	05/25/18 17:21	N	NA 000 39108-34-4	8:2 FLUOROTELOMERSULFONIC ACID (8:2FTSA)	35.7	SC	Yes	Y	Y	1.37 2.50 4.00	NG_L	NG_L			
B8E0038-BS1 537_MOD 70 130	05/25/18 17:21	N	NA 000 2355-31-9	MEFOSAA	41.7	SC	Yes	Y	Y	1.37 2.50 4.00	NG_L	NG_L	40.0 41.7 104		
B8E0038-BS1 537_MOD 130	05/25/18 17:21	N	NA 000 291-50-6	ETFOSAA	46.8	SC	Yes	Y	Y	1.37 2.50 4.00	NG_L	NG_L	40.0 46.8 117 70		
B8E0038-BS1 537_MOD 31.2 77.9	05/25/18 17:21	N	NA 000 2058-94-8	PERFLUOROUNDECANOIC ACID (PFUNA)	31.2	SC	Yes	Y	Y	1.37 2.50 4.00	NG_L	NG_L	40.0		
B8E0038-BS1 537_MOD 42.6 106	05/25/18 17:21	N	NA 000 335-77-3	PERFLUORODECANESULFONIC ACID (PFDS)	42.6	SC	Yes	Y	Y	1.37 2.50 4.00	NG_L	NG_L	40.0		
B8E0038-BS1 537_MOD 104	05/25/18 17:21	N	NA 000 307-55-1	PERFLUORODODECANOIC ACID (PFDOA)	41.8	SC	Yes	Y	Y	1.37 2.50 4.00	NG_L	NG_L	40.0 41.8		
B8E0038-BS1 537_MOD 40.0 40.1 100	05/25/18 17:21	N	NA 000 72629-94-8	PERFLUOROTRIDECANOIC ACID (PFRDA)	40.1	SC	Yes	Y	Y	1.37 2.50 4.00	NG_L	NG_L			
B8E0038-BS1 537_MOD 37.5 93.9	05/25/18 17:21	N	NA 000 376-06-7	PERFLUOROTETRADECANOIC ACID (PFTA)	37.5	SC	Yes	Y	Y	1.37 2.50 4.00	NG_L	NG_L	40.0		
B8E0038-BS1 537_MOD 50 150	05/25/18 17:21	N	NA 000 13C3-PFBA	13C3-PFBA	93.6	IS	Yes	Y	Y		PCT_REC		100 93.6 93.6		
B8E0038-BS1 537_MOD 50 150	05/25/18 17:21	N	NA 000 13C3-PFPeA	13C3-PFPEA	84.7	IS	Yes	Y	Y		PCT_REC		100 84.7 84.7		
B8E0038-BS1 537_MOD 50 150	05/25/18 17:21	N	NA 000 13C3-PFBS	13C3-PFBS	99.5	IS	Yes	Y	Y		PCT_REC		100 99.5 99.5		
B8E0038-BS1 537_MOD 50 150	05/25/18 17:21	N	NA 000 13C2-PFHxA	13C2-PFHXA	86.6	IS	Yes	Y	Y		PCT_REC		100 86.6 86.6		
B8E0038-BS1 537_MOD 50 150	05/25/18 17:21	N	NA 000 13C4-PFHpA	13C4-PFHPA	95.7	IS	Yes	Y	Y		PCT_REC		100 95.7 95.7		
B8E0038-BS1 537_MOD 50 150	05/25/18 17:21	N	NA 000 18O2-PFHxS	18O2-PFHXS	88.1	IS	Yes	Y	Y		PCT_REC		100 88.1 88.1		
B8E0038-BS1 537_MOD 50 150	05/25/18 17:21	N	NA 000 13C2-PFOA	13C2-PFOA	72.3	IS	Yes	Y	Y		PCT_REC		100 72.3 72.3		
B8E0038-BS1 537_MOD 50 150	05/25/18 17:21	N	NA 000 13C5-PFNA	13C5-PFNA	70.8	IS	Yes	Y	Y		PCT_REC		100 70.8 70.8		
B8E0038-BS1 537_MOD 50 150	05/25/18 17:21	N	NA 000 13C8-PFOA	13C8-PFOA	44.3	IS	Yes	Y	H	Y		PCT_REC	100 44.3 44.3		
B8E0038-BS1 537_MOD 50 150	05/25/18 17:21	N	NA 000 STL01054	13C8 PFOS	88.3	IS	Yes	Y	Y		PCT_REC		100 88.3 88.3		
B8E0038-BS1 537_MOD 50 150	05/25/18 17:21	N	NA 000 13C2-PFDA	13C2-PFDA	59.2	IS	Yes	Y	Y		PCT_REC		100 59.2 59.2		
B8E0038-BS1 537_MOD 50 150	05/25/18 17:21	N	NA 000 d3-MeFOSAA	D3-MEFOSAA	60.8	IS	Yes	Y	Y		PCT_REC		100 60.8 60.8		
B8E0038-BS1 537_MOD 50 150	05/25/18 17:21	N	NA 000 d5-EiFOSAA	D5-ETFOSAA	67.0	IS	Yes	Y	Y		PCT_REC		100 67.0 67.0		
B8E0038-BS1 537_MOD 50 150	05/25/18 17:21	N	NA 000 13C2-PFUnA	13C2-PFUNA	58.9	IS	Yes	Y	Y		PCT_REC		100 58.9 58.9		
B8E0038-BS1 537_MOD 50 150	05/25/18 17:21	N	NA 000 13C2-PFDoA	13C2-PFDOA	69.0	IS	Yes	Y	Y		PCT_REC		100 69.0 69.0		
B8E0038-BS1 537_MOD 50 150	05/25/18 17:21	N	NA 000 13C2-PFTeDA	13C2-PFTEDA	69.5	IS	Yes	Y	Y		PCT_REC		100 69.5 69.5		
#sys_sample_code lab_anl_method_name analysis_date analysis_time total_or_dissolved column_number test_type test_batch_type test_batch_id															
BPS1-TT-MW306D-FRB-20180426	537_MOD	05/25/18 21:43	N	NA 000 PREP	B8E0038										
BPS1-TT-MW306D-FRB-20180426	537_MOD	05/25/18 21:43	N	NA 000 ANALYSIS	S8E0066										
BPS1-TT-MW309S-FRB-20180425	537_MOD	05/25/18 21:54	N	NA 000 PREP	B8E0038										
BPS1-TT-MW309S-FRB-20180425	537_MOD	05/25/18 21:54	N	NA 000 ANALYSIS	S8E0066										
BP-TT-AOC22-MW10-FRB-20180424	537_MOD	05/25/18 22:06	N	NA 000 PREP	B8E0038										
BP-TT-AOC22-MW10-FRB-20180424	537_MOD	05/25/18 22:06	N	NA 000 ANALYSIS	S8E0066										
BP-TT-SW4004-FRB-20180427	537_MOD	05/25/18 22:17	N	NA 000 PREP	B8E0038										
BP-TT-SW4004-FRB-20180427	537_MOD	05/25/18 22:17	N	NA 000 ANALYSIS	S8E0066										
B8E0038-BLK1	537_MOD	05/25/18 17:55	N	NA 000 PREP	B8E0038										
B8E0038-BLK1	537_MOD	05/25/18 17:55	N	NA 000 ANALYSIS	S8E0066										
B8E0038-BS1 537_MOD	05/25/18 17:21	N	NA 000 PREP	B8E0038											
B8E0038-BS1 537_MOD	05/25/18 17:21	N	NA 000 ANALYSIS	S8E0066											
#sys_sample_code SAMPLE_TYPE_CODE SAMPLE_MATRIX_CODE SAMPLE_SOURCE PARENT_SAMPLE_CODE COMMENT SAMPLE_DATE SAMPLE_TIME SAMPLE_RECEIPT_DATE															
SAMPLE_DELIVERY_GROUP STANDARD_SOLUTION_SOURCE SAMPLE_RECEIPT_TIME															
BPS1-TT-MW306D-FRB-20180426	N	WG	Field	04/26/18 14:30	04/28/18 1800822	09:48									
BPS1-TT-MW309S-FRB-20180425	N	WG	Field	04/25/18 09:27	04/28/18 1800822	09:48									
BP-TT-AOC22-MW10-FRB-20180424	N	WG	Field	04/24/18 16:10	04/28/18 1800822	09:48									
BP-TT-SW4004-FRB-20180427	N	WG	Field	04/27/18 11:55	04/28/18 1800822	09:48									
B8E0038-BLK1	LB	WQ	Lab	05/07/18 09:05	1800822										
B8E0038-BS1 BS	WQ	Lab		05/07/18 09:05	1800822	18C1302									
#sys_sample_code lab_anl_method_name analysis_date analysis_time total_or_dissolved column_number test_type lab_matrix_code analysis_location basis container_id dilution_factor															
lab_prep_method_name prep_date prep_time leachate_method leachate_date leachate_time lab_name_code qc_level lab_sample_id percent_moisture subsample_amount subsample_amount_unit															
BPS1-TT-MW306D-FRB-20180426	537_MOD	05/25/18 21:43	N	NA 000 WG	LB	WET	A	1	METHOD	05/07/18 09:05		VISTA	quant	1800822-01	0.113
L	AMR	M	4	DEG	C	1000	uL								
BPS1-TT-MW309S-FRB-20180425	537_MOD	05/25/18 21:54	N	NA 000 WG	LB	WET	A	1	METHOD	05/07/18 09:05		VISTA	quant	1800822-02	0.114
L	AMR	M	4	DEG	C	1000	uL								
BP-TT-AOC22-MW10-FRB-20180424	537_MOD	05/25/18 22:06	N	NA 000 WG	LB	WET	A	1	METHOD	05/07/18 09:05		VISTA	quant	1800822-03	0.119
L	AMR	M	4	DEG	C	1000	uL								
BP-TT-SW4004-FRB-20180427	537_MOD	05/25/18 22:17	N	NA 000 WG	LB	WET	A	1	METHOD	05/07/18 09:05		VISTA	quant	1800822-04	0.102
L	AMR	M	4	DEG	C	1000	uL								
B8E0038-BLK1	537_MOD	05/25/18 17:55	N	NA 000 WQ	LB	WET		1	METHOD	05/07/18 09:05		VISTA	quant	B8E0038-BLK1	0.250
M	1000	uL													
B8E0038-BS1 537_MOD	05/25/18 17:21	N	NA 000 WQ	LB	WET		1	METHOD	05/07/18 09:05			VISTA	quant	B8E0038-BS1	0.250
M	1000	uL													



DATA VALIDATION REPORT

Project:	Naval Weapons Industrial Reserve Plant Bethpage
Laboratory:	Vista Analytical Laboratory
Sample Delivery Groups:	1800802, 1800803, 1800822, 1800824, 1800859, and 1800860
Analyses/Method:	Per- and Polyfluoroalkyl Substances (PFAS) via Modified U.S. EPA Method 537 compliant with Department of Defense Quality System's Manual Version 5.1 Table B-15
Validation Level:	Stage 4 Validation Electronic and Manual
Project Number:	0888812477.SA.DV

SUMMARY

This report summarizes data review findings for the PFAS groundwater sampling event (samples listed below) collected by Tetra Tech at Naval Weapons Industrial Reserve Plant (NWIRP) Bethpage Site between on 24 April and 1 May 2018 in accordance with the following Uniform Federal Policy (UFP) Sampling and Analysis Plan (SAP):

- *Sampling and Analysis Plan for Per- and Polyfluoroalkyl Substances Investigation, Facility Wide, Naval Weapons Industrial Reserve Plant, Bethpage, New York. (Tetra Tech February 2018).*

Sample Summary Per- and Polyfluoroalkyl Substances via Modified U.S. EPA Method 537				
Sample Delivery Group	Lab Identification	Sample Identification	Sample Date	Matrix/Sample Type
1800802	1800802-01	BP-TT-AOC22-MW10-20180424	4/24/2018	Groundwater
1800802	1800802-02	BP-HN-MW24S-20180424	4/24/2018	Groundwater
1800802	1800802-03	BPS1-TT-MW309S-20180425	4/25/2018	Groundwater
1800802	1800802-04	BPS1-TT-MW313S-20180425	4/25/2018	Groundwater
1800802	1800802-05	BPS1-TT-MW301S-20180425	4/25/2018	Groundwater
1800802	1800802-06	BP-DUP02-20180425	4/25/2018	Duplicate of BPS1-TT-MW309S-20180425
1800802	1800802-07	BP-EB01-20180425	4/25/2018	Equipment Blank
1800802	1800802-08	BPS1-TT-MW307I-20180426	4/26/2018	Groundwater
1800802	1800802-09	BPS1-TT-MW306S-20180426	4/26/2018	Groundwater
1800802	1800802-10	BPS1-TT-MW307D-20180426	4/26/2018	Groundwater
1800802	1800802-11	BPS1-TT-MW306I-20180426	4/26/2018	Groundwater
1800802	1800802-12	BPS1-TT-MW307S-20180426	4/26/2018	Groundwater
1800802	1800802-13	BPS1-TT-MW306D-20180426	4/26/2018	Groundwater
1800802	1800802-14	BPS1-TT-MW308I-20180426	4/26/2018	Groundwater
1800802	1800802-15	BPS1-TT-MW309I-20180426	4/26/2018	Groundwater
1800802	1800802-16	BPS1-DUP03-20180426	4/26/2018	Duplicate of BPS1-TT-MW307D-20180426
1800803	1800803-01	BPS1-TT-MW308S-20180426	4/26/2018	Groundwater
1800803	1800803-02	BPS1-TT-MW305D-20180427	4/27/2018	Groundwater
1800803	1800803-03	BPS1-TT-MW305S-20180427	4/27/2018	Groundwater

Sample Summary Per- and Polyfluoroalkyl Substances via Modified U.S. EPA Method 537				
Sample Delivery Group	Lab Identification	Sample Identification	Sample Date	Matrix/Sample Type
1800803	1800803-04	BP-HN-MW24IR-20180427	4/27/2018	Groundwater
1800803	1800803-05	BPS1-TT-MW305I-20180427	4/27/2018	Groundwater
1800803	1800803-06	BP-MH-SW4001-SOUTH-20180427	4/27/2018	Surface water
1800803	1800803-07	BP-TT-SW4002-20180427	4/27/2018	Surface water
1800803	1800803-08	BP-TT-SW4004-20180427	4/27/2018	Surface water
1800822	1800822-01	BPS1-TT-MW306D-FRB-20180426	4/26/2018	Groundwater
1800822	1800822-02	BPS1-TT-MW309S-FRB-20180425	4/25/2018	Groundwater
1800822	1800822-03	BP-TT-AOC22-MW10-FRB-20180424	4/24/2018	Groundwater
1800822	1800822-04	BP-TT-SW4004-FRB-20180427	4/27/2018	Surface water
1800824	1800824-01	BPS1-TT-MW309D-20180429	4/29/2018	Groundwater
1800824	1800824-02	BPS1-TT-MW301D-20180429	4/29/2018	Groundwater
1800824	1800824-03	BP-EB02-20180429	4/29/2018	Equipment Blank
1800824	1800824-04	BPS1-TT-MW311S-20180429	4/29/2018	Groundwater
1800824	1800824-05	BPS1-TT-MW312S-20180429	4/29/2018	Groundwater
1800824	1800824-06	BP-DUP05-20180429	4/29/2018	Duplicate of BPS1-TT-MW311S-20180429
1800824	1800824-07	BPS1-TT-MW310S-20180430	4/30/2018	Groundwater
1800824	1800824-08	BPS1-TT-MW301I-20180430	4/30/2018	Groundwater
1800824	1800824-09	BPS1-TT-MW314S-20180430	4/30/2018	Groundwater
1800824	1800824-10	BPS1-TT-MW314I-20180430	4/30/2018	Groundwater
1800824	1800824-11	BP-EB03-20180430	4/30/2018	Equipment Blank
1800824	1800824-12	BPS1-TT-MW308D-20180430	4/30/2018	Groundwater
1800859	1800859-01	BP-MH-SW4001-SOUTH-20180501	5/1/2018	Surface water
1800859	1800859-02	BP-TT-SW4002-20180501	5/1/2018	Surface water
1800859	1800859-03	BP-DUP06-20180501	5/1/2018	Duplicate of BP-MH-SW4001-SOUTH-20180501
1800859	1800859-04	BP-EB04-20180501	5/1/2018	Equipment Blank
1800860	1800860-01	BP-MH-SW4001-SOUTH-FRB-20180501	5/1/2018	Surface water

Data validation activities were conducted using the measurement performance criteria identified in the project UFP SAP and the following guidance documents: *General Data Validation Guidelines* (DoD 2018), *National Functional Guidelines for Superfund Organic Methods Data Review* (U.S. EPA January 2017), *Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use* (U.S. EPA January 2009), *Department of Defense (DoD) Quality Systems Manual for Environmental Laboratories*, Version 5.1 (DoD February 2017). In the absence of method-specific information, laboratory quality control (QC) limits, project-specific requirements, and/or professional judgment were used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following parameters:

✓	Data completeness (chain-of-custody)/sample integrity
✓	Holding times and sample preservation
✓	Gas chromatography/mass spectrometer performance checks
✓	Ion transitions
✓	Initial calibration/initial calibration verification/continuing calibration verification
✓	Instrument sensitivity check
✓	Laboratory blanks/equipment blanks
X	Extracted and injection internal standard analytes recoveries
X	Matrix spike and/or matrix spike duplicate result
✓	Laboratory control sample /laboratory control sample duplicate result
✓	Field duplicate
✓	Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. Acceptable data parameters for which all criteria were met, no qualification was performed, and/or non-conformance or other issues that were noted during validation, but did not result in qualification of data are not discussed further. The symbol (X) indicates that a QC non-conformance resulted in the qualification of data. Any QC non-conformance that resulted in the qualification of data is discussed below.

RESULTS

Extracted and Injection Internal Standard Analytes Recoveries

Internal standards are pure chemicals, structurally similar to the method analytes, which are added to each sample prior to extraction (extracted internal standard) or just prior to analysis (injection internal standard). The internal standard percent recoveries (%Rs) are used to measure the relative response of PFAS and extraction effectiveness. Extracted and injection internal standard %R non-conformances are summarized in Attachment A in Tables A-1 and A-2; respectively.

Data qualification on the basis of internal standard was as follows:

Internal Standard Non-Conformance Chart:

Criteria	Action		
	Detected	Non-Detected	Reason Code
$50\% \leq \%R \leq 150\%$	No qualification	No qualification	None
$\%R \geq 150\%$	J-	UJ	I10
$20\% \leq \%R \leq 50\%$	J+	No qualification	I9
$\%R \leq 20\%$	J+	X	I9

Notes:

ICAL = Initial calibration
 %R = Percent recovery
 UJ = Undetected and estimated
 I9 = Internal standard infraction, high bias
 X = Serious deficiency project team to decide data use

CCV = Continuing calibration verification
 J+ = Positive value estimated, high bias
 J- = Undetected value estimated, low bias
 I10 = Internal standard infraction, low bias

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results

MS/MSDs are generated to provide information about the effect of each sample matrix on the sample preparation and the measurement methodology. MS/MSD %Rs assess the effect of the sample matrix on the accuracy of the analytical results and %Rs above the control limit could indicate a potential high result bias while %Rs below QC limits could indicate a potential low result bias. The relative percent differences (RPDs) between the MS and MSD results are evaluated to assess sample precision. The MS/MSD %Rs and RPDs were reviewed for conformance with the QC acceptance criteria. Non-conformances are summarized in Attachment A in Table A-3. Data qualification to the analytes associated with the specific MS/MSD non-conformances were as follows:

MS/MSD Non-conformances Chart:

Criteria	Action		
	Detected	Non-detected	Reason Code
$\%R \geq 130\%$	J+	No qualification	M2
$\geq 70\% \%R \leq 130\%$	No qualification	No qualification	None
$20\% \leq \%R \leq 70$	J-	UJ	M3
$\%R \leq 20\%$	J-	X	M3
$RPD \leq 30\%$	No qualification	No qualification	None
$RPD \geq 30\%$	J	UJ	M4

Notes:

%R = Percent recovery
 J+ = Positive value estimated, biased high
 J- = Undetected value estimated, low bias
 M2 = Percent recovery infraction, high bias
 M4 = Duplicate precision infraction

RPD = Relative percent difference
 UJ = Undetected and estimated
 X = Serious deficiency project team to decide data use
 M3 = Percent recovery infraction, low bias
 X = Serious deficiency; project team to decide data use

Qualification Actions

The data were reviewed independently from the laboratory to assess data quality. All analytes detected at concentrations less than the limit of quantitation but greater than the method detection limit were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation. Any sample that was analyzed at a dilution because of high concentrations of target or non-target analytes was checked to confirm that the results and/or sample-specific limit of quantitation and limit of detections were adjusted accordingly by the laboratory.

No results were rejected; therefore, analytical completeness was calculated to be 100 percent. Data not qualified during data review are considered usable by the project. The remaining results qualified as estimated may be high or low, but the data are usable for their intended purpose, according to U.S. EPA and Department of Defense guidelines. Attachment B provides a summary of all qualified results during this data review.

ATTACHMENTS

Attachment A: Non-Conformance Summary Tables

Attachment B: Qualified Results Summary after Data Review

Attachment A
Non-Conformance Summary Tables

Table A-1 Extracted Internal Standard Recovery Non-Conformance							
SDG	Lab ID	Sample ID	Isotope	Associated Analyte	%R	Limits	Flags
1800824	1800824-10	BPS1-TT-MW314I-20180430	13C3-PFBS	Perfluorobutanesulfonic acid (PFBS)	153	50-150	J-
1800824	1800824-12	BPS1-TT-MW308D-20180430	13C3-PFBS	Perfluorobutanesulfonic acid (PFBS)	161	50-150	J-

Notes:

Results that are undetected with potential high bias were not qualified and are not summarized.

SDG = Sample delivery group

ID = Identification

%R = Percent recovery

J- = Result was qualified estimated and may be biased low.

Table A-2 Injected Internal Standard Recovery Non-Conformance							
SDG	Lab ID	Sample ID	Isotope	Associated Analyte	%R	Limits	Flags
1800802	1800802-05	PS1-TT-MW301S-20180425	13C8-PFOA	Perfluorooctanoic acid (PFOA)	49.9	50-150	J+
1800803	1800803-05	BPS1-TT-MW305I-20180427	13C9-PFNA	Perfluorononanoic acid (PFNA)	38.9	50-150	J+
1800803	1800803-05	BPS1-TT-MW305I-20180427	13C8-PFOA	Perfluorooctanoic acid (PFOA)	47.3	50-150	J+
1800803	1800803-06	BP-MH-SW400I-South-20180427	13C6-PFDA	Perfluorodecanoic acid (PFDA)	39.9	50-150	J+
1800803	1800803-06	BP-MH-SW400I-South-20180427	13C9-PFNA	Perfluorononanoic acid (PFNA)	45.1	50-150	J+
1800803	1800803-06	BP-MH-SW400I-South-20180427	13C8-PFOA	Perfluorooctanoic acid (PFOA)	44.2	50-150	J+
1800803	1800803-07	BP-TT-SW4002-20180427	13C8-PFOA	Perfluorooctanoic acid (PFOA)	47.8	50-150	J+
1800824	1800824-05	BPS1-TT-MW312S-20180429	13C4-PFBA	Perfluorobutanoic Acid (PFBA)	48.2	50-150	J+
1800824	1800824-05	BPS1-TT-MW312S-20180429	13C5-PFHxA	Perfluorohexanoic acid (PFHXA)	49	50-150	J+
1800824	1800824-05	BPS1-TT-MW312S-20180429	13C8-PFOA	Perfluorooctanoic acid (PFOA)	47.8	50-150	J+
1800824	1800824-06	BP-DUP05-20180429	3C8-PFOA	Perfluorooctanoic acid (PFOA)	49.3	50-150	J+
1800824	1800824-07	BPS1-TT-MW310S-20180430	13C4-PFBA	Perfluorobutanoic Acid (PFBA)	49	50-150	J+
1800824	1800824-07	BPS1-TT-MW310S-20180430	13C5-PFHxA	Perfluorohexanoic acid (PFHXA)	47.7	50-150	J+
1800824	1800824-07	BPS1-TT-MW310S-20180430	13C9-PFNA	Perfluorononanoic acid (PFNA)	49.9	50-150	J+
1800824	1800824-07	BPS1-TT-MW310S-20180430	13C8-PFOA	Perfluorooctanoic acid (PFOA)	45	50-150	J+
1800824	1800824-08	BPS1-TT-MW301I-20180430	13C4-PFBA	Perfluorobutanoic Acid (PFBA)	45	50-150	J+
1800824	1800824-08	BPS1-TT-MW301I-20180430	13C6-PFDA	Perfluorodecanoic acid (PFDA)	44.1	50-150	J+
1800824	1800824-08	BPS1-TT-MW301I-20180430	13C5-PFHxA	Perfluorohexanoic acid (PFHXA)	47.7	50-150	J+
1800824	1800824-08	BPS1-TT-MW301I-20180430	13C9-PFNA	Perfluorononanoic acid (PFNA)	42.9	50-150	J+
1800824	1800824-08	BPS1-TT-MW301I-20180430	13C8-PFOA	Perfluorooctanoic acid (PFOA)	46.4	50-150	J+
1800824	1800824-09	BPS1-TT-MW314S-20180430	13C4-PFBA	Perfluorobutanoic Acid (PFBA)	49.8	50-150	J+

**Table A-2
Injected Internal Standard Recovery Non-Conformance**

SDG	Lab ID	Sample ID	Isotope	Associated Analyte	%R	Limits	Flags
1800824	1800824-09	BPS1-TT-MW314S-20180430	13C5-PFHxA	Perfluorohexanoic acid (PFHXA)	48.9	50-150	J+
1800824	1800824-10	BPS1-TT-MW314I-20180430	13C4-PFBA	Perfluorobutanoic Acid (PFBA)	35.4	50-150	J+
1800824	1800824-10	BPS1-TT-MW314I-20180430	13C6-PFDA	Perfluorodecanoic acid (PFDA)	37	50-150	J+
1800824	1800824-10	BPS1-TT-MW314I-20180430	13C5-PFHxA	Perfluorohexanoic acid (PFHXA)	39.8	50-150	J+
1800824	1800824-10	BPS1-TT-MW314I-20180430	13C9-PFNA	Perfluorononanoic acid (PFNA)	44.2	50-150	J+
1800824	1800824-10	BPS1-TT-MW314I-20180430	13C8-PFOA	Perfluorooctanoic acid (PFOA)	38.7	50-150	J+
1800824	1800824-10	BPS1-TT-MW314I-20180430	13C7-PFUdA	Perfluoroundecanoic acid (PFUNA)	35	50-150	J+
1800824	1800824-12	BPS1-TT-MW308D-20180430	13C4-PFBA	Perfluorobutanoic Acid (PFBA)	19.9	50-150	J+
1800824	1800824-12	BPS1-TT-MW308D-20180430	13C6-PFDA	Perfluorodecanoic acid (PFDA)	38.9	50-150	J+
1800824	1800824-12	BPS1-TT-MW308D-20180430	13C9-PFNA	Perfluorononanoic acid (PFNA)	42.7	50-150	J+
1800824	1800824-12	BPS1-TT-MW308D-20180430	13C8-PFOA	Perfluorooctanoic acid (PFOA)	41.6	50-150	J+

Notes:

Results that are undetected with potential high bias were not qualified and are not summarized.

- SDG = Sample delivery group
- ID = Identification
- %R = Percent recovery
- J+ = Result was qualified estimated and may be biased high.

**Table A-3
Matrix Spike/Matrix Spike Duplicate Non-Conformance**

SDG	Lab ID	Spiked Sample	Analyte	MS %R	MSD %R	%R Limits	RPD	RPD Limits	Flags
1800802	1800802-02	BP-HN-MW24S-20180424	Perfluorooctanoic acid (PFOA)	74.8	115	70-130	42.4*	<30	J
1800824	1800824-05	BPS1-TT-MW312S-20180429	Perfluorooctane sulfonic acid (PFOS)	119	131*	70-130	9.6	<30	J+
1800824	1800824-05	BPS1-TT-MW312S-20180429	Perfluorohexanoic acid (PFHXA)	110	139*	70-130	23.3	<30	J+
1800824	1800824-05	BPS1-TT-MW312S-20180429	Perfluorodecanoic acid (PFDA)	87.8	120	70-130	31*	<30	J

Notes:

Results that are undetected with potential high bias were not qualified and are not summarized.

- SDG = Sample delivery group
- ID = Identification
- %R = Percent recovery
- RPD = Relative percent difference
- * = Outside control limits
- J+ = Result was qualified estimated and may be biased high.
- J = Result was qualified as estimated due to potential poor precision.

Attachment B
Qualified Results Summary after Data Review

**Table B-1
Qualified Results Summary after Data Review**

SDG	Lab ID	Sample ID	Sample Date	CAS No	Analyte	Result (ng/L)	Lab Qualifier	Final Qualifier	Reason Code
1800802	1800802-02	BP-HN-MW24S-20180424	4/24/2018	335-67-1	Perfluorooctanoic acid (PFOA)	96.2		J	M4
1800802	1800802-05	BPS1-TT-MW301S-20180425	4/25/2018	335-67-1	Perfluorooctanoic acid (PFOA)	4.73		J+	I9
1800803	1800803-05	BPS1-TT-MW305I-20180427	4/27/2018	375-95-1	Perfluorononanoic acid (PFNA)	1.84	J	J+	I9
1800803	1800803-05	BPS1-TT-MW305I-20180427	4/27/2018	335-67-1	Perfluorooctanoic acid (PFOA)	16.2		J+	I9
1800803	1800803-06	BP-MH-SW4001-SOUTH-20180427	4/27/2018	335-76-2	Perfluorodecanoic acid (PFDA)	1.56	J	J+	I9
1800803	1800803-06	BP-MH-SW4001-SOUTH-20180427	4/27/2018	375-95-1	Perfluorononanoic acid (PFNA)	9.66		J+	I9
1800803	1800803-06	BP-MH-SW4001-SOUTH-20180427	4/27/2018	335-67-1	Perfluorooctanoic acid (PFOA)	20.7		J+	I9
1800803	1800803-07	BP-TT-SW4002-20180427	4/27/2018	335-67-1	Perfluorooctanoic acid (PFOA)	4.21		J+	I9
1800824	1800824-05	BPS1-TT-MW312S-20180429	4/29/2018	375-22-4	Perfluorobutanoic acid (PFBA)	14.5		J+	I9
1800824	1800824-05	BPS1-TT-MW312S-20180429	4/29/2018	335-76-2	Perfluorodecanoic acid (PFDA)	2.45	U	UJ	M4
1800824	1800824-05	BPS1-TT-MW312S-20180429	4/29/2018	307-24-4	Perfluorohexanoic acid (PFHXA)	21		J+	M2,I9
1800824	1800824-05	BPS1-TT-MW312S-20180429	4/29/2018	1763-23-1	Perfluorooctane sulfonic acid (PFOS)	3.72	J	J+	M2
1800824	1800824-05	BPS1-TT-MW312S-20180429	4/29/2018	335-67-1	Perfluorooctanoic acid (PFOA)	26		J+	I9
1800824	1800824-06	BP-DUP05-20180429	4/29/2018	335-67-1	Perfluorooctanoic acid (PFOA)	11.6		J+	I9
1800824	1800824-07	BPS1-TT-MW310S-20180430	4/30/2018	375-22-4	Perfluorobutanoic acid (PFBA)	10.8		J+	I9
1800824	1800824-07	BPS1-TT-MW310S-20180430	4/30/2018	307-24-4	Perfluorohexanoic acid (PFHXA)	10.8		J+	I9
1800824	1800824-07	BPS1-TT-MW310S-20180430	4/30/2018	375-95-1	Perfluorononanoic acid (PFNA)	6.84		J+	I9
1800824	1800824-07	BPS1-TT-MW310S-20180430	4/30/2018	335-67-1	Perfluorooctanoic acid (PFOA)	30.1		J+	I9
1800824	1800824-08	BPS1-TT-MW301I-20180430	4/30/2018	375-22-4	Perfluorobutanoic acid (PFBA)	4.48		J+	I9
1800824	1800824-08	BPS1-TT-MW301I-20180430	4/30/2018	335-76-2	Perfluorodecanoic acid (PFDA)	1.56	J	J+	I9
1800824	1800824-08	BPS1-TT-MW301I-20180430	4/30/2018	307-24-4	Perfluorohexanoic acid (PFHXA)	7.94		J+	I9
1800824	1800824-08	BPS1-TT-MW301I-20180430	4/30/2018	375-95-1	Perfluorononanoic acid (PFNA)	2.5	J	J+	I9
1800824	1800824-08	BPS1-TT-MW301I-20180430	4/30/2018	335-67-1	Perfluorooctanoic acid (PFOA)	6.31		J+	I9
1800824	1800824-09	BPS1-TT-MW314S-20180430	4/30/2018	375-22-4	Perfluorobutanoic acid (PFBA)	7.6		J+	I9
1800824	1800824-09	BPS1-TT-MW314S-20180430	4/30/2018	307-24-4	Perfluorohexanoic acid (PFHXA)	16.3		J+	I9
1800824	1800824-10	BPS1-TT-MW314I-20180430	4/30/2018	375-73-5	Perfluorobutanesulfonic acid (PFBS)	1.63	J	J-	I10
1800824	1800824-10	BPS1-TT-MW314I-20180430	4/30/2018	375-22-4	Perfluorobutanoic acid (PFBA)	16.7		J+	I9
1800824	1800824-10	BPS1-TT-MW314I-20180430	4/30/2018	335-76-2	Perfluorodecanoic acid (PFDA)	2.81	J	J+	I9
1800824	1800824-10	BPS1-TT-MW314I-20180430	4/30/2018	307-24-4	Perfluorohexanoic acid (PFHXA)	35		J+	I9
1800824	1800824-10	BPS1-TT-MW314I-20180430	4/30/2018	375-95-1	Perfluorononanoic acid (PFNA)	10		J+	I9
1800824	1800824-10	BPS1-TT-MW314I-20180430	4/30/2018	335-67-1	Perfluorooctanoic acid (PFOA)	16.8		J+	I9
1800824	1800824-10	BPS1-TT-MW314I-20180430	4/30/2018	2058-94-8	Perfluoroundecanoic acid (PFUNA)	2.14	J	J+	I9
1800824	1800824-12	BPS1-TT-MW308D-20180430	4/30/2018	375-73-5	Perfluorobutanesulfonic acid (PFBS)	2.42	U	UJ	I10
1800824	1800824-12	BPS1-TT-MW308D-20180430	4/30/2018	375-22-4	Perfluorobutanoic acid (PFBA)	21.3		J+	I9
1800824	1800824-12	BPS1-TT-MW308D-20180430	4/30/2018	335-76-2	Perfluorodecanoic acid (PFDA)	3.91		J+	I9

**Table B-1
Qualified Results Summary after Data Review**

SDG	Lab ID	Sample ID	Sample Date	CAS No	Analyte	Result (ng/L)	Lab Qualifier	Final Qualifier	Reason Code
1800824	1800824-12	BPS1-TT-MW308D-20180430	4/30/2018	375-95-1	Perfluorononanoic acid (PFNA)	4.34		J+	I9
1800824	1800824-12	BPS1-TT-MW308D-20180430	4/30/2018	335-67-1	Perfluorooctanoic acid (PFOA)	16.1		J+	I9

Notes:

SDG = Sample delivery group

ID = Identification

CAS No. = Chemical Abstracts Services number

ng/L = Nanograms liter

U = **Undetected** — The analyte was analyzed but undetected at the listed limit of detection.

UJ = Undetected and estimated

J = **Estimated Value** — One or more quality control parameters were outside control limits or the analyte concentration was less than the limit of quantitation.

J+ = Positive value estimated with potential high bias

J- = Undetected value estimated with potential low bias

Qualification Reason Codes:

I9 = Internal standard infraction with potential high bias

I10 = Internal standard infraction with potential low bias

M2 = Percent recovery infraction with potential high bias

M4 = Duplicate precision infraction

DODCMD_ID	INSTALLATION_ID	SDG	SITE_NAME	NORM_SITE_NAME	LOCATION_NAME	LOCATION_TYPE_DESC	COORD_X	COORD_Y	CONTRACT_ID	DO_CTO_NUMBER	CONTR_NAME	SAMPLE_NAME	SAMPLE_MATRIX_DESC	SAMPLE_TYPE_DESC	COLLECT_DATE	ANALYTICAL_METHOD
MID_ATLANTIC	BETHPAGE_NWIRP	1800822							N6247016D9008	WE09	TETRA TECH NUS, INC.	BP-TT-AQC22-MW10-FRB-20180424	Water for QC samples	Field Reagent Blank	24-Apr-18	537_MOD
MID_ATLANTIC	BETHPAGE_NWIRP	1800822							N6247016D9008	WE09	TETRA TECH NUS, INC.	BP-TT-SW4004-FRB-20180427	Water for QC samples	Field Reagent Blank	27-Apr-18	537_MOD
MID_ATLANTIC	BETHPAGE_NWIRP	1800822							N6247016D9008	WE09	TETRA TECH NUS, INC.	BPS1-TT-MW3060-FRB-20180426	Water for QC samples	Field Reagent Blank	26-Apr-18	537_MOD
MID_ATLANTIC	BETHPAGE_NWIRP	1800822							N6247016D9008	WE09	TETRA TECH NUS, INC.	BPS1-TT-MW3095-FRB-20180425	Water for QC samples	Field Reagent Blank	25-Apr-18	537_MOD

ANALYTICAL_METHOD_GRP_DESC
Perfluoroalkyl Compounds
Perfluoroalkyl Compounds
Perfluoroalkyl Compounds
Perfluoroalkyl Compounds