

Brunswick County Public Utilities - NC

PO Box 249
Bolivia, NC 28422-0249

LELAND, N.C

Client Project# NORTHWEST WATER PLANT
Samples Received: 3/22/2024

Analytical Report 0324-860

PFAS by Isotope Dilution (non-potable water)

Custom List

Report Issue Date: 4/19/2024

I certify that to the best of my knowledge all analytical data presented in this report have been checked for completeness, accuracy, errors and legibility in addition to having been conducted in accordance with approved protocol, and that all deviations and analytical problems are summarized in the appropriate narrative(s). This analytical report was prepared in Portable Document Format (.PDF) and contains 25 pages. This report shall not be reproduced except in full without approval of the laboratory. This will provide assurance that parts of the report are not taken out of context.

Amendment(s):

Signature:



Laura Boivin, QA Associate II



Enthalpy Analytical, LLC – Ultratrace
Christina Kurnath, Project Manager
chkurnath@montrose-env.com / www.enthalpy.com
O: 910-876-6895
2714 Exchange Drive, Wilmington, NC 28405

Summary of Results



Enthalpy Analytical

Job No.: 0324-860-1 PFAS by Isotope Dilution (non-potable water)

Brunswick County Public Utilities - NC NORTHWEST WATER PLANT LELAND, N.C

Summary

	Compound	CAS	032224-SO1 ng/L	032224-EO1 ng/L
Acids	PFPaA	422-64-0	ND U	ND U
	PFBA	375-22-4	ND U	ND U
	PFPeA	2706-90-3	3.84	3.88
	PFHxA	307-24-4	4.88	4.90
	PFHpA	375-85-9	2.15	1.87
	PFOA	335-67-1	4.21	4.29
	PFNA	375-95-1	ND U	0.472 J
	PFDA	335-76-2	0.218 J	0.0839 L
	PFUnDA	2058-94-8	ND U	ND U
	PFDoDA	307-55-1	ND U	ND U
	PFTTrDA	72629-94-8	ND U	ND U
	PFTeDA	376-06-7	ND U	ND U
	PFHxDA	67905-19-5	ND U	ND U
	Sulfonates	PFBS	375-73-5	3.21
PFPeS		2706-91-4	0.490 J	0.523
PFHxS		355-46-4	2.61	2.13
PFHpS		375-92-8	0.0426 L	0.0126 L
PFOS		1763-23-1	8.75	8.09
PFNS		68259-12-1	ND U	ND U
PFDS		335-77-3	ND U	ND U
4:2 FTS		757124-72-4	ND U	ND U
6:2 FTS		27619-97-2	ND U	ND U
8:2 FTS		39108-34-4	ND U	ND U
10:2 FTS		120226-60-0	ND U	ND U
Sulfonamidos	FBSA	30334-69-1	0.257 L	0.195 L
	N-EtFOSA	4151-50-2	ND U	ND U
	N-EtFOSAA	2991-50-6	ND U	ND U
	N-EtFOSE	1691-99-2	ND U	ND U
	N-MeFOSA	31506-32-8	ND U	ND U
	N-MeFOSAA	2355-31-9	ND U	ND U
	N-MeFOSE	24448-09-7	ND U	ND U
	PFOSA	754-91-6	0.0546 L	0.0101 L
PFECAs	ADONA	919005-14-4	ND U	ND U
	EVE Acid	69087-46-3	ND U	ND U
	HFPO-DA	13252-13-6	ND U	2.03
	Hydro-EVE Acid	773804-62-9	ND U	ND U
	NFDHA	151772-58-6	ND U	ND U
	PEPA	267239-61-2	ND U	0.545
	PFECA-G	801212-59-9	ND U	ND U
	PFMOAA	674-13-5	8.75	6.34
	PFMOBA	863090-89-5	ND U	ND U
	PFMOPrA	377-73-1	ND U	ND U
	PFO2HxA	39492-88-1	ND U	ND U
	PFO3OA	39492-89-2	ND U	ND U
	PFO4DA	39492-90-5	ND U	ND U
	PFO5DA	39492-91-6	ND U	ND U
	PMPA	13140-29-9	3.13	3.55
	R-EVE	2416366-22-6	53.1	12.4
	PFESAs	11Cl-PF3OUdS	763051-92-9	ND U
9Cl-PF3ONS		756426-58-1	ND U	ND U
Hydrolyzed PSDA		2416366-19-1	9.45	1.88
Nafion Byproduct 1 (PS Acid)		29311-67-9	ND U	ND U
Nafion Byproduct 2 (Hydro-PS Acid)		749836-20-2	0.0499 L	0.0987 L
NVHOS		1132933-86-8	ND U	ND U
PFEESA		113507-82-7	ND U	ND U
R-PSDA		2416366-18-0	46.0	10.9
R-PSDCA	241636-21-5	ND U	ND U	

Detailed Results

Enthalpy Analytical

Job No.: 0324-860-1 PFAS by Isotope Dilution (non-potable water)

Brunswick County Public Utilities - NC NORTHWEST WATER PLANT LELAND, N.C

Enthalpy ID	0324-860-001-1	Prep Batch	EU17134	Sample Vol (mL)	289.04
Sample Name	032224-SO1	Prep Date	2024-03-25 13:35	Extract Vol (mL)	0.4
Matrix	aqueous	Analysis Date	2024-03-26 20:48	Split Factor	N/A
Sampling Date	2024-03-22 13:00	Analyst	bmay	Method Code	EU-047-NPW
Received Date	2024-03-22	Instrument	Sauron	Sample Type	Sample
		Bottle ID	A		

	Compound	CAS	InjFileName	Formatted Result ng/L	LOD ng/L	LOQ ng/L	Recovery Limits	Recovery	Flags
Acids	PFPrA	422-64-0	F280324038	ND	0.484	1.06			U
	PFBA	375-22-4	S260324017	ND	0.220	0.554			U
	PFPeA	2706-90-3	S260324017	3.84	0.158	0.554			
	PFHxA	307-24-4	S260324017	4.88	0.185	0.554			
	PFHpA	375-85-9	S260324017	2.15	0.194	0.554			
	PFOA	335-67-1	S260324017	4.21	0.127	0.554			
	PFNA	375-95-1	S260324017	ND	0.125	0.554			U
	PFDA	335-76-2	S260324017	0.218	0.158	0.554			J
	PFUnDA	2058-94-8	S260324017	ND	0.125	0.554			U
	PFDODA	307-55-1	S260324017	ND	0.225	0.554			U
	PFTTrDA	72629-94-8	S260324017	ND	0.183	0.554			U
	PFTeDA	376-06-7	S260324017	ND	0.211	0.554			U
	PFHxDA	67905-19-5	S270324012	ND	0.294	0.554			U
	Sulfonates	PFBS	375-73-5	S260324017	3.21	0.294	0.554		
PFPeS		2706-91-4	S260324017	0.490	0.114	0.522			J
PFHxS		355-46-4	S260324017	2.61	0.427	0.507			
PFHpS		375-92-8	S260324017	0.0426	0.268	0.527			L
PFOS		1763-23-1	S260324017	8.75	0.292	0.513			
PFNS		68259-12-1	S260324017	ND	0.172	0.533			U
PFDS		335-77-3	S260324017	ND	0.291	0.533			U
4:2 FTS		757124-72-4	S260324017	ND	0.0718	0.519			U
6:2 FTS		27619-97-2	S260324017	ND	0.261	0.527			U
8:2 FTS		39108-34-4	S260324017	ND	0.124	0.530			U
10:2 FTS		120226-60-0	S260324017	ND	0.424	0.554			U
Sulfonamidos		FBSA	30334-69-1	S260324017	0.257	0.263	0.554		
	N-EtFOSA	4151-50-2	S260324017	ND	0.343	0.554			U
	N-EtFOSAA	2991-50-6	S260324017	ND	0.225	0.554			U
	N-EtFOSE	1691-99-2	S260324017	ND	0.848	2.49			U
	N-MeFOSA	31506-32-8	S260324017	ND	0.228	0.554			U
	N-MeFOSAA	2355-31-9	S260324017	ND	0.156	0.554			U
	N-MeFOSE	24448-09-7	S260324017	ND	0.526	2.49			U
	PFOSA	754-91-6	S260324017	0.0546	0.0777	0.554			L
PFECAs	ADONA	919005-14-4	S260324017	ND	0.150	0.524			U
	EVE Acid	69087-46-3	S260324017	ND	0.176	1.25			U
	HFPO-DA	13252-13-6	S260324017	ND	0.0586	0.554			U
	Hydro-EVE Acid	773804-62-9	S260324017	ND	0.182	0.554			U
	NFDHA	151772-58-6	S260324017	ND	0.116	0.554			U
	PEPA	267239-61-2	S260324017	ND	0.104	0.554			U
	PFECA-G	801212-59-9	S260324017	ND	0.0739	0.554			U
	PFMOAA	674-13-5	S260324017	8.75	0.280	0.554			
	PFMOBA	863090-89-5	S260324017	ND	0.929	1.25			U
	PFMOPrA	377-73-1	S260324017	ND	0.197	0.554			U
	PFO2HxA	39492-88-1	S260324017	ND	0.178	0.554			U
	PFO3OA	39492-89-2	S260324017	ND	0.254	0.554			U

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Brunswick County Public Utilities - NC NORTHWEST WATER PLANT LELAND, N.C

	PFO4DA	39492-90-5	S260324017	ND	0.438	2.77			U
	PFO5DA	39492-91-6	S260324017	ND	0.443	2.77			U
	PMPA	13140-29-9	S260324017	3.13	0.130	0.554			
	R-EVE	2416366-22-6	S260324017	53.1	0.919	1.25			
PFESAs	11CI-PF3OUdS	763051-92-9	S260324017	ND	0.261	0.522			U
	9CI-PF3ONS	756426-58-1	S260324017	ND	0.355	0.516			U
	Hydrolyzed PSDA	2416366-19-1	S260324017	9.45	0.368	0.554			
	Nafion Byproduct 1 (PS Acid)	29311-67-9	S260324017	ND	0.296	0.554			U
	Nafion Byproduct 2 (Hydro-PS Acid)	749836-20-2	S260324017	0.0499	0.458	0.554			L
	NVHOS	1132933-86-8	S260324017	ND	0.0853	0.554			U
	PFEESA	113507-82-7	S260324017	ND	0.166	0.554			U
	R-PSDA	2416366-18-0	S260324017	46.0	2.44	2.44			
	R-PSDCA	241636-21-5	S260324017	ND	0.234	0.554			U
ES	MPFBA		S260324017				20-150%	68.8%	
	M5PFPeA		S260324017				20-150%	62.9%	
	M3PFBS		S260324017				20-150%	193.9%	Q
	M2-4:2 FTS		S260324017				20-150%	266.6%	Q
	M5PFHxA		S260324017				20-150%	21.2%	
	M3HFPO-DA		S260324017				20-150%	6.2%	Q
	M4PFHpA		S260324017				20-150%	10.0%	Q
	M3PFHxS		S260324017				20-150%	111.3%	
	M2-6:2 FTS		S260324017				20-150%	136.0%	
	M8PFOA		S260324017				20-150%	6.4%	Q
	M9PFNA		S260324017				20-150%	5.7%	Q
	M8PFOS		S260324017				20-150%	109.2%	
	M2-8:2 FTS		S260324017				20-150%	113.5%	
	M8FOSA-I		S260324017				20-150%	62.9%	
	M6PFDA		S260324017				20-150%	9.5%	Q
	d3-N-MeFOSAA		S260324017				20-150%	116.4%	
	d5-N-EtFOSAA		S260324017				20-150%	114.4%	
	M7PFUdA		S260324017				20-150%	14.5%	Q
	MPFD _o A		S260324017				20-150%	22.3%	
	M2PFTeDA		S260324017				20-150%	7.0%	Q
	d3-N-MeFOSA		S260324017				10-200%	1.1%	Q
	d5-N-EtFOSA		S260324017				10-200%	1.1%	Q
	d7-N-MeFOSE		S260324017				10-200%	43.4%	
	d9-N-EtFOSE		S260324017				10-200%	37.0%	
	13C3-PFP _r A		F280324038				20-150%	2.9%	Q

Enthalpy Analytical

Job No.: 0324-860-1 PFAS by Isotope Dilution (non-potable water)

Brunswick County Public Utilities - NC NORTHWEST WATER PLANT LELAND, N.C

Enthalpy ID	0324-860-002-1	Prep Batch	EU17134	Sample Vol (mL)	294.65
Sample Name	032224-EO1	Prep Date	2024-03-25 13:35	Extract Vol (mL)	0.4
Matrix	aqueous	Analysis Date	2024-03-26 21:11	Split Factor	N/A
Sampling Date	2024-03-22 13:00	Analyst	bmay	Method Code	EU-047-NPW
Received Date	2024-03-22	Instrument	Sauron	Sample Type	Sample
		Bottle ID	A		

	Compound	CAS	InjFileName	Formatted Result ng/L	LOD ng/L	LOQ ng/L	Recovery Limits	Recovery	Flags
Acids	PFPrA	422-64-0	F280324039	ND	0.475	1.04			U
	PFBA	375-22-4	S260324018	ND	0.216	0.543			U
	PFPeA	2706-90-3	S260324018	3.88	0.155	0.543			
	PFHxA	307-24-4	S260324018	4.90	0.182	0.543			
	PFHpA	375-85-9	S260324018	1.87	0.190	0.543			
	PFOA	335-67-1	S260324018	4.29	0.124	0.543			
	PFNA	375-95-1	S260324018	0.472	0.123	0.543			J
	PFDA	335-76-2	S260324018	0.0839	0.155	0.543			L
	PFUnDA	2058-94-8	S260324018	ND	0.123	0.543			U
	PFDoDA	307-55-1	S260324018	ND	0.221	0.543			U
	PFTTrDA	72629-94-8	S260324018	ND	0.180	0.543			U
	PFTeDA	376-06-7	S260324018	ND	0.207	0.543			U
	PFHxDA	67905-19-5	S270324013	ND	0.288	0.543			U
	Sulfonates	PFBS	375-73-5	S260324018	3.25	0.288	0.543		
PFPeS		2706-91-4	S260324018	0.523	0.111	0.512			
PFHxS		355-46-4	S260324018	2.13	0.419	0.497			
PFHpS		375-92-8	S260324018	0.0126	0.263	0.517			L
PFOS		1763-23-1	S260324018	8.09	0.287	0.503			
PFNS		68259-12-1	S260324018	ND	0.169	0.523			U
PFDS		335-77-3	S260324018	ND	0.285	0.523			U
4:2 FTS		757124-72-4	S260324018	ND	0.0704	0.509			U
6:2 FTS		27619-97-2	S260324018	ND	0.256	0.517			U
8:2 FTS		39108-34-4	S260324018	ND	0.122	0.520			U
10:2 FTS		120226-60-0	S260324018	ND	0.416	0.543			U
Sulfonamidos	FBSA	30334-69-1	S260324018	0.195	0.258	0.543			L
	N-EtFOSA	4151-50-2	S260324018	ND	0.336	0.543			U
	N-EtFOSAA	2991-50-6	S260324018	ND	0.221	0.543			U
	N-EtFOSE	1691-99-2	S260324018	ND	0.831	2.44			U
	N-MeFOSA	31506-32-8	S260324018	ND	0.224	0.543			U
	N-MeFOSAA	2355-31-9	S260324018	ND	0.153	0.543			U
	N-MeFOSE	24448-09-7	S260324018	ND	0.516	2.44			U
	PFOSA	754-91-6	S260324018	0.0101	0.0762	0.543			L
PFECAs	ADONA	919005-14-4	S260324018	ND	0.147	0.514			U
	EVE Acid	69087-46-3	S260324018	ND	0.173	1.22			U
	HFPO-DA	13252-13-6	S260324018	2.03	0.0575	0.543			
	Hydro-EVE Acid	773804-62-9	S260324018	ND	0.178	0.543			U
	NFDHA	151772-58-6	S260324018	ND	0.114	0.543			U
	PEPA	267239-61-2	S260324018	0.545	0.102	0.543			
	PFECA-G	801212-59-9	S260324018	ND	0.0725	0.543			U
	PFMOAA	674-13-5	S260324018	6.34	0.275	0.543			
	PFMOBA	863090-89-5	S260324018	ND	0.911	1.22			U
	PFMOPrA	377-73-1	S260324018	ND	0.193	0.543			U
	PFO2HxA	39492-88-1	S260324018	ND	0.175	0.543			U
	PFO3OA	39492-89-2	S260324018	ND	0.249	0.543			U

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Brunswick County Public Utilities - NC NORTHWEST WATER PLANT LELAND, N.C

	PFO4DA	39492-90-5	S260324018	ND	0.429	2.72			U
	PFO5DA	39492-91-6	S260324018	ND	0.434	2.72			U
	PMPA	13140-29-9	S260324018	3.55	0.128	0.543			
	R-EVE	2416366-22-6	S260324018	12.4	0.901	1.22			
PFESAs	11CI-PF3OUdS	763051-92-9	S260324018	ND	0.256	0.512			U
	9CI-PF3ONS	756426-58-1	S260324018	ND	0.348	0.506			U
	Hydrolyzed PSDA	2416366-19-1	S260324018	1.88	0.361	0.543			
	Nafion Byproduct 1 (PS Acid)	29311-67-9	S260324018	ND	0.290	0.543			U
	Nafion Byproduct 2 (Hydro-PS Acid)	749836-20-2	S260324018	0.0987	0.450	0.543			L
	NVHOS	1132933-86-8	S260324018	ND	0.0837	0.543			U
	PFEESA	113507-82-7	S260324018	ND	0.163	0.543			U
	R-PSDA	2416366-18-0	S260324018	10.9	2.39	2.39			
	R-PSDCA	241636-21-5	S260324018	ND	0.229	0.543			U
ES	MPFBA		S260324018				20-150%	77.1%	
	M5PFPeA		S260324018				20-150%	78.2%	
	M3PFBS		S260324018				20-150%	163.7%	Q
	M2-4:2 FTS		S260324018				20-150%	228.0%	Q
	M5PFHxA		S260324018				20-150%	50.0%	
	M3HFPO-DA		S260324018				20-150%	24.7%	
	M4PFHpA		S260324018				20-150%	39.5%	
	M3PFHxS		S260324018				20-150%	117.0%	
	M2-6:2 FTS		S260324018				20-150%	131.2%	
	M8PFOA		S260324018				20-150%	25.2%	
	M9PFNA		S260324018				20-150%	17.4%	Q
	M8PFOS		S260324018				20-150%	107.6%	
	M2-8:2 FTS		S260324018				20-150%	108.2%	
	M8FOSA-I		S260324018				20-150%	70.8%	
	M6PFDA		S260324018				20-150%	24.5%	
	d3-N-MeFOSAA		S260324018				20-150%	123.9%	
	d5-N-EtFOSAA		S260324018				20-150%	123.0%	
	M7PFUdA		S260324018				20-150%	36.2%	
	MPFD _o A		S260324018				20-150%	40.3%	
	M2PFTeDA		S260324018				20-150%	34.7%	
	d3-N-MeFOSA		S260324018				10-200%	5.7%	Q
	d5-N-EtFOSA		S260324018				10-200%	5.9%	Q
	d7-N-MeFOSE		S260324018				10-200%	46.3%	
	d9-N-EtFOSE		S260324018				10-200%	44.4%	
	13C3-PFP _r A		F280324039				20-150%	3.4%	Q

QC Data

Enthalpy Analytical

Job No.: 0324-860-1 PFAS by Isotope Dilution (non-potable water)

Brunswick County Public Utilities - NC NORTHWEST WATER PLANT LELAND, N.C

Enthalpy ID	MB_17134_PFAS	Prep Batch	EU17134	Sample Vol (mL)	250
Sample Name	MB_17134_PFAS	Prep Date	2024-03-25 13:35	Extract Vol (mL)	0.4
Matrix	aqueous	Analysis Date	2024-03-26 17:02	Split Factor	N/A
Sampling Date		Analyst	bmay	Method Code	EU-047-NPW
Received Date		Instrument	Sauron	Sample Type	Blank
		Bottle ID	-		

	Compound	CAS	InjFileName	Formatted Result	LOD ng/L	LOQ ng/L	Recovery Limits	Recovery	Flags
Acids	PFPrA	422-64-0	F280324036	ND	0.560	1.22			U
	PFBA	375-22-4	S260324007	ND	0.254	0.640			U
	PFPeA	2706-90-3	S260324007	ND	0.183	0.640			U
	PFHxA	307-24-4	S260324007	ND	0.214	0.640			U
	PFHpA	375-85-9	S260324007	ND	0.224	0.640			U
	PFOA	335-67-1	S260324007	ND	0.146	0.640			U
	PFNA	375-95-1	S260324007	ND	0.145	0.640			U
	PFDA	335-76-2	S260324007	ND	0.183	0.640			U
	PFUnDA	2058-94-8	S260324007	ND	0.145	0.640			U
	PFDODA	307-55-1	S260324007	ND	0.260	0.640			U
	PFTTrDA	72629-94-8	S260324007	ND	0.212	0.640			U
	PFTeDA	376-06-7	S260324007	ND	0.244	0.640			U
	PFHxDA	67905-19-5	S270324010	ND	0.340	0.640			U
	Sulfonates	PFBS	375-73-5	S260324007	ND	0.340	0.640		
PFPeS		2706-91-4	S260324007	ND	0.131	0.603			U
PFHxS		355-46-4	S260324007	ND	0.494	0.586			U
PFHpS		375-92-8	S260324007	ND	0.310	0.610			U
PFOS		1763-23-1	S260324007	ND	0.338	0.593			U
PFNS		68259-12-1	S260324007	ND	0.199	0.616			U
PFDS		335-77-3	S260324007	ND	0.336	0.616			U
4:2 FTS		757124-72-4	S260324007	ND	0.0830	0.600			U
6:2 FTS		27619-97-2	S260324007	ND	0.302	0.610			U
8:2 FTS		39108-34-4	S260324007	ND	0.143	0.613			U
10:2 FTS		120226-60-0	S260324007	ND	0.490	0.640			U
Sulfonamidos		FBSA	30334-69-1	S260324007	ND	0.304	0.640		
	N-EtFOSA	4151-50-2	S260324007	ND	0.396	0.640			U
	N-EtFOSAA	2991-50-6	S260324007	ND	0.260	0.640			U
	N-EtFOSE	1691-99-2	S260324007	ND	0.980	2.88			U
	N-MeFOSA	31506-32-8	S260324007	ND	0.264	0.640			U
	N-MeFOSAA	2355-31-9	S260324007	ND	0.180	0.640			U
	N-MeFOSE	24448-09-7	S260324007	ND	0.608	2.88			U
	PFOSA	754-91-6	S260324007	ND	0.0898	0.640			U
PFECAs	ADONA	919005-14-4	S260324007	ND	0.173	0.606			U
	EVE Acid	69087-46-3	S260324007	ND	0.204	1.44			U
	HFPO-DA	13252-13-6	S260324007	ND	0.0678	0.640			U
	Hydro-EVE Acid	773804-62-9	S260324007	ND	0.210	0.640			U
	NFDHA	151772-58-6	S260324007	ND	0.135	0.640			U
	PEPA	267239-61-2	S260324007	ND	0.120	0.640			U
	PFECA-G	801212-59-9	S260324007	ND	0.0854	0.640			U
	PFMOAA	674-13-5	S260324007	ND	0.324	0.640			U
	PFMOBA	863090-89-5	S260324007	ND	1.07	1.44			U
	PFMOPrA	377-73-1	S260324007	ND	0.228	0.640			U
	PFO2HxA	39492-88-1	S260324007	ND	0.206	0.640			U
	PFO3OA	39492-89-2	S260324007	ND	0.294	0.640			U

Enthalpy Analytical

Job No.: 0324-860-1 PFAS by Isotope Dilution (non-potable water)

Brunswick County Public Utilities - NC NORTHWEST WATER PLANT LELAND, N.C

	PFO4DA	39492-90-5	S260324007	ND	0.506	3.20			U
	PFO5DA	39492-91-6	S260324007	ND	0.512	3.20			U
	PMPA	13140-29-9	S260324007	ND	0.151	0.640			U
	R-EVE	2416366-22-6	S260324007	ND	1.06	1.44			U
PFESAs	11CI-PF3OUdS	763051-92-9	S260324007	ND	0.302	0.603			U
	9CI-PF3ONS	756426-58-1	S260324007	ND	0.410	0.596			U
	Hydrolyzed PSDA	2416366-19-1	S260324007	ND	0.426	0.640			U
	Nafion Byproduct 1 (PS Acid)	29311-67-9	S260324007	ND	0.342	0.640			U
	Nafion Byproduct 2 (Hydro-PS Acid)	749836-20-2	S260324007	ND	0.530	0.640			U
	NVHOS	1132933-86-8	S260324007	ND	0.0986	0.640			U
	PFEESA	113507-82-7	S260324007	ND	0.192	0.640			U
	R-PSDA	2416366-18-0	S260324007	ND	2.82	2.82			U
	R-PSDCA	241636-21-5	S260324007	ND	0.270	0.640			U
ES	MPFBA		S260324007				20-150%	86.7%	
	M5PFPeA		S260324007				20-150%	81.9%	
	M3PFBS		S260324007				20-150%	103.6%	
	M2-4:2 FTS		S260324007				20-150%	132.8%	
	M5PFHxA		S260324007				20-150%	65.3%	
	M3HFPO-DA		S260324007				20-150%	40.9%	
	M4PFHpA		S260324007				20-150%	58.3%	
	M3PFHxS		S260324007				20-150%	108.7%	
	M2-6:2 FTS		S260324007				20-150%	116.8%	
	M8PFOA		S260324007				20-150%	45.2%	
	M9PFNA		S260324007				20-150%	37.3%	
	M8PFOS		S260324007				20-150%	107.5%	
	M2-8:2 FTS		S260324007				20-150%	107.3%	
	M8FOSA-I		S260324007				20-150%	83.1%	
	M6PFDA		S260324007				20-150%	37.6%	
	d3-N-MeFOSAA		S260324007				20-150%	130.4%	
	d5-N-EtFOSAA		S260324007				20-150%	127.3%	
	M7PFUdA		S260324007				20-150%	45.4%	
	MPFD _o A		S260324007				20-150%	52.5%	
	M2PFTeDA		S260324007				20-150%	62.5%	
	d3-N-MeFOSA		S260324007				10-200%	12.9%	
	d5-N-EtFOSA		S260324007				10-200%	12.3%	
	d7-N-MeFOSE		S260324007				10-200%	54.8%	
	d9-N-EtFOSE		S260324007				10-200%	59.0%	
	13C3-PFP _r A		F280324036				20-150%	4.6%	Q

Enthalpy Analytical

Job No.: 0324-860-1 PFAS by Isotope Dilution (non-potable water)

Brunswick County Public Utilities - NC NORTHWEST WATER PLANT LELAND, N.C

Enthalpy ID	OPR_17134_PFAS	Prep Batch	EU17134	Sample Vol (mL)	250
Sample Name	OPR_17134_PFAS	Prep Date	2024-03-25 13:35	Extract Vol (mL)	0.4
Matrix	aqueous	Analysis Date	2024-03-26 17:24	Split Factor	N/A
Sampling Date		Analyst	bmay	Method Code	EU-047-NPW
Received Date		Instrument	Sauron	Sample Type	Control
		Bottle ID	-		

	Compound	CAS	InjFileName	Formatted Result ng/L	LOD ng/L	LOQ ng/L	Recovery Limits	Recovery	Flags
Acids	PFBA	375-22-4	S260324008	17.9	0.254	0.640	69.1-122%	89.5%	
	PFPeA	2706-90-3	S260324008	16.7	0.183	0.640	68.5-121%	83.7%	
	PFHxA	307-24-4	S260324008	17.4	0.214	0.640	68.3-121%	86.8%	
	PFHpA	375-85-9	S260324008	17.1	0.224	0.640	62.4-128%	85.3%	
	PFOA	335-67-1	S260324008	17.4	0.146	0.640	66.3-124%	86.9%	
	PFNA	375-95-1	S260324008	18.6	0.145	0.640	70.5-120%	93.1%	
	PFDA	335-76-2	S260324008	17.6	0.183	0.640	68.9-117%	88.2%	
	PFUnDA	2058-94-8	S260324008	17.5	0.145	0.640	58.1-132%	87.7%	
	PFDoDA	307-55-1	S260324008	18.6	0.260	0.640	52.1-140%	92.8%	
	PFTTrDA	72629-94-8	S260324008	22.3	0.212	0.640	65-144%	111.3%	
	PFTeDA	376-06-7	S260324008	17.8	0.244	0.640	36.1-161%	89.1%	
Sulfonates	PFBS	375-73-5	S260324008	17.6	0.340	0.640	67.5-111.6%	99.3%	
	PFPeS	2706-91-4	S260324008	18.2	0.131	0.603	51.8-142%	96.8%	
	PFHxS	355-46-4	S260324008	15.4	0.494	0.586	59.6-128%	84.3%	
	PFHpS	375-92-8	S260324008	15.8	0.310	0.610	46.9-157%	82.8%	
	PFOS	1763-23-1	S260324008	15.2	0.338	0.593	59.2-132%	82.1%	
	PFNS	68259-12-1	S260324008	16.0	0.199	0.616	53.9-133%	82.9%	
	PFDS	335-77-3	S260324008	15.0	0.336	0.616	38.1-142%	77.6%	
	4:2 FTS	757124-72-4	S260324008	15.2	0.0830	0.600	61.9-131%	81.3%	
	6:2 FTS	27619-97-2	S260324008	16.7	0.302	0.610	62.3-129%	87.9%	
	8:2 FTS	39108-34-4	S260324008	18.1	0.143	0.613	37.5-159%	94.5%	
Sulfonamidos	N-EtFOSAA	2991-50-6	S260324008	17.6	0.260	0.640	61.5-133%	87.8%	
	N-MeFOSAA	2355-31-9	S260324008	16.7	0.180	0.640	57.3-138%	83.6%	
	PFOSA	754-91-6	S260324008	19.6	0.0898	0.640	49.1-143%	97.9%	
PFECAs	HFPO-DA	13252-13-6	S260324008	22.0	0.0678	0.640	57.2-130%	110.0%	
ES	MPFBA		S260324008				20-150%	76.4%	
	M5PFPeA		S260324008				20-150%	72.3%	
	M3PFBS		S260324008				20-150%	99.5%	
	M2-4:2 FTS		S260324008				20-150%	125.1%	
	M5PFHxA		S260324008				20-150%	45.0%	
	M3HFPO-DA		S260324008				20-150%	14.2%	Q
	M4PFHpA		S260324008				20-150%	23.3%	
	M3PFHxS		S260324008				20-150%	108.3%	
	M2-6:2 FTS		S260324008				20-150%	111.4%	
	M8PFOA		S260324008				20-150%	10.9%	Q
	M9PFNA		S260324008				20-150%	7.4%	Q
	M8PFOS		S260324008				20-150%	104.5%	
	M2-8:2 FTS		S260324008				20-150%	103.5%	
	M8FOSA-I		S260324008				20-150%	69.0%	
	M6PFDA		S260324008				20-150%	13.9%	Q
	d3-N-MeFOSAA		S260324008				20-150%	126.7%	
d5-N-EtFOSAA		S260324008				20-150%	123.0%		
M7PFUdA		S260324008				20-150%	28.6%		
MPFDoA		S260324008				20-150%	41.7%		

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Brunswick County Public Utilities - NC NORTHWEST WATER PLANT LELAND, N.C

	M2PFTeDA		S260324008				20-150%	43.2%	
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Narrative Summary



Enthalpy Analytical Narrative Summary

Company	Brunswick County Public Utilities - NC
Job No.	0324-860-1 PFAS by Isotope Dilution (non-potable water)
Client ID.	NORTHWEST WATER PLANT Site: LELAND, N.C

1. Custody

Jack Sullivan received the samples at 9.4 °C after being relinquished by Brunswick County Public Utilities - NC.

The samples were received in good condition. Prior to, during, and after analysis, the samples were kept under lock with access only to authorized personnel by Enthalpy Analytical, LLC.

Samples received above 6 °C, client notified in order acknowledgment documentation.

Table 1 - Sample Inventory

EU Lab Sample ID	Client Sample ID	Matrix	Received
0324-860-001-1	032224-SO1	aqueous	2024-03-22
0324-860-002-1	032224-EO1	aqueous	2024-03-22

2. Methods and Analytes

A list of analytes of interest and corresponding methods of analysis is shown in Table 3. Abbreviations are defined in the listed Appendices.

Table 3 - Methods and Analytes

EU Method	Analytes	Cleanup Method
EU-047	Custom List	ENVI-Carb

3. Analysis

The samples were analyzed using Waters Acquity UPLC equipped with Xevo TQ MS (LC/MS/MS "Sauron").

The samples were analyzed in more than one analytical sequence in order to include all of the analytes of interest and to meet method acceptance criteria.

Polar compound PFPrA in the samples, including the method blank (MB) and Ongoing Precision Recovery (OPR) samples, was analyzed at a dilution factor of ten (D10).

4. Calibration

In the initial calibration, the analytes exhibited R² of ≥ 0.99 . The reported analytes in the calibration standards, continuing calibration (concal) and Initial Calibration Verification (ICV) met the accuracy criterion for native analytes, except as noted below.

PFTrDA exceeded method control limits in the concals for the initial injection sequence. This analyte was not detected >LOQ in the samples; therefore, the data is reportable without adverse impact.

Enthalpy Analytical Narrative Summary

Company	Brunswick County Public Utilities - NC
Job No.	0324-860-1 PFAS by Isotope Dilution (non-potable water)
Client ID.	NORTHWEST WATER PLANT Site: LELAND, N.C

5. QC Notes

Ongoing Precision Recovery (OPR) control limits have not been established for some analytes of interest.

Except where noted below, the QC sample analyses passed all method criteria.

Select surrogates (ES) fell outside method recovery criteria in the method blank (MB) and OPR. Target analytes are quantified based on their ratio to their labeled standard analogs. When detected at a signal-to-noise above 10:1 the ES peak area is used to quantify its respective target analyte using accepted isotope dilution principles. The data is reported without adverse impact.

The samples were extracted within the 28-day from collection holding time and analyzed within the 28-day from extraction to analysis holding time required by the method.

6. Reporting Notes

The results presented in this report are representative of the samples as provided to the laboratory.

This report provides all results including detections below LOD following client instruction.

Some labeled extraction standards (ES) in the sample analyses recovered below the control limits for ES recovery, as denoted by the "Q" qualifier. The target analytes are quantified based on their ratio to their labeled standard analogs. As a result, low or high labeled standard recovery do not cause any change to ratios or contribute any additional error in the measurement of the target analytes. When detected at a signal-to-noise above 10:1 the ES peak area is used to quantify its respective target analyte using accepted isotope dilution principles. The data is reported without adverse impact.

These analyses met the requirements of the TNI Standard. Any deviations from the requirements of the reference method or TNI Standard have been stated above.

Enthalpy Analytical, LLC in Wilmington NC is accredited by the Louisiana Department of Environmental Quality to the 2009 TNI Standard under certificate number 05075.

General Reporting Notes – Data Qualifiers

The following are general reporting notes that are applicable to all Enthalpy Analytical, LLC - Wilmington, NC data reports, unless specifically noted otherwise.

General Data Qualifiers

- Ac - Alternate calculation flag indicates the es recovery was calculated using the opening concal when either of the following situations is encountered in the data processing software: the ES recovery is over 400% or the JS is not detected.
- B – The analyte was found in the method blank, at a concentration that was at least 10% of the amount in the sample.
- Cxx – Two or more congeners co-elute. In EDDs, C denotes the lowest IUPAC congener in a co-elution group and additional co-eluters for the group ('xx') are shown with the number of the lowest IUPAC co-eluter.
- E – The reported concentration exceeds the calibration range (upper point of the calibration curve). For HRMS data, this condition does not imply additional measurement uncertainty. For LC-MS/MS data, these values should be considered as having measurement uncertainty higher than values within the calibration range.
- EDL – Estimated Detection Level: The EDL is unique to isotope dilution methods and reflects the conditions of analysis at the time of analysis, including the equipment used. Where the MDL is a static value, the EDL is a dynamic value.
- EMPC – Estimated Maximum Possible Concentration: EMPC is specific to Dioxin/Furan tests to indicate the determined ion-abundance ratio was outside the allowed theoretical range (usually due to being near the detection limit, although it can very rarely be caused by a co-eluting interference). The EMPC concentration is adjusted to reflect the value at the theoretical ion-abundance ratio.
- I/IR – The ion ratio between the primary and secondary ions was observed to be outside the method criteria. The analyte concentration may be inaccurate due to interference.
- J – The analyte has a concentration below the minimum calibration level (LOQ value) but greater than the LOD. These values should be considered as having measurement uncertainty higher than values within the calibration range
- L - For reports containing PFAS analytes only, this flag indicates that an analyte has a concentration below the Minimum Detection Limit (MDL) . The reported concentration is not recommended for regulatory use as the analyte signal may have a signal-to-noise ratio less than the criteria deemed necessary to be considered a detected analyte.
- LOD – Limit of Detection: For reports conforming to the DOD ELAP QSM, this is the QSM-defined LOD. For reports conforming to TNI requirements (but not DOD ELAP QSM requirements), this value is the minimum detection limit (MDL). The LOD is adjusted for sample weight or volume.

General Reporting Notes – Data Qualifiers

- LOQ – Limit of Quantitation: For reports conforming to the DOD ELAP QSM, this is the QSM-defined LOQ. For reports conforming to TNI requirements (but not DOD ELAP QSM requirements), this value is the reporting limit (RL). The LOQ is adjusted for sample weight or volume.
- <LOD() – Analyte was not found at a concentration high enough to be reported as detected. It is reported as less than the LOD, and the LOD is given in the parentheses.
- <LOQ() – Analyte was not found at a concentration high enough to be reported as above the QSM-defined LOQ or TNI defined Reporting Limit. It is reported as less than the LOQ, and the LOQ is given in the parentheses.
- ND – Indicates a non-detect.
- NR – Indicates a value that is not reportable due to issues observed in sample preparation or analysis.
- PR – The associated congener(s) is(are) poorly resolved.
- QI – Indicates the presence of a quantitative interference.
- RL – Reporting Limit. Lowest reportable value. The level is higher than the MDL.
- SI – Denotes “Single Ion Mode” and is utilized for PCBs where the secondary ion trace has a significantly elevated noise level due to background PFK. Responses for such peaks are calculated using an EMPC approach based solely on the primary ion area(s) and may be considered estimates.
- U – The analyte was not detected.
- V / Q – The labeled standard recovery is not within method control limits.
- X – Indicates the result is from re-injection/repeat/second-column analysis.

Lab Identifiers/ Data Attributes

- AR – Indicates use of the archived portion of the sample extract.
- CU – Indicates a sample that required additional clean-up prior to HRMS injection/processing.
- D – Dilution Data. Result was obtained from the analysis of a dilution. The number that follows the “D” indicates the dilution factor.
- DE – Indicates a dilution performed with the addition of ES (Extraction Standard) solution.
- DUP – Designation for a duplicate sample.
- MS – Designation for a matrix spike.
- MSD – Designation for a matrix spike duplicate.



General Reporting Notes – Data Qualifiers

- R – Indicates a re-extraction of the sample.
- RJ – Indicates a reinjection of the sample extract.
- S – Indicates a sample split. The number that follows the “S” indicates the split factor.
- SAT – Indicates an analyte saturated the detector.

PFAS Compound Acronym List

Acronym	CAS #	Compound Name
Target Analytes		
* Analyte is not accredited for SOP EU047 # Method 537.1 Accredited ^ Method 533 Accredited		
^ PFBA	375-22-4	Perfluorobutanoic Acid
^ PFPeA	2706-90-3	Perfluoropentanoic Acid
#, ^ PFHxA	307-24-4	Perfluorohexanoic Acid
#, ^ PFHpA	375-85-9	Perfluoroheptanoic Acid
#, ^ PFOA	335-67-1	Perfluorooctanoic Acid
#, ^ PFNA	375-95-1	Perfluorononanoic Acid
#, ^ PFDA	335-76-2	Perfluorodecanoic acid
#, ^ PFUnA (PFUnDA)	2058-94-8	Perfluoroundecanoic acid
#, ^ PFDoA (PFDoDA)	307-55-1	Perfluorododecanoic acid
# PFTrDA (PFTriA)	72629-94-8	Perfluorotridecanoic acid
# PFTeDA (PFTA)	376-06-7	Perfluorotetradecanoic acid
#, ^ PFBS	375-73-5	Perfluorobutane sulfonic acid
^ PFPeS	2706-91-4	Perfluoropentane sulfonic acid
#, ^ PFHxS	355-46-4	Perfluorohexane sulfonic acid
^ PFHpS	375-92-8	Perfluoroheptane sulfonic acid
#, ^ PFOS	1763-23-1	Perfluorooctane sulfonic acid
PFNS	68259-12-1	Perfluorononane sulfonic acid
PFDS	335-77-3	Perfluorodecane sulfonic acid
^ 4:2 FTS	757124-72-4	4:2 fluorotelomer sulfonic acid
^ 6:2 FTS	27619-97-2	6:2 fluorotelomer sulfonic acid
^ 8:2 FTS	39108-34-4	8:2 fluorotelomer sulfonic acid
PFOSA (FOSA)	754-91-6	Perfluorooctane sulfonamide
# N-MeFOSAA	2355-31-9	N-methyl perfluorooctane sulfonamido acetic acid
# N-EtFOSAA	2991-50-6	N-ethyl perfluorooctane sulfonamido acetic acid
#, ^ HFPO-DA	13252-13-6	2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-propanoic acid (Gen-X)
*, #, ^ 11Cl-PF3OUdS	763051-92-9	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid
*, #, ^ 9Cl-PF3ONS	756426-58-1	9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid
*, #, ^ ADONA	919005-14-4	4,8-dioxa-3H-perfluorononanoic acid
*, ^ PFEESA	113507-82-7	Perfluoro(2-ethoxyethane)sulphonic acid
*, ^ PFMOBA (PFMBA)	863090-89-5	Perfluoro-4-methoxybutanic acid
*, ^ NFDHA	151772-58-6	Nonafluoro-3,6-dioxaheptanoic acid
*, ^ PFMOPrA (PFMPA)	377-73-1	Perfluoro-3-methoxypropanoic acid
* PFMOAA	674-13-5	Perfluoro-2-methoxyacetic acid
* PFO2HxA	39492-88-1	Perfluoro (3,5-dioxaheptanoic) acid
* PFO3OA	39492-89-2	Perfluoro (3,5,7-trioxaoctanoic) acid
* PFO4DA	39492-90-5	Perfluoro (3,5,7,9-tetraoxadecanoic) acid
* PFO5DA	39492-91-6	Perfluoro(3,5,7,9,11-pentaoxadodecanoic) acid
* Nafion Byproduct 1	29311-67-9	Nafion Byproduct 1
* Nafion Byproduct 2	749836-20-2	Nafion Byproduct 2
* PEPA	267239-61-2	Perfluoro-2-ethoxypropanoic acid
* PMPA	13140-29-9	Perfluoro-2-methoxypropanoic acid
* 10:2 FTS	120226-60-0	Fluorotelomer sulfonate 10:2
* N-EtFOSA	4151-50-2	N-ethylperfluoro-1-octanesulfonamide
* N-EtFOSE	1691-99-2	2-(N-methylperfluoro-1-octanesulfonamido)-ethanol
* N-MeFOSA	31506-32-8	N-methylperfluoro-1-octanesulfonamide
* N-MeFOSE	24448-09-7	2-(N-methylperfluoro-1-octanesulfonamido)-ethanol
* PFECA-G	801212-59-9	4-(Heptafluoroisopropoxy)hexafluorobutanoic acid
* PFHxDA	67905-19-5	Perfluorohexadecanoic acid
* R-PSDA (Nafion Byproduct 4)	2416366-18-0	Perfluoro-4-(2-sulfoethoxy)pentanoic acid



PFAS Compound Acronym List		
Acronym	CAS #	Compound Name
Target Analytes		
* Analyte is not accredited for SOP EU047 # Method 537.1 Accredited ^ Method 533 Accredited		
* Hydrolyzed PSDA (Nafion Byproduct 5)	2416366-19-1	2-fluoro-2-[1,1,2,3,3,3-hexafluoro-2-(1,1,2,2-tetrafluoro-2-sulfoethoxy)propoxy]-acetic acid
* R-PSDCA (Nafion Byproduct 6)	2416366-21-5	1,1,2,2-tetrafluoro-2-[1,2,2,3,3-pentafluoro-1-(trifluoromethyl)propoxy] ethanesulfonic acid
* EVE Acid	69087-46-3	2,2,3,3-tetrafluoro-3-({1,1,1,2,3,3-hexafluoro-3-[(1,2,2-trifluoroethenyl)oxy]propan-2-yl}oxy)propionic acid
* FBSA	30334-69-1	Perfluorobutylsulfonamide
* Hydro-EVE Acid	773804-62-9	2,2,3,3-Tetrafluoro-3-{{1,1,1,2,3,3-hexafluoro-3-(1,2,2,2-tetrafluoroethoxy)propan-2-yl}oxy}propanoic acid
* R-EVE Acid	2416366-22-6	4-(2-carboxy-1,1,2,2-tetrafluoroethoxy)-2,2,3,3,4,5,5,5-octafluoro-pentanoic acid
* NVHOS	1132933-86-8	Perfluoroethoxysulfonic acid
* PFDoS	79780-39-5	Perfluorododecane sulfonic acid
* PFOA	16517-11-6	Perfluorooctadecanoic acid
* 3:3 FTCA	356-02-5	2H,2H,3H,3H-Perfluorohexanoic acid
* 5:3 FTCA	914637-49-3	2H,2H,3H,3H-Perfluorooctanoic acid
* 7:3 FTCA	812-70-4	2H,2H,3H,3H-Perfluorodecanoic acid
* N-AP-FHxSA	50598-28-2	N-(3-(Dimethylamino)propyl)tridecafluoro-1-hexanesulfonamide
* N-CMAmP-6:2 FOSA	34455-29-3	N-(Carboxymethyl)-N,N-dimethyl-3-(((3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)sulfonyl)amino)1-propanaminium

Sample Custody



0324-860



Chain of Custody Record

Enthalpy Ultratrace Job#: _____ COC Page 1 of 1

Special Handling:

- Standard Turn Around Time
- Rush Turn Around Time -- Date Needed _____
- All Fast TATs Subject to Approval by Enthalpy Analytical, Inc.
- All Samples Disposed of After 6 months Unless Otherwise Instructed.

Enthalpy Analytical-Wilmington, NC has added enhancements to standard methods to improve accuracy, precision and permit an assessment of laboratory performance in the context of your specific data needs. For more information email ChdyJames@enthalpy.com.

Client Name: BRUNSWICK COUNTY UTILITIES
 Project Manager: GLENN WALKER
 Report To: SAME

Project Number: _____
 Site Name: NORTHWEST WATER PLANT
 Location: LELAND N.C.

PO#: _____
 Telephone#: _____
 Email: _____

This Chain of Custody is applicable to Non-Air samples. Standard TAT differ per analysis and are provided by request.

Client Special Instructions:

Matrix: GW-Groundwater, WW-Wastewater, NW-Non-Potable Water, DW-Drinking Water, S-Soil, SL-Sludge, BT-Biological Tissue, O-Other

Type: G=Grab C=Composite Q=Quality Control

Sample ID	Date	Time	Sample Volume	Type	Matrix	Sample Containers				Analyses							Notes			
						# of Bottles	# of Jars	# of Bags	# Other	Method 1613	Method 8290	Method 1668A/B/C PCE	PFAS by LC/MS/MS	PAHs by HRGC/HRMS	Sample on Hold	Method 23		ALL PFAS		
032224-SO1	3/22/2024	1300PM	250 ml	G	NW	2												X	Please Add PFPrA and	
032224-EO1	3/22/2024	1300PM	250 ml	G	DW	2													X	PFHpA To The Testing.
																				Mark Hager Knows About
																				This If you Have Questions

Relinquished By:	Date: <u>3/22/2024</u>	Received By:	Date: <u>3/22/24</u>	Time: <u>13:36</u>	Sample Temperature Upon Receipt:
BILLY BENTON					<input checked="" type="checkbox"/> Iced <input type="checkbox"/> Ambient °C <u>9.4</u>
					<input type="checkbox"/> Iced <input type="checkbox"/> Ambient °C _____
					<input type="checkbox"/> Iced <input type="checkbox"/> Ambient °C _____

JOB ID: 0324-860 Date / Time: 03/22/24 13:36 Initials: J.S.
 OR
 Client: Brunswick County Utilities

Temp °C: 9.4 Thermometer ID: T10 Cooler 1 of 1

Received via	<i>Check one</i>		<i>Check one</i>		Yes	No
	On ice:	<input checked="" type="checkbox"/>	in a Box:	<input type="checkbox"/>	Cooler seals:	<input type="checkbox"/> <input checked="" type="checkbox"/>
	Melted ice:	<input type="checkbox"/>	in a Cooler:	<input checked="" type="checkbox"/>	Sample seals:	<input type="checkbox"/> <input checked="" type="checkbox"/>
	Ambient:	<input type="checkbox"/>	Cooler in Box:	<input type="checkbox"/>	Good condition:	<input checked="" type="checkbox"/> <input type="checkbox"/>
	FedEx	<input type="checkbox"/>				
UPS	<input type="checkbox"/>					
DHL	<input type="checkbox"/>					
USPS	<input type="checkbox"/>					
Courier	<input checked="" type="checkbox"/>					
Other	<input type="checkbox"/>					

Comment:

Temp °C: Thermometer ID: Cooler of

Received via	<i>Check one</i>		<i>Check one</i>		Yes	No
	On ice:	<input type="checkbox"/>	in a Box:	<input type="checkbox"/>	Cooler seals:	<input type="checkbox"/> <input type="checkbox"/>
	Melted ice:	<input type="checkbox"/>	in a Cooler:	<input type="checkbox"/>	Sample seals:	<input type="checkbox"/> <input type="checkbox"/>
	Ambient:	<input type="checkbox"/>	Cooler in Box:	<input type="checkbox"/>	Good condition:	<input type="checkbox"/> <input type="checkbox"/>
	FedEx	<input type="checkbox"/>				
UPS	<input type="checkbox"/>					
DHL	<input type="checkbox"/>					
USPS	<input type="checkbox"/>					
Courier	<input type="checkbox"/>					
Other	<input type="checkbox"/>					

Comment:

Temp °C: Thermometer ID: Cooler of

Received via	<i>Check one</i>		<i>Check one</i>		Yes	No
	On ice:	<input type="checkbox"/>	in a Box:	<input type="checkbox"/>	Cooler seals:	<input type="checkbox"/> <input type="checkbox"/>
	Melted ice:	<input type="checkbox"/>	in a Cooler:	<input type="checkbox"/>	Sample seals:	<input type="checkbox"/> <input type="checkbox"/>
	Ambient:	<input type="checkbox"/>	Cooler in Box:	<input type="checkbox"/>	Good condition:	<input type="checkbox"/> <input type="checkbox"/>
	FedEx	<input type="checkbox"/>				
UPS	<input type="checkbox"/>					
DHL	<input type="checkbox"/>					
USPS	<input type="checkbox"/>					
Courier	<input type="checkbox"/>					
Other	<input type="checkbox"/>					

Comment:

**This Is The Last Page
Of This Report.**