Table 1. Preliminary Assessment Report Summary and Recommendations (continued)

PRL Number	Potential AFFF PRL	Rationale	Recommendation
11	Outfall 002	Collects surface water runoff from a small area of the ramp area on the western and southwestern sides of the Main Hangar.	Proceed to SI. Focus on soil and groundwater. Sample sediment and surface water, if present.
12	Outfall 003	Collects surface water runoff from the location of the former fire station.	Proceed to SI. Focus on soil and groundwater. Sample sediment and surface water, if present.
13	Outfall 004	Collects surface water runoff from the Main Aircraft Maintenance Hangar and the ramp area north and south of the Main Hangar.	Proceed to SI. Focus on soil and groundwater. Sample sediment and surface water, if present.
14	Outfall 005	Collects surface water runoff from a portion of the FSMH; a small portion of the ramp area on the south side of the FSMH; and the areas surrounding the Fire Station, Base Supply, Civil Engineering, and Vehicle Maintenance.	Proceed to SI. Focus on soil and groundwater. Sample sediment and surface water, if present.

AFFF = Aqueous film-forming foam.
ARFF = Aircraft rescue and firefighting.
FSMH = Fuel Systems Maintenance Hangar.
FSS = Fire suppression system.
HEF = High-expansion foam.
NFA = No further action.
OWS = Oil/water separator.
PRL = Potential release location.
SI = Site inspection.

Table 2. PFOS/PFOA SI Screening Criteria

Parameter	Chemical Abstract Service Number	EPA RSL for Tap Water[a] (ng/L)	EPA Health Advisory[b] (ng/L)	Residential Risk-based Soil Screening Level[c] (µg/kg)
PFOS	1763-23-1	NA	70.0[d]	1,260
PFOA	335-67-1	NA		1,260
PFBS	375-73-5	400,000[e]	NA	1,260,000

[a] EPA RSL for tap water, May 2018; Target HQ = 1.0.
[b] *Drinking Water Health Advisory for Perfluorooctane Sulfonate* (EPA 2016a) and *Drinking Water Health Advisory for Perfluorooctanoic Acid* (EPA 2016b).
[c] Residential risk-based soil screening levels determined by using the EPA RSL calculator (https://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search) and the May 2018 EPA RSL tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables-may-2018) for soil and sediment; Target HQ = 1.0.
[d] When PFOA and PFOS are both present, the combined detected concentrations of the compounds are compared with the 70-ng/L health advisory value.
[e] PFBS analytical results for groundwater and surface water have been compared to the tap water screening levels.

µg/kg = Micrograms per kilogram.
EPA = U.S. Environmental Protection Agency.
HQ = Hazard quotient.
NA = Not available.
ng/L = Nanograms per liter
PFBS = Perfluorobutane sulfonate.
PFOA = Perfluorooctanoic acid.
PFOS = Perfluorooctane sulfonate.
RSL = Regional screening level.
SI = Site inspection.

Table 3. Summary of SI Activities

PRL Name	Analyzed Parameters[a]	Soil Borings	Soil Samples[b]	Groundwater Samples[b]	Surface Water Samples	Sediment Samples
1: Aircraft Parking Ramp	PFOS/PFOA	2	5	1	0	0
2: Building 600: Main Aircraft Maintenance Hangar	PFOS/PFOA	2	4	2	0	0
3: Building 2600: Fuel Systems Maintenance Hangar	PFOS/PFOA	3	7	2	0	0
4: Building 2500: Current Fire Station	PFOS/PFOA	2	4	1	0	0
5: Former Building 606: Former Fire Station	PFOS/PFOA	3	7	1	0	0
7: Building 636: Vehicle Maintenance	PFOS/PFOA	2	5	1	0	0
8: Building 635: Civil Engineering	PFOS/PFOA	2	4	1	0	0
9: Retention Pond	PFOS/PFOA	2	4	1	0	0
10: Outfall 001	PFOS/PFOA	0	0	0	0	0
11: Outfall 002	PFOS/PFOA	0	0	0	1	1
12: Outfall 003	PFOS/PFOA	0	0	0	0	0
13: Outfall 004	PFOS/PFOA	0	0	0	1	1
14: Outfall 005	PFOS/PFOA	0	0	0	1	1

[a] PFOS/PFOA is used generically in this SI Report to include the following six 2012 UCMR3 Rule emerging contaminants: PFOS, PFOA, perfluorobutane sulfonate, perfluorononanoic acid, perfluoroheptanoic acid, and perfluorohexane sulfonate. All samples were analyzed for PFOS/PFOA using EPA Method 537, revision 1.1.
[b] Includes field duplicate.

EPA = U.S. Environmental Protection Agency.
PFOA = Perfluorooctanoic acid.
PFOS = Perfluorooctane sulfonate.
PRL = Potential release location.
SI = Site inspection.
UCMR3 = Third Unregulated Contaminant Monitoring Rule.

Table 4. Well Construction Details for Lincoln ANGB SI

Monitoring Well	Top of Casing Elevation (ft AMSL)	Ground Elevation (ftAMSL)	Screened Interval (ft BGS)	Total Well Depth (ft BTOC)	Well Diameter (in.)	Casing
PRL 1						
MW-LIN01-01	1160.54	1160.96	14.5-24.5	25	2	PVC
PRL 2						
MW-LIN02-01	1164.70	1165.08	9.5-19.5	19.5	2	PVC
PRL 3						
MW-LIN03-01	1165.52	1165.71	14.5-24.5	25	2	PVC
PRL 4						
MW-LIN04-01	1166.48	1166.64	9.5-19.5	19.5	2	PVC
PRL 5						
MW-LIN05-01	1161.40	1161.64	10-20	20	2	PVC
PRL 7						
MW-LIN07-01	1158.06	1158.47	10-20	20	2	PVC
PRL 8						
MW-LIN08-01	1157.37	1157.78	9.5-19.5	19.5	2	PVC
PRL 9						
MW-LIN09-01	1159.08	1159.31	9.5-19.5	19.5	2	PVC

Source: TOC elevation and ground surface elevation data are from the monitoring well survey on July 25, 2018, by Allied Surveying and Mapping (see Appendix C). Screened interval, total depth, and well diameter data in this table were obtained from the well construction diagrams provided in Appendix A.

AMSL = Above mean sea level.
ANGB = Air National Guard Base.
BGS = Below ground surface.
BTOC = Below top of casing.
PRL = Potential release location.
PVC = Polyvinylchloride.
SI = Site inspection.
TOC = Top of Casing.

Table 5. Water Level Measurements

Monitoring Well Identifier	TOC Elevation (ft AMSL)	Screened Interval	July 2018	
			Depth to Water (ft BTOC)	Groundwater Elevation (ft AMSL)
New Wells[a]				
MW-LIN01-01	1160.54	14.5-24.5	10.62	1149.92
MW-LIN02-01	1164.70	9.5-19.5	13.88	1150.82
MW-LIN03-01	1165.52	14.5-24.5	12.70	1152.82
MW-LIN04-01	1166.48	9.5-19.5	13.52	1152.96
MW-LIN05-01	1161.40	10-20	12.62	1148.78
MW-LIN07-01	1158.06	10-20	10.26	1147.80
MW-LIN08-01	1157.37	9.5-19.5	9.44	1147.93
MW-LIN09-01	1159.08	9.5-19.5	10.16	1148.92
Existing Well				
TU015-MW005-PRL02 [b]	1161.50[c]	10-20	12.79	1148.71

[a] Source: TOC elevation and ground surface elevation data are from the monitoring well survey on July 25, 2018, by Allied Surveying and Mapping (see Appendix C). Screened intervals shown in this table for the new wells were obtained from the well construction diagrams provided in Appendix A. Depth to water information was obtained from the groundwater sampling logs in Appendix B.

[b] Source: Ground surface elevation and screened interval are from the Final Remedial Investigation Report, Former Vehicle Service Pits at Building 608 (TU015), Former Detergent and/or Waste Oil USTs at Building 608 (TU018) and Former Drop Tank Storage Area at Building 608 (SA019), Lincoln Air National Guard Base, Lincoln, Nebraska (TEC-Weston 2017). Depth to water information was obtained from the groundwater sampling logs in Appendix B.

[c] The value shown is the ground surface elevation

AMSL = Above mean sea level.
BTOC = Below top of casing.
TOC = Top of casing.
UST = Underground storage tank.

Table 6. Water Quality Parameters

Parameter	Groundwater					
	MW-LIN01-01	MW-LIN02-01	MW-LIN03-01	MW-LIN04-01	MW-LIN05-01	MW-LIN07-01
Dissolved oxygen (mg/L)	5.91	15.25	4.41	12.20	6.85	3.79
ORP (mV)	107.8	135.2	103.1	212.2	105.3	85.3
pH (S.U.)	7.45	6.93	7.41	6.38	7.38	7.41
Conductivity (mS/cm)	0.916	0.843	0.688	0.748	0.821	1.169
Temperature (°C)	15.75	14.90	16.03	15.11	16.83	15.09
Turbidity (NTU)	20.6	2.30	114	2.37	25.2	6.99

Parameter	Groundwater			Surface Water		
	MW-LIN08-01	MW-LIN09-01	TU015-MW005-PRL2	LIN11-SW1	LIN13-SW1	LIN14-SW1
Dissolved oxygen (mg/L)	6.66	4.01	2.79	4.04	2.15	1.52
ORP (mV)	161.6	119.4	54.9	93.5	26.5	-176.1
pH (S.U.)	7.52	7.19	7.40	8.04	7.52	7.52
Conductivity (mS/cm)	0.956	2.388	0.832	0.463	0.982	0.953
Temperature (°C)	14.64	15.25	16.55	20.04	17.82	17.75
Turbidity (NTU)	116	12.6	31.6	18.9	34.4	21.2

mS/cm = MicroSiemens per centimeter.
mV = Millivolt.
mg/L = Milligrams per liter
NTU = Nephelometric turbidity unit.
ORP = Oxidation-reduction potential.
S.U. = Standard unit.

Table 7. Summary of Soil and Sediment Analytical Results

					Analyte	Perfluorooctane Sulfonate (PFOS)	Perfluorooctanoic Acid (PFOA)	Perfluorobutane Sulfonate (PFBS)	Perfluoroheptanoic Acid (PFHpA)	Perfluorohexane Sulfonate (PFHxS)	Perfluorononanoic Acid (PFNA)
					Screening Level[a]	1,260	1,260	1,260,000	NA	NA	NA
PRL	Location	Sample Identifier	Sample Date	Sample Depth (ft)	Sample Type	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
1	LIN01-SB1	LIN01-SB1-01	7/18/2018	0-2	REG	**10**	**0.25 J**	0.22 U	**0.14 J**	**0.59**	**0.17 J**
1	LIN01-SB1	LIN01-SB1-02	7/18/2018	10-12	REG	**320 J**	**0.58**	0.24 U	**0.1 J**	**2.5**	**1.3 J**
1	LIN01-SB1	LIN01-SB1-02D	7/18/2018	10-12	FD	**330 J**	**0.53**	0.25 U	0.28 U	**2.3**	**1 J**
1	LIN01-SB2	LIN01-SB2-01	7/18/2018	0-2	REG	**5.7**	**0.72**	0.23 U	**0.23 J**	**0.47**	**0.14 J**
1	LIN01-SB2	LIN01-SB2-02	7/18/2018	15-17	REG	0.6 U	0.24 U	0.22 U	0.24 U	0.24 U	0.24 U
2	LIN02-SB1	LIN02-SB1-01	7/18/2018	0-2	REG	**14**	**2.4**	0.23 U	**0.65**	**1.3**	**0.46**
2	LIN02-SB1	LIN02-SB1-02	7/18/2018	14-16	REG	0.62 U	0.25 U	0.22 U	0.25 U	**0.3 J**	0.25 U
2	LIN02-SB2	LIN02-SB2-01	7/20/2018	0-2	REG	**1.9**	**0.46**	0.24 U	**0.55**	**0.47**	0.27 U
2	LIN02-SB2	LIN02-SB2-02	7/20/2018	6-8	REG	0.66 U	0.26 U	**0.17 J**	0.26 U	**0.13 J**	0.26 U
3	LIN03-SB1	LIN03-SB1-01	7/18/2018	0-2	REG	**0.91 J**	0.24 U	0.22 U	0.24 U	0.1 U	0.24 U
3	LIN03-SB1	LIN03-SB1-02	7/18/2018	17-19	REG	0.62 U	0.25 U	**0.12 J**	0.25 U	**0.64**	0.25 U
3	LIN03-SB2	LIN03-SB2-01	7/18/2018	0-2	REG	**160 J**	**1.3**	**0.63**	**0.31 J**	**5.4**	0.24 U
3	LIN03-SB2	LIN03-SB2-02	7/18/2018	15-17	REG	**1.1 J**	0.25 U	0.23 U	0.25 U	**0.41**	0.25 U
3	LIN03-SB3	LIN03-SB3-01	7/18/2018	0-2	REG	**4.8**	**0.38 J**	**0.91**	**0.17 J**	**2.7**	0.27 U
3	LIN03-SB3	LIN03-SB3-01D	7/18/2018	0-2	FD	**0.4 J**	**0.18 J**	**0.81**	**0.11 J**	**1.7**	0.25 U
3	LIN03-SB3	LIN03-SB3-02	7/18/2018	15-17	REG	0.59 U	0.24 U	**0.2 J**	0.24 U	**0.92**	0.24 U
4	LIN04-SB1	LIN04-SB1-01	7/18/2018	0-2	REG	52 J	0.76	**0.33 J**	0.72	**5.3**	0.66
4	LIN04-SB1	LIN04-SB1-02	7/18/2018	14-16	REG	0.63 U	5.9	**3.7**	1.5	**160 J**	0.25 U
4	LIN04-SB2	LIN04-SB2-01	7/18/2018	0-2	REG	9	0.61	**0.22** U	0.72	**0.95**	0.79
4	LIN04-SB2	LIN04-SB2-02	7/18/2018	15-17	REG	0.6 U	0.24 U	**0.11 J**	0.17 J	**0.88**	0.24 U

Table 7. Summary of Soil and Sediment Analytical Results (continued)

					Analyte	Perfluorooctane Sulfonate (PFOS)	Perfluorooctanoic Acid (PFOA)	Perfluorobutane Sulfonate (PFBS)	Perfluoroheptanoic Acid (PFHpA)	Perfluorohexane Sulfonate (PFHxS)	Perfluorononanoic Acid (PFNA)
					Screening Level[a]	1,260	1,260	1,260,000	NA	NA	NA
PRL	Location	Sample Identifier	Sample Date	Sample Depth (ft)	Sample Type	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
5	LIN05-SB1	LIN05-SB1-01	7/19/2018	0-2	REG	**770 J**	**1.6**	**1.3**	**0.59**	**21**	**2.2 J**
5	LIN05-SB1	LIN05-SB1-02	7/19/2018	12-14	REG	**1.6**	**0.47**	**0.27 J**	**0.13 J**	**2.3**	0.25 U
5	LIN05-SB2	LIN05-SB2-01	7/18/2018	0-2	REG	**9.2**	**0.45**	**0.46 J**	**0.2 J**	**2.1**	**0.52**
5	LIN05-SB2	LIN05-SB2-02	7/18/2018	12-14	REG	0.66 U	0.26 U	0.24 U	0.26 U	0.087 U	0.26 U
5	LIN05-SB3	LIN05-SB3-01	7/19/2018	0-2	REG	**18**	**2.7**	**0.24 J**	**0.46**	**4.7**	**0.71**
5	LIN05-SB3	LIN05-SB3-01D	7/19/2018	0-2	FD	**17**	**2.6**	**0.31 J**	**0.53**	**5.4**	**0.5**
5	LIN05-SB3	LIN05-SB3-02	7/19/2018	18-20	REG	**0.76 J**	0.25 U	**0.31 J**	0.25 U	**0.99**	0.25 U
7	LIN07-SB1	LIN07-SB1-01	7/20/2018	0-2	REG	**4.3**	**0.41**	0.23 U	**0.38 J**	**1.7**	**0.14 J**
7	LIN07-SB1	LIN07-SB1-02	7/20/2018	4-6	REG	0.64 U	0.26 U	**0.17 J**	**0.18 J**	**5.9**	0.26 U
7	LIN07-SB1	LIN07-SB1-02D	7/20/2018	4-6	FD	**2.6**	**0.18 J**	**0.13 J**	**0.16 J**	**5**	0.25 U
7	LIN07-SB2	LIN07-SB2-01	7/20/2018	0-2	REG	**9.6**	**0.46**	0.24 U	**0.36 J**	**1.6**	**0.19 J**
7	LIN07-SB2	LIN07-SB2-02	7/20/2018	9-11	REG	0.76 U	0.3 U	**1.8**	0.3 U	**0.56**	0.3 U
8	LIN08-SB1	LIN08-SB1-01	7/20/2018	0-2	REG	14	0.69	**0.15 J**	0.2 J	**0.75**	0.2 J
8	LIN08-SB1	LIN08-SB1-02	7/20/2018	7-9	REG	0.62 U	0.25 U	**0.22** U	0.25 U	**0.16 U**	0.25 U
8	LIN08-SB2	LIN08-SB2-01	7/20/2018	0-2	REG	1.3	0.24 U	**0.22** U	0.24 U	**0.16 J**	0.24 U
8	LIN08-SB2	LIN08-SB2-02	7/20/2018	4.5-6.5	REG	3.3 J	0.69	**0.25** U	0.28 U	**0.74**	0.28 U
9	LIN09-SB1	LIN09-SB1-01	7/19/2018	0-2	REG	6.3	0.61	**0.16 J**	0.64	**1.6**	0.2 J
9	LIN09-SB1	LIN09-SB1-02	7/19/2018	10-12	REG	1.6	0.18 J	**0.54**	0.15 J	**1.9**	0.26 U
9	LIN09-SB2	LIN09-SB2-01	7/19/2018	0-2	REG	8.6	0.72	**0.21 J**	0.55	**2.3**	0.54
9	LIN09-SB2	LIN09-SB2-02	7/19/2018	16-18	REG	0.67 U	0.27 U	**0.24** U	0.27 U	**0.12 J**	0.27 U

Table 7. Summary of Soil and Sediment Analytical Results (continued)

					Analyte	Perfluorooctane Sulfonate (PFOS)	Perfluorooctanoic Acid (PFOA)	Perfluorobutane Sulfonate (PFBS)	Perfluoroheptanoic Acid (PFHpA)	Perfluorohexane Sulfonate (PFHxS)	Perfluorononanoic Acid (PFNA)
					Screening Level[a]	1,260	1,260	1,260,000	NA	NA	NA
PRL	Location	Sample Identifier	Sample Date	Sample Depth (ft)	Sample Type	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
Sediment											
11	LIN11-SD1	LIN11-SD1-01	7/25/2018	0	REG	**11**	**0.59**	**0.14 J**	0.28 U	**1.4**	0.28 U
13	LIN13-SD1	LIN13-SD1-01	7/25/2018	0	REG	**850 J**	**5**	**3.4**	**1.3**	**37 J**	**0.39 J**
14	LIN14-SD1	LIN14-SD1-01	7/25/2018	0	REG	**22**	**0.46 J**	**0.21 J**	**0.2 J**	**2.6**	**0.22 J**

*EPA residential risk-based soil screening level determined using the EPA RSL calculator and May 2018 EPA RSL tables.
Bold denotes detected concentration.

µg/kg = Micrograms per kilogram.
EPA = U.S. Environmental Protection Agency.
FD = Field duplicate.
NA = Not applicable.
PRL = Potential release location.
REG = Regular.
RSL = Regional screening level.

Data Qualifiers:
J = Estimated concentration.
U = Chemical not detected above the laboratory detection limit.

Table 8. Summary of Groundwater and Surface Water Analytical Results

					Analyte	Perfluorooctane Sulfonate (PFOS)	Perfluorooctanoic Acid (PFOA)	PFOS+PFOA	Perfluorobutane Sulfonate (PFBS)	Perfluoroheptanoic Acid (PFHpA)	Perfluorohexane Sulfonate (PFHxS)	Perfluorononanoic Acid (PNFA)
					Health Advisory[a]	70	70	70	NA	NA	NA	NA
					EPA RSL Tap Water[b]	NA	NA	NA	400,000	NA	NA	NA
PRL	Location	Sample Identifier	Sample Date	Sample Depth (ft)	Sample Type	(ng/L)	(ng/L)	(ng/L)	(ng/L)	(ng/L)	(ng/L)	(ng/L)
Groundwater												
1	MW-LIN01-01	MW-LIN01-01-01	7/25/2018	14	REG	44 U	36	36	14	12	87	1 J
2	MW-LIN02-01	MW-LIN02-01-01	7/25/2018	19.72	REG	13000 J	1700 J	14700	2100 J	760 J	15000 J	91
2	TU015-MW005-PRL02	TU015-MW005-PRL02-01	7/25/2018	17	REG	2400 J	230	2630	340 J	160	2200 J	5.3
3	MW-LIN03-01	MW-LIN03-01-01	7/25/2018	24.7	REG	4200 J	180	4380	230	140	2100 J	8.7
3	MW-LIN03-01	MW-LIN03-01-01D	7/25/2018	24.7	FD	3800 J	190	3990	240	150	2000 J	9.3
4	MW-LIN04-01	MW-LIN04-01-01	7/25/2018	19.68	REG	13000 J	1300 J	14300	1500 J	590 J	13000 J	73
5	MW-LIN05-01	MW-LIN05-01-01	7/25/2018	20	REG	1500 J	130	1630	190	110 J	1500 J	6.4
7	MW-LIN07-01	MW-LIN07-01-01	7/25/2018	19.7	REG	640 J	140	780	260	80	1200 J	6
8	MW-LIN08-01	MW-LIN08-01-01	7/25/2018	19.56	REG	880 J	410 J	1290	1100 J	270	3800 J	3.2
9	MW-LIN09-01	MW-LIN09-01-01	7/25/2018	19.04	REG	13 U	40	40	980 J	210	680 J	0.61 J
Surface Water												
11	LIN11-SW1	LIN11-SW1-01	7/25/2018	NA	REG	120	10	130	8	11	44	1.8 J
13	LIN13-SW1	LIN13-SW1-01	7/25/2018	NA	REG	33000 J	1800 J	34800	2200 J	940 J	17000 J	31 J
14	LIN14-SW1	LIN14-SW1-01	7/25/2018	NA	REG	990 J	90	1080	180	60	940 J	4

Table 8. Summary of Groundwater and Surface Water Analytical Results (continued)

[a] May 2016 EPA health advisory for PFOS/PFOA combined.
[b] May 2018 EPA RSL for tap water.
Bold denotes detected concentration.
Bold highlighted denotes concentration that exceeds screening criteria.
EPA = U.S. Environmental Protection Agency.
FD = Field duplicate.
NA = Not applicable.
ng/L = Nanograms per liter.
PFOA = Perfluorooctanoic acid.
PFOS = Perfluorooctane sulfonate.
PRL = Potential release location.
REG = Regular.
RSL = Regional screening level.

Data Qualifiers:
J = Estimated concentration.
U = Chemical not detected above the laboratory detection limit.

Table 9. Field QC Blank Results

Parameter / Sample ID / Sample Type / Sample Date	Units	ER-01 RNSW 07/18/2018	ER-02 RNSW 07/19/2018	ER-03 RNSW 07/19/2018	ER-04 RNSW 07/20/2018	ER-05 RNSW 07/24/2018	FB-01 FBLK 07/19/2018	Field Reagent Blank FBLK 07/19/2018
Perfluorobutanesulfonic acid	ng/L	0.87 U	0.88 U	1.4 U	1.1 U	0.87 U	**1.1 J**	0.87 U
Perfluoroheptanoic acid	ng/L	1.3 U	1.3 U	2.1 U	1.6 U	1.3 U	**2.8**	1.3 U
Perfluorohexanesulfonic acid	ng/L	0.33 U	0.88 U	**2.2 J**	1.1 U	**0.54 J**	**4.3**	0.87 U
Perfluorononanoic acid	ng/L	1.3 U	1.3 U	2.1 U	1.6 U	1.3 U	**0.78 J**	1.3 U
Perfluorooctane sulfonate	ng/L	**1.1 J**	2.6 U	**25 J**	3.2 U	**0.97 J**	**16 J**	2.6 U
Perfluorooctanoic acid	ng/L	1.3 U	1.3 U	2.1 U	1.6 U	1.3 U	**2.1 J**	1.3 U

Bold denotes detected concentration.
FBLK = Field blank.
ID = Identification.
ng/L = Nanograms per liter.
QC = Quality control.
RNSW = Rinse water.

Data Qualifiers:
J = Estimated concentration.
U = Chemical not detected above the laboratory detection limit.

Table 10. SI Recommendation Summary Table

PRL No.	PRL Description	Constituents Above Screening Criteria	Sampling Recommendations and Objectives
1	Aircraft Parking Ramp	**None**	**Soil:** Although screening criteria were not exceeded, additional surface and subsurface soil samples are proposed to determine if an unidentified source exists, and if so, to determine the nature and extent in the vertical and horizontal directions given the potential for soil to groundwater migration. **Groundwater:** Determine the nature and extent both vertically and horizontally through the sampling of existing and additional new monitoring wells.
2	Main Aircraft Maintenance Hangar – Building 600	**Groundwater:** PFOS + PFOA	**Soil:** Although screening criteria were not exceeded, additional surface and subsurface soil samples are proposed to determine if an unidentified source exists, and if so, to determine the nature and extent in the vertical and horizontal directions given the potential for soil to groundwater migration. **Groundwater:** Determine the nature and extent both vertically and horizontally through the sampling of existing and additional new monitoring wells.
3	Fuel Systems Maintenance Hangar – Building 2600	**Groundwater:** PFOS + PFOA	**Soil:** Although screening criteria were not exceeded, additional surface and subsurface soil samples are proposed to determine if an unidentified source exists, and if so, to determine the nature and extent in the vertical and horizontal directions given the potential for soil to groundwater migration. **Groundwater:** Determine the nature and extent both vertically and horizontally through the sampling of existing and additional new monitoring wells.
4	Current Fire Station – Building 2500	**Groundwater:** PFOS + PFOA	**Soil:** Although screening criteria were not exceeded, additional surface and subsurface soil samples are proposed to determine if an unidentified source exists, and if so, to determine the nature and extent in the vertical and horizontal directions given the potential for soil to groundwater migration. **Groundwater:** Determine the nature and extent both vertically and horizontally through the sampling of existing and additional new monitoring wells.
5	Former Fire Station – Former Building 606	**Groundwater:** PFOS + PFOA	**Soil:** Although screening criteria were not exceeded, additional surface and subsurface soil samples are proposed to determine if an unidentified source exists, and if so, to determine the nature and extent in the vertical and horizontal directions given the potential for soil to groundwater migration. **Groundwater:** Determine the nature and extent both vertically and horizontally through the sampling of existing and additional new monitoring wells.
7	Vehicle Maintenance – Building 636	**Groundwater:** PFOS + PFOA	**Soil:** Although screening criteria were not exceeded, additional surface and subsurface soil samples are proposed to determine if an unidentified source exists, and if so, to determine the nature and extent in the vertical and horizontal directions given the potential for soil to groundwater migration. **Groundwater:** Determine the nature and extent both vertically and horizontally through the sampling of existing and additional new monitoring wells.
8	Civil Engineering – Building 635	**Groundwater: PFOS + PFOA**	**Soil:** Although screening criteria were not exceeded, additional surface and subsurface soil samples are proposed to determine if an unidentified source exists, and if so, to determine the nature and extent in the vertical and horizontal directions given the potential for soil to groundwater migration. **Groundwater:** Determine the nature and extent both vertically and horizontally through the sampling of existing and additional new monitoring wells.

Table 10. SI Recommendation Summary Table (continued)

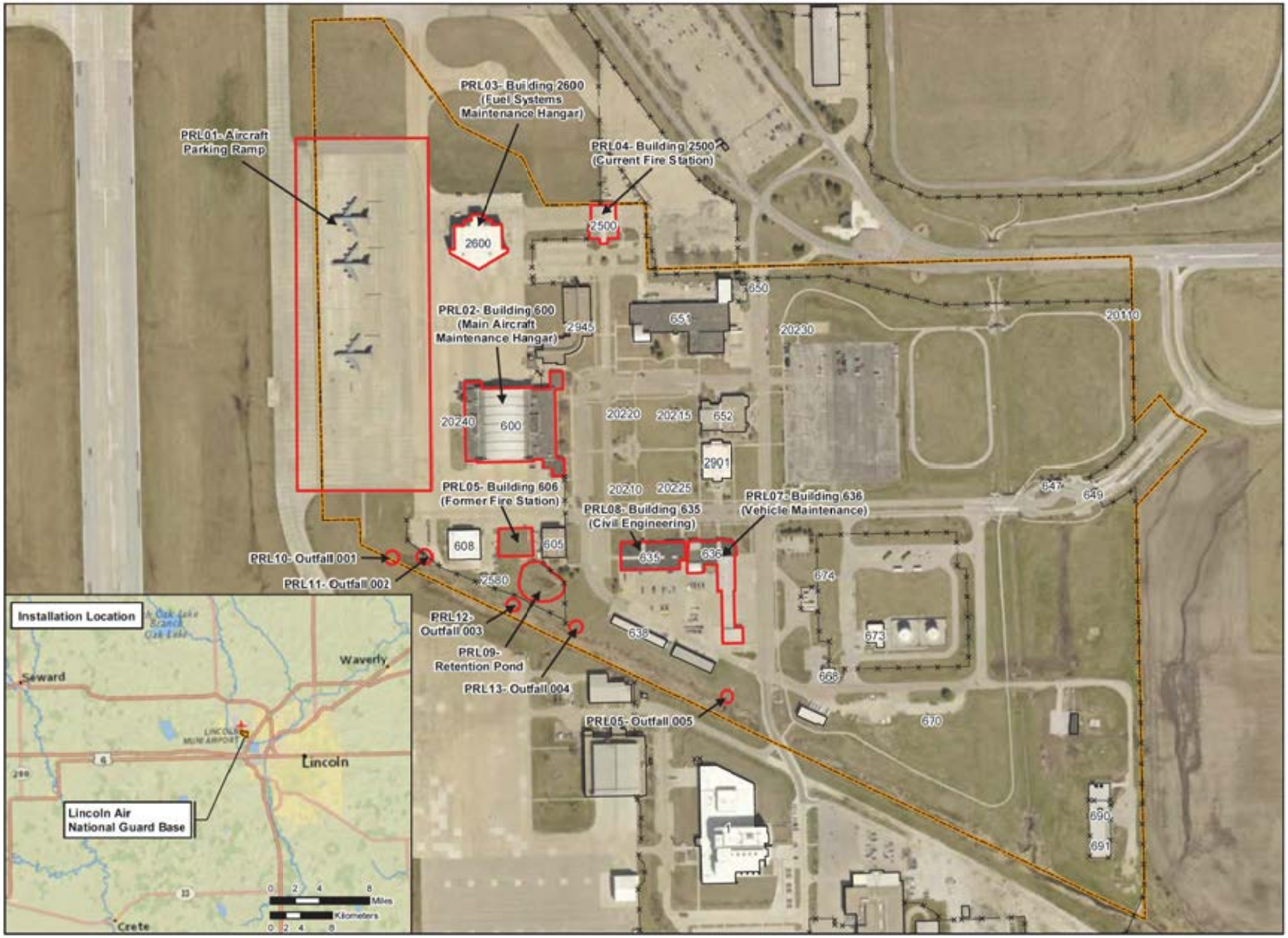
PRL No.	PRL Description	Constituents Above Screening Criteria	Sampling Recommendations and Objectives
9	Retention Pond	**None**	**Soil:** Although screening criteria were not exceeded, additional surface and subsurface soil samples are proposed to determine if an unidentified source exists, and if so, to determine the nature and extent in the vertical and horizontal directions given the potential for soil to groundwater migration. **Groundwater:** Determine the nature and extent both vertically and horizontally through the sampling of existing and additional new monitoring wells.
10	Outfall 001	**No surface water/sediment available for sample collection**	**Surface Water and Sediment**: Determine PFOS/PFOA impact to surface water through upgradient sampling of surface water and sediment and evaluate potential downgradient impacts at locations off Base.
11	Outfall 002	**Surface Water:** PFOS + PFOA	**Surface Water and Sediment**: Determine PFOS/PFOA impact to surface water through additional upgradient sampling of surface water and sediment and evaluate potential downgradient impacts at locations off Base.
12	Outfall 003	**No surface water/sediment available for sample collection**	**Surface Water and Sediment**: Determine PFOS/PFOA impact to surface water through upgradient sampling of surface water and sediment and evaluate potential downgradient impacts at locations off Base.
13	Outfall 004	**Surface Water:** PFOS + PFOA	**Surface Water and Sediment**: Determine PFOS/PFOA impact to surface water through additional upgradient sampling of surface water and sediment and evaluate potential downgradient impacts at locations off Base.
14	Outfall 005	**Surface Water:** PFOS + PFOA	**Surface Water and Sediment**: Determine PFOS/PFOA impact to surface water through additional upgradient sampling of surface water and sediment and evaluate potential downgradient impacts at locations off Base.
General			**Soil:** Collect additional surface and subsurface soil samples to determine the nature and extent both vertically and horizontally of PFOS/PFOA contamination. Analyze for an expanded list of PFOS/PFOA compounds to evaluate for potential precursor compounds. **Groundwater:** (1) Collect additional groundwater samples in upgradient locations to quantify potential impacts from upgradient sources; and (2) collect additional groundwater samples off Base through the installation of a limited number of new monitoring wells to determine if PFAS concentrations beyond the Base boundary are present and are increasing or decreasing. **Surface Water/Sediment:** (1) Collect additional surface water and sediment samples in upgradient locations to quantify potential impacts from upgradient sources; and (2) collect additional surface water and sediment samples off Base to determine the nature and extent of PFAS beyond the Base boundary.

PFOA = Perfluorooctanoic acid.
PFOS = Perfluorooctane sulfonate.
PRL = Potential release location.
SI = Site inspection.

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FIGURES

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LEGEND:

- Potential Release Location (PRL)
- Installation Boundary*
- Building*
- Fence*

NOTES:

* Source: Common Installation Picture (CIP) geodatabase provided by ANG GeoBase on 07/26/2017.

1. Background Source: ESRI World Imagery (Lincoln/Lancaster County Orthos, 03/2016).

0 100 200 400 Feet
0 25 50 100 Meters



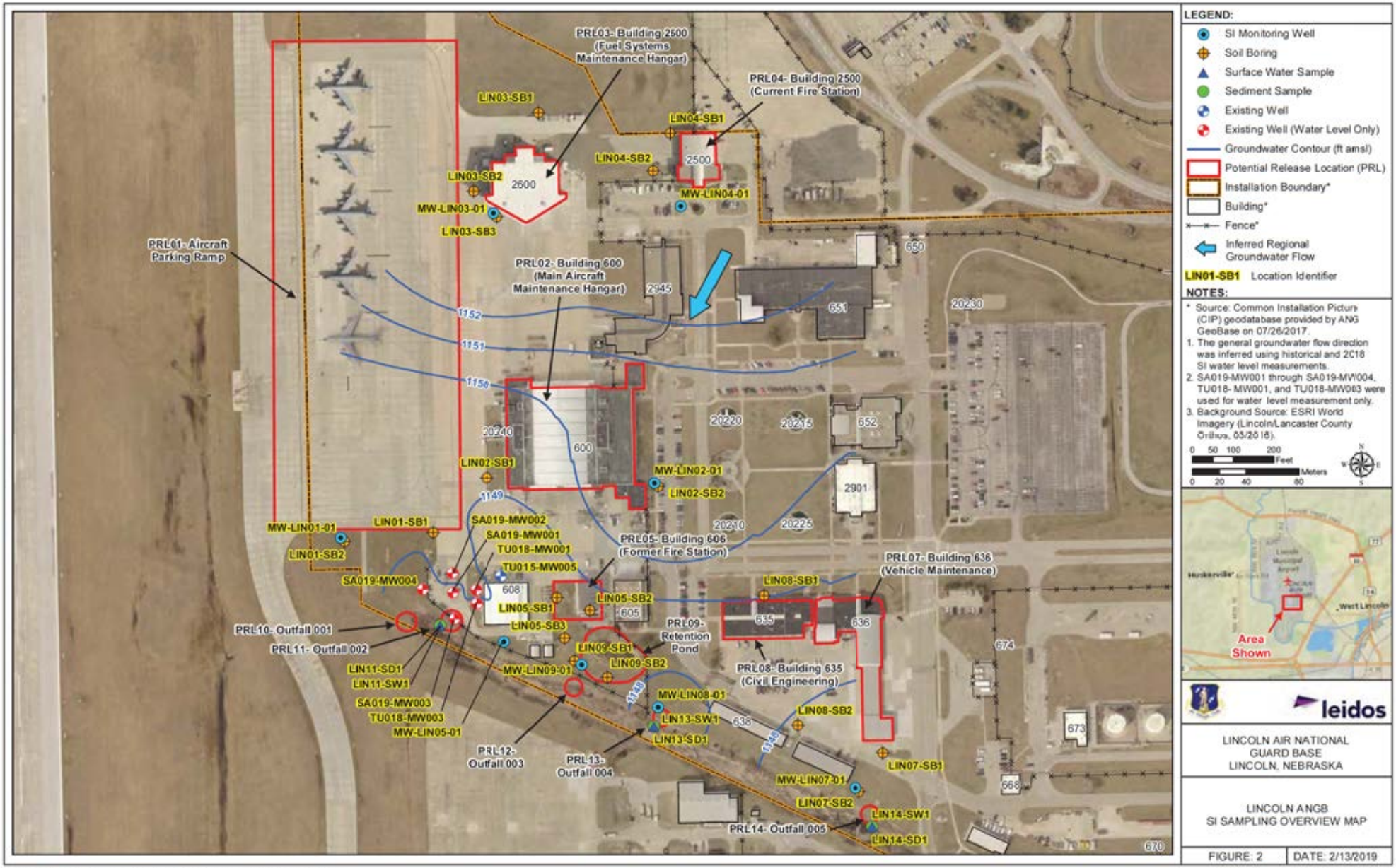
leidos

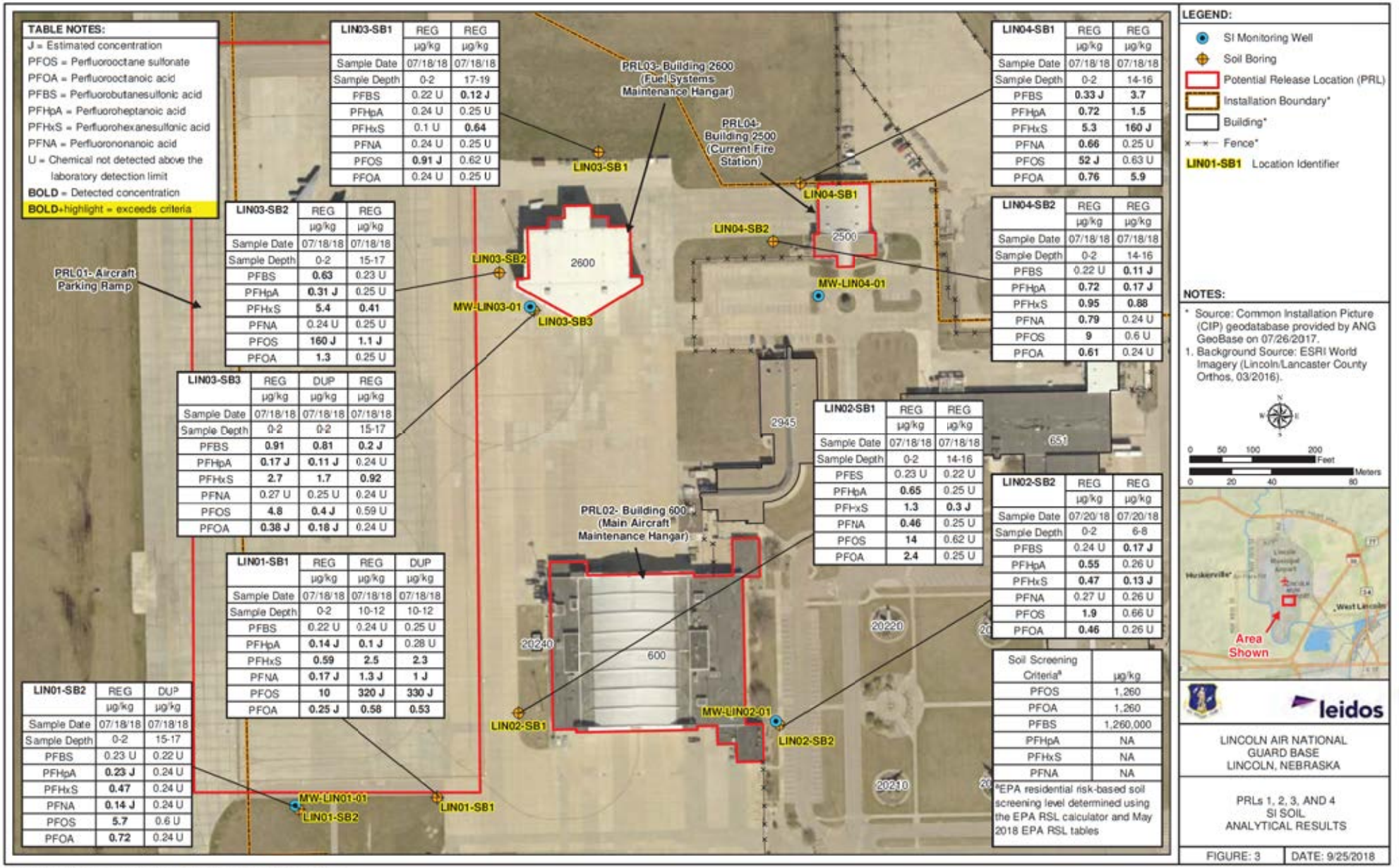
LINCOLN AIR NATIONAL GUARD BASE
LINCOLN, NEBRASKA

LINCOLN ANGB
LOCATION MAP

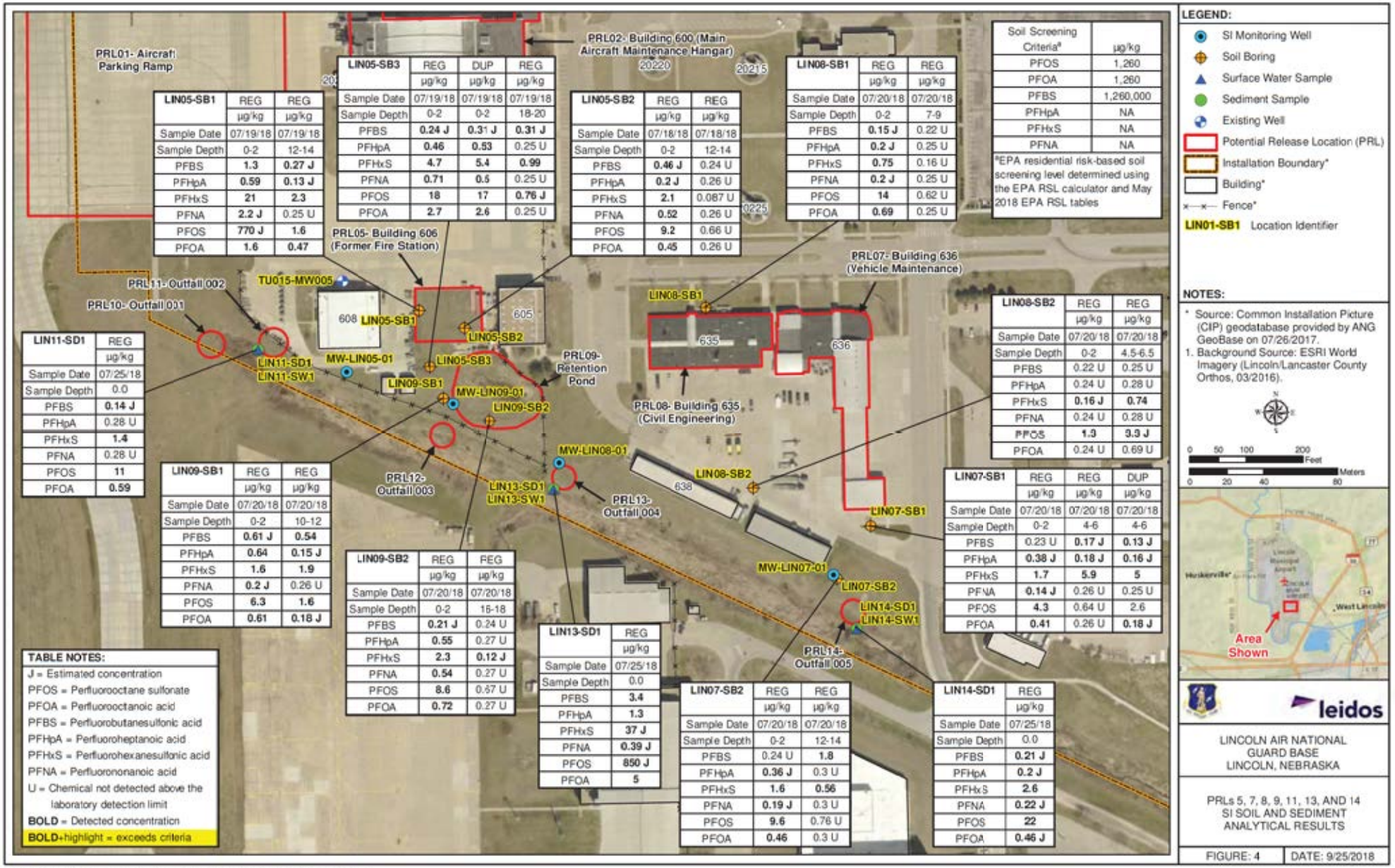
FIGURE: 1 | DATE: 9/14/2018

PROJECT: \\E2\Projects\ANG Phase 3 SI for PFCs\z_GIS\Lincoln\Projects\SI\Figure 1 Lincoln Location Map_11x17.mxd


PRL03- Building 2500 (Fuel Systems Maintenance Hangar)
PRL04- Building 2500 (Current Fire Station)
PRL01- Aircraft Parking Ramp
PRL02- Building 600 (Main Aircraft Maintenance Hangar)
PRL05- Building 606 (Former Fire Station)
PRL07- Building 636 (Vehicle Maintenance)
PRL08- Building 635 (Civil Engineering)
PRL09- Retention Pond
PRL10- Outfall 001
PRL11- Outfall 002
PRL12- Outfall 003
PRL13- Outfall 004
PRL14- Outfall 005
LIN03-SB1
LIN03-SB2
LIN03-SB3
MW-LIN03-01
LIN04-SB1
LIN04-SB2
MW-LIN04-01
LIN02-SB1
LIN02-SB2
MW-LIN02-01
LIN01-SB1
LIN01-SB2
MW-LIN01-01
SA019-MW002
SA019-MW001
TU018-MW001
TU015-MW005
SA019-MW004
LIN05-SB1
LIN05-SB2
LIN05-SB3
LIN08-SB1
LIN08-SB2
MW-LIN08-01
LIN09-SB1
LIN09-SB2
MW-LIN09-01
LIN11-SD1
LIN11-SW1
SA019-MW003
TU018-MW003
MW-LIN05-01
LIN13-SW1
LIN13-SD1
LIN07-SB1
MW-LIN07-01
LIN07-SB2
LIN14-SW1
LIN14-SD1
2600
2500
600
608
605
635
636
638
673
668
674
670
650
651
652
2945
2901
20230
20240
20220
20215
20210
20225
1152
1151
1150
1149
1148
1146
LEGEND:
SI Monitoring Well
Soil Boring
Surface Water Sample
Sediment Sample
Existing Well
Existing Well (Water Level Only)
Groundwater Contour (ft amsl)
Potential Release Location (PRL)
Installation Boundary*
Building*
Fence*
Inferred Regional Groundwater Flow
LIN01-SB1 Location Identifier
NOTES:
* Source: Common Installation Picture (CIP) geodatabase provided by ANG GeoBase on 07/26/2017.
1. The general groundwater flow direction was inferred using historical and 2018 SI water level measurements.
2. SA019-MW001 through SA019-MW004, TU018- MW001, and TU018-MW003 were used for water level measurement only.
3. Background Source: ESRI World Imagery (Lincoln/Lancaster County Orthos, 03/2018).
0 50 100 200 Feet
0 20 40 80 Meters
Area Shown
LINCOLN AIR NATIONAL GUARD BASE
LINCOLN, NEBRASKA
LINCOLN ANGB
SI SAMPLING OVERVIEW MAP
FIGURE: 2
DATE: 2/13/2019



PROJECT: \027Projects\ANG Phase 3 SI for PFOA\z_GIS\Lincoln\Projects\SI\Figure 3 PRL 1 2 3 4 Soil Results_11x17.mxd



LIN05-SB1	REG	REG
	µg/kg	µg/kg
Sample Date	07/19/18	07/19/18
Sample Depth	0-2	12-14
PFBS	**1.3**	**0.27 J**
PFHpA	**0.59**	**0.13 J**
PFHxS	**21**	**2.3**
PFNA	**2.2 J**	0.25 U
PFOS	**770 J**	**1.6**
PFOA	**1.6**	**0.47**

LIN05-SB3	REG	DUP	REG
	µg/kg	µg/kg	µg/kg
Sample Date	07/19/18	07/19/18	07/19/18
Sample Depth	0-2	0-2	18-20
PFBS	**0.24 J**	**0.31 J**	**0.31 J**
PFHpA	**0.46**	**0.53**	0.25 U
PFHxS	**4.7**	**5.4**	**0.99**
PFNA	**0.71**	**0.5**	0.25 U
PFOS	**18**	**17**	**0.76 J**
PFOA	**2.7**	**2.6**	0.25 U

LIN05-SB2	REG	REG
	µg/kg	µg/kg
Sample Date	07/18/18	07/18/18
Sample Depth	0-2	12-14
PFBS	**0.46 J**	0.24 U
PFHpA	**0.2 J**	0.26 U
PFHxS	**2.1**	0.087 U
PFNA	**0.52**	0.26 U
PFOS	**9.2**	0.66 U
PFOA	**0.45**	0.26 U

LIN08-SB1	REG	REG
	µg/kg	µg/kg
Sample Date	07/20/18	07/20/18
Sample Depth	0-2	7-9
PFBS	**0.15 J**	0.22 U
PFHpA	**0.2 J**	0.25 U
PFHxS	**0.75**	0.16 U
PFNA	**0.2 J**	0.25 U
PFOS	**14**	0.62 U
PFOA	**0.69**	0.25 U

Soil Screening Criteria[a]	µg/kg
PFOS	1,260
PFOA	1,260
PFBS	1,260,000
PFHpA	NA
PFHxS	NA
PFNA	NA

[a]EPA residential risk-based soil screening level determined using the EPA RSL calculator and May 2018 EPA RSL tables

LIN08-SB2	REG	REG
	µg/kg	µg/kg
Sample Date	07/20/18	07/20/18
Sample Depth	0-2	4.5-6.5
PFBS	0.22 U	0.25 U
PFHpA	0.24 U	0.28 U
PFHxS	**0.16 J**	**0.74**
PFNA	0.24 U	0.28 U
PFOS	**1.3**	**3.3 J**
PFOA	0.24 U	0.69 U

LIN11-SD1	REG
	µg/kg
Sample Date	07/25/18
Sample Depth	0.0
PFBS	**0.14 J**
PFHpA	0.28 U
PFHxS	**1.4**
PFNA	0.28 U
PFOS	**11**
PFOA	**0.59**

LIN09-SB1	REG	REG
	µg/kg	µg/kg
Sample Date	07/20/18	07/20/18
Sample Depth	0-2	10-12
PFBS	**0.61 J**	**0.54**
PFHpA	**0.64**	**0.15 J**
PFHxS	**1.6**	**1.9**
PFNA	**0.2 J**	0.26 U
PFOS	**6.3**	**1.6**
PFOA	**0.61**	**0.18 J**

LIN09-SB2	REG	REG
	µg/kg	µg/kg
Sample Date	07/20/18	07/20/18
Sample Depth	0-2	16-18
PFBS	**0.21 J**	0.24 U
PFHpA	**0.55**	0.27 U
PFHxS	**2.3**	**0.12 J**
PFNA	**0.54**	0.27 U
PFOS	**8.6**	0.67 U
PFOA	**0.72**	0.27 U

LIN13-SD1	REG
	µg/kg
Sample Date	07/25/18
Sample Depth	0.0
PFBS	**3.4**
PFHpA	**1.3**
PFHxS	**37 J**
PFNA	**0.39 J**
PFOS	**850 J**
PFOA	**5**

LIN07-SB1	REG	REG	DUP
	µg/kg	µg/kg	µg/kg
Sample Date	07/20/18	07/20/18	07/20/18
Sample Depth	0-2	4-6	4-6
PFBS	0.23 U	**0.17 J**	**0.13 J**
PFHpA	**0.38 J**	**0.18 J**	**0.16 J**
PFHxS	**1.7**	**5.9**	**5**
PFNA	**0.14 J**	0.26 U	0.25 U
PFOS	**4.3**	0.64 U	2.6
PFOA	**0.41**	0.26 U	**0.18 J**

LIN07-SB2	REG	REG
	µg/kg	µg/kg
Sample Date	07/20/18	07/20/18
Sample Depth	0-2	12-14
PFBS	0.24 U	**1.8**
PFHpA	**0.36 J**	0.3 U
PFHxS	**1.6**	**0.56**
PFNA	**0.19 J**	0.3 U
PFOS	**9.6**	0.76 U
PFOA	**0.46**	0.3 U

LIN14-SD1	REG
	µg/kg
Sample Date	07/25/18
Sample Depth	0.0
PFBS	**0.21 J**
PFHpA	**0.2 J**
PFHxS	**2.6**
PFNA	**0.22 J**
PFOS	**22**
PFOA	**0.46 J**

TABLE NOTES:

J = Estimated concentration
PFOS = Perfluorooctane sulfonate
PFOA = Perfluorooctanoic acid
PFBS = Perfluorobutanesulfonic acid
PFHpA = Perfluoroheptanoic acid
PFHxS = Perfluorohexanesulfonic acid
PFNA = Perfluorononanoic acid
U = Chemical not detected above the laboratory detection limit
BOLD = Detected concentration
BOLD+highlight = exceeds criteria

LEGEND:

- SI Monitoring Well
- Soil Boring
- Surface Water Sample
- Sediment Sample
- Existing Well
- Potential Release Location (PRL)
- Installation Boundary*
- Building*
- Fence*
- **LIN01-SB1** Location Identifier

NOTES:

* Source: Common Installation Picture (CIP) geodatabase provided by ANG GeoBase on 07/26/2017.
1. Background Source: ESRI World Imagery (Lincoln/Lancaster County Orthos, 03/2016).

0 50 100 200 Feet
0 20 40 80 Meters

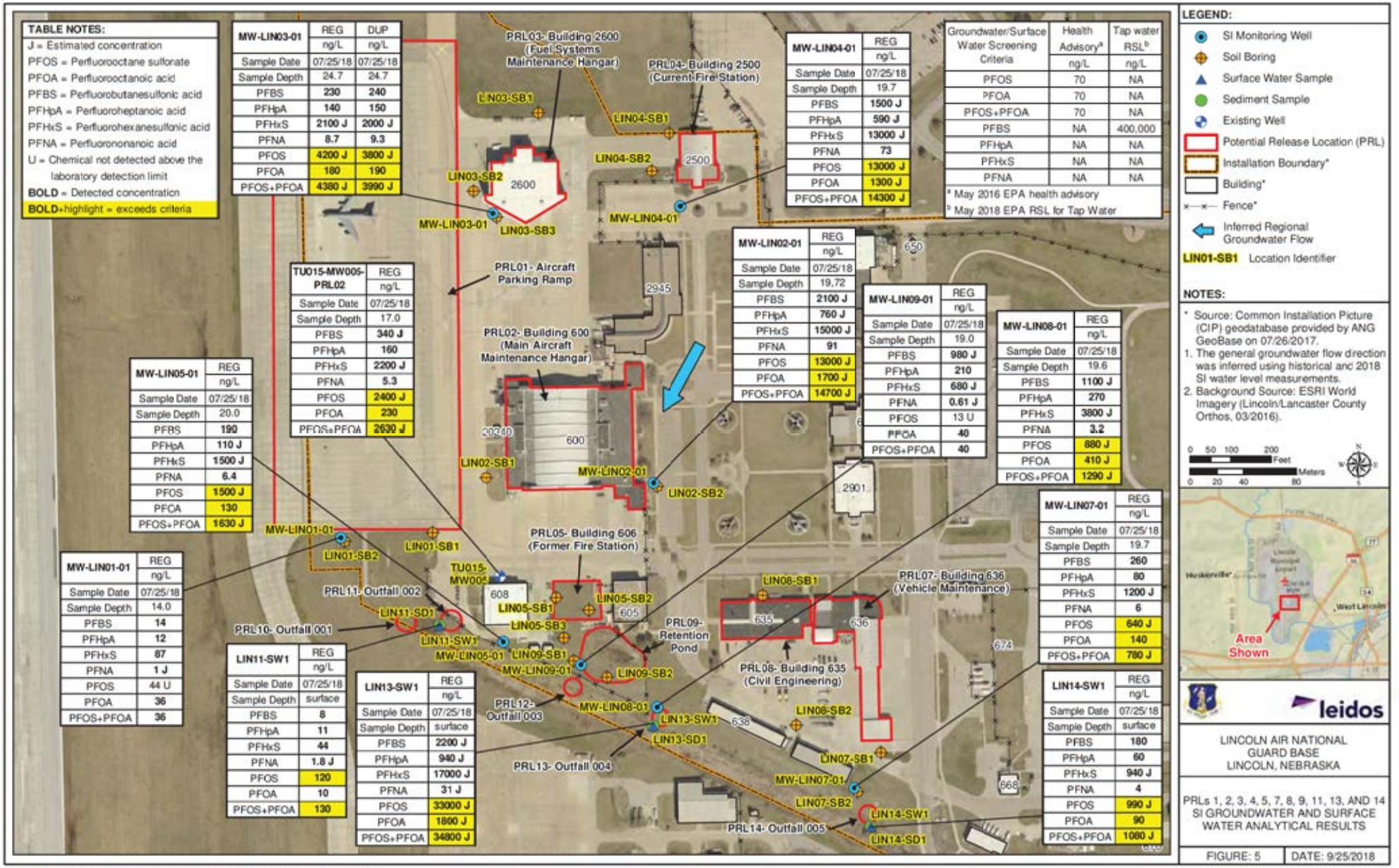
leidos

LINCOLN AIR NATIONAL GUARD BASE
LINCOLN, NEBRASKA

PRLs 5, 7, 8, 9, 11, 13, AND 14
SI SOIL AND SEDIMENT
ANALYTICAL RESULTS

FIGURE: 4 | DATE: 9/25/2018

PROJECT: 027\Projects\ANG Phase 3 SI for PFOA\z_GIS\Lincoln\Projects\SI\Figure 4 PRL 5 7 8 9 11 13 14 Soil Results_11x17.mxd


TABLE NOTES:
J = Estimated concentration
PFOS = Perfluorooctane sulfonate
PFOA = Perfluorooctanoic acid
PFBS = Perfluorobutanesulfonic acid
PFHpA = Perfluoroheptanoic acid
PFHxS = Perfluorohexanesulfonic acid
PFNA = Perfluorononanoic acid
U = Chemical not detected above the laboratory detection limit
BOLD = Detected concentration
BOLD+highlight = exceeds criteria
MW-LIN03-01 | REG ng/L | DUP ng/L
Sample Date | 07/25/18 | 07/25/18
Sample Depth | 24.7 | 24.7
PFBS | 230 | 240
PFHpA | 140 | 150
PFHxS | 2100 J | 2000 J
PFNA | 8.7 | 9.3
PFOS | 4200 J | 3800 J
PFOA | 180 | 190
PFOS+PFOA | 4380 J | 3990 J
MW-LIN04-01 | REG ng/L
Sample Date | 07/25/18
Sample Depth | 19.7
PFBS | 1500 J
PFHpA | 590 J
PFHxS | 13000 J
PFNA | 73
PFOS | 13000 J
PFOA | 1300 J
PFOS+PFOA | 14300 J
Groundwater/Surface Water Screening Criteria | Health Advisory[a] ng/L | Tap water RSL[b] ng/L
PFOS | 70 | NA
PFOA | 70 | NA
PFOS+PFOA | 70 | NA
PFBS | NA | 400,000
PFHpA | NA | NA
PFHxS | NA | NA
PFNA | NA | NA
[a] May 2016 EPA health advisory
[b] May 2018 EPA RSL for Tap Water
MW-LIN02-01 | REG ng/L
Sample Date | 07/25/18
Sample Depth | 19,72
PFBS | 2100 J
PFHpA | 760 J
PFHxS | 15000 J
PFNA | 91
PFOS | 13000 J
PFOA | 1700 J
PFOS+PFOA | 14700 J
MW-LIN09-01 | REG ng/L
Sample Date | 07/25/18
Sample Depth | 19.0
PFBS | 980 J
PFHpA | 210
PFHxS | 680 J
PFNA | 0.61 J
PFOS | 13 U
PFOA | 40
PFOS+PFOA | 40
MW-LIN08-01 | REG ng/L
Sample Date | 07/25/18
Sample Depth | 19.6
PFBS | 1100 J
PFHpA | 270
PFHxS | 3800 J
PFNA | 3.2
PFOS | 880 J
PFOA | 410 J
PFOS+PFOA | 1290 J
TU015-MW005-PRL02 | REG ng/L
Sample Date | 07/25/18
Sample Depth | 17.0
PFBS | 340 J
PFHpA | 160
PFHxS | 2200 J
PFNA | 5.3
PFOS | 2400 J
PFOA | 230
PFOS+PFOA | 2630 J
MW-LIN05-01 | REG ng/L
Sample Date | 07/25/18
Sample Depth | 20.0
PFBS | 190
PFHpA | 110 J
PFHxS | 1500 J
PFNA | 6.4
PFOS | 1500 J
PFOA | 130
PFOS+PFOA | 1630 J
MW-LIN07-01 | REG ng/L
Sample Date | 07/25/18
Sample Depth | 19.7
PFBS | 260
PFHpA | 80
PFHxS | 1200 J
PFNA | 6
PFOS | 640 J
PFOA | 140
PFOS+PFOA | 780 J
MW-LIN01-01 | REG ng/L
Sample Date | 07/25/18
Sample Depth | 14.0
PFBS | 14
PFHpA | 12
PFHxS | 87
PFNA | 1 J
PFOS | 44 U
PFOA | 36
PFOS+PFOA | 36
LIN11-SW1 | REG ng/L
Sample Date | 07/25/18
Sample Depth | surface
PFBS | 8
PFHpA | 11
PFHxS | 44
PFNA | 1.8 J
PFOS | 120
PFOA | 10
PFOS+PFOA | 130
LIN13-SW1 | REG ng/L
Sample Date | 07/25/18
Sample Depth | surface
PFBS | 2200 J
PFHpA | 940 J
PFHxS | 17000 J
PFNA | 31 J
PFOS | 33000 J
PFOA | 1800 J
PFOS+PFOA | 34800 J
LIN14-SW1 | REG ng/L
Sample Date | 07/25/18
Sample Depth | surface
PFBS | 180
PFHpA | 60
PFHxS | 940 J
PFNA | 4
PFOS | 990 J
PFOA | 90
PFOS+PFOA | 1080 J
PRL03- Building 2600 (Fuel Systems Maintenance Hangar)
PRL04- Building 2500 (Current Fire Station)
PRL01- Aircraft Parking Ramp
PRL02- Building 600 (Main Aircraft Maintenance Hangar)
PRL05- Building 606 (Former Fire Station)
PRL07- Building 636 (Vehicle Maintenance)
PRL08- Building 635 (Civil Engineering)
PRL09- Retention Pond
PRL10- Outfall 001
PRL11- Outfall 002
PRL12- Outfall 003
PRL13- Outfall 004
PRL14- Outfall 005
LIN03-SB1
LIN03-SB2
LIN03-SB3
LIN04-SB1
LIN04-SB2
LIN02-SB1
LIN02-SB2
LIN01-SB1
LIN01-SB2
LIN11-SD1
LIN05-SB1
LIN05-SB2
LIN05-SB3
LIN09-SB1
LIN09-SB2
LIN08-SB1
LIN08-SB2
LIN13-SW1
LIN13-SD1
LIN07-SB1
LIN07-SB2
LIN14-SW1
LIN14-SD1
MW-LIN03-01
MW-LIN04-01
MW-LIN02-01
MW-LIN01-01
MW-LIN05-01
MW-LIN09-01
MW-LIN08-01
MW-LIN07-01
TU015-MW005
2500
2600
2945
600
650
2901
608
605
635
636
638
674
668
LEGEND:
SI Monitoring Well
Soil Boring
Surface Water Sample
Sediment Sample
Existing Well
Potential Release Location (PRL)
Installation Boundary*
Building*
Fence*
Inferred Regional Groundwater Flow
LIN01-SB1 Location Identifier
NOTES:
* Source: Common Installation Picture (CIP) geodatabase provided by ANG GeoBase on 07/26/2017.
1. The general groundwater flow direction was inferred using historical and 2018 SI water level measurements.
2. Background Source: ESRI World Imagery (Lincoln/Lancaster County Orthos, 03/2016).
0 50 100 200 Feet
0 20 40 80 Meters
Area Shown
leidos
LINCOLN AIR NATIONAL GUARD BASE
LINCOLN, NEBRASKA
PRLs 1, 2, 3, 4, 5, 7, 8, 9, 11, 13, AND 14
SI GROUNDWATER AND SURFACE WATER ANALYTICAL RESULTS
FIGURE: 5
DATE: 9/25/2018

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APPENDIX A

SOIL BORINGS AND WELL CONSTRUCTION LOGS

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Client/Installation	Oversight Contractor	Borehole Number
ANG/LINCOLN ANGB	Leidos	LIN04-SB01
Project	**Driller : Stratus**	**Page**
FY17 Phase 3 Regional SI for PFOS/PFOA	ANG/LINCOLN ANGB	Page 1 of 4

Sizes and Type of Drilling and Sampling Equipment	Borehole Location Description
DPT Geoprobe	LIN04-SB01, in grass near firehall

Date/Time Started :	Date/Time Finished
7/18/18 1120	7/18/18 1140

Overburden Thickness	Depth to Groundwater (ft)	Total Depth (ft)
>20 ft	16	20

Sample for PFOS/PFOA Analysis	Sample for PFOS/PFOA Analysis
Sample ID: LIN04-SB01-01 @1135 Sample Interval: 0 to 2 ft	Sample ID: LIN04-SB01-02 @1140 Sample Interval: 14 to 16 ft

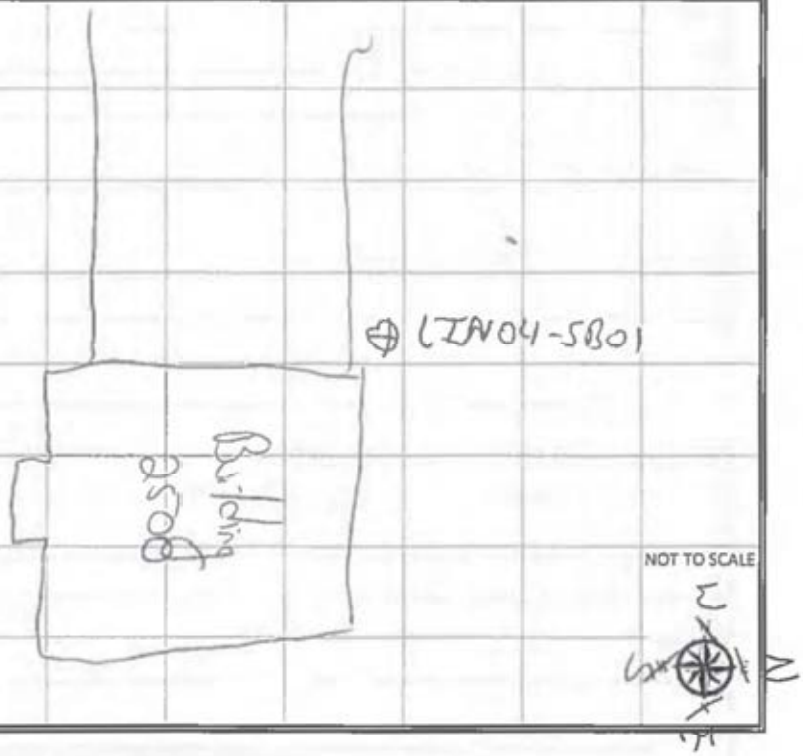
Inspector Name	Inspector Signature
Tom Messing	

Monitoring Well ID :	Backfill Type	Date Backfilled :
N/A	Bentonite #8	7/18/18

Latitude	Longitude	Elevation (ft)
40.843560739	-96.75589434 4	1,164

Notes:
None

Sketch:



Client/Installation	Oversight Contractor	Borehole Number
~~ANG/LINCOLN ANGB~~	Leidos	LIN__-SB__
Project	**Driller : Stratus**	**Page**
FY17 Phase 3 Regional SI for PFOS/PFOA	ANG/LINCOLN ANGB	Page 1 of 4

Sizes and Type of Drilling and Sampling Equipment	Borehole Location Description
DPT Geoprobe	

Date/Time Started :	Date/Time Finished :

Overburden Thickness	Depth to Groundwater (ft)	Total Depth (ft)

Sample for PFOS/PFOA Analysis	Sample for PFOS/PFOA Analysis
Sample ID: LIN__-SB__-01 Sample Interval: 0 to 2 ft	Sample ID: LIN__-SB__-02 Sample Interval: ____ to ____ ft

Inspector Name	Inspector Signature
Tom Messing	

Monitoring Well ID :	Backfill Type	Date Backfilled :

Latitude	Longitude	Elevation (ft)

Notes:

Sketch:

NOT TO SCALE

Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	LIN24-SB01	Page 2 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/18/18

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes:
0.5	10YR 4/3, dry silty clay low plasticity Brown	0.0	0-2' 1135 7/18/18	
1				
1.5				
2		0.0		
2.5				
3				
3.5				
4	2.5YR 4/6 silty clay moist, plastic reddish moderate brown	0.0		
4.5				
5				
5.5				
6		0.0		
6.5				
7				
7.5				
8		0.0		
8.5				
9				
9.5				
10				

Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	LINCH-SB1	Page 3 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/18/18

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes:
10.5	2.5YR 4/6 silty clay reddish brown			
11.0				
11.5				
12.0		0.2		
12.5				
13.0				
13.5				
14.0		0.0		
14.5			Sample 1140 7/18/18	
15.0				
15.5				
16.0	layer	0.0		
16.5				
17.0				
17.5				
18.0				
18.5				
19.0				
19.5				
20.0				

SAMPLE COLLECTION/CHAIN-OF-CUSTODY RECORD

PROJECT NAME: LINCOLN ANG DELIVERY ORDER 0011

Borehole Data	
SAMPLING POINT:	LIN34-SB01
SAMPLE LOCATION:	LIN04-SB01
SAMPLE MEDIA:	Soil
SAMPLE TYPE	Grab
LOGBOOK NUMBER:	1

SAC - TestAmerica Sacramento

Sample Data	Sample No. 1
SAMPLE ID NUMBER:	LIN34-SB01-01
SAMPLE DEPTH:	0-2'

FIELD	READING	UNITS	
PID	0.0	ppm	

Date/Time: 7/18/18 1135

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	NR X

Sample Data	Sample No. 2
SAMPLE ID NUMBER:	LIN34-SB01-02
SAMPLE DEPTH (FT): bgs	14-16

FIELD	READING	UNITS	
PID	0.0	ppm	

Date/Time: 7/18/18 1140

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	NR X

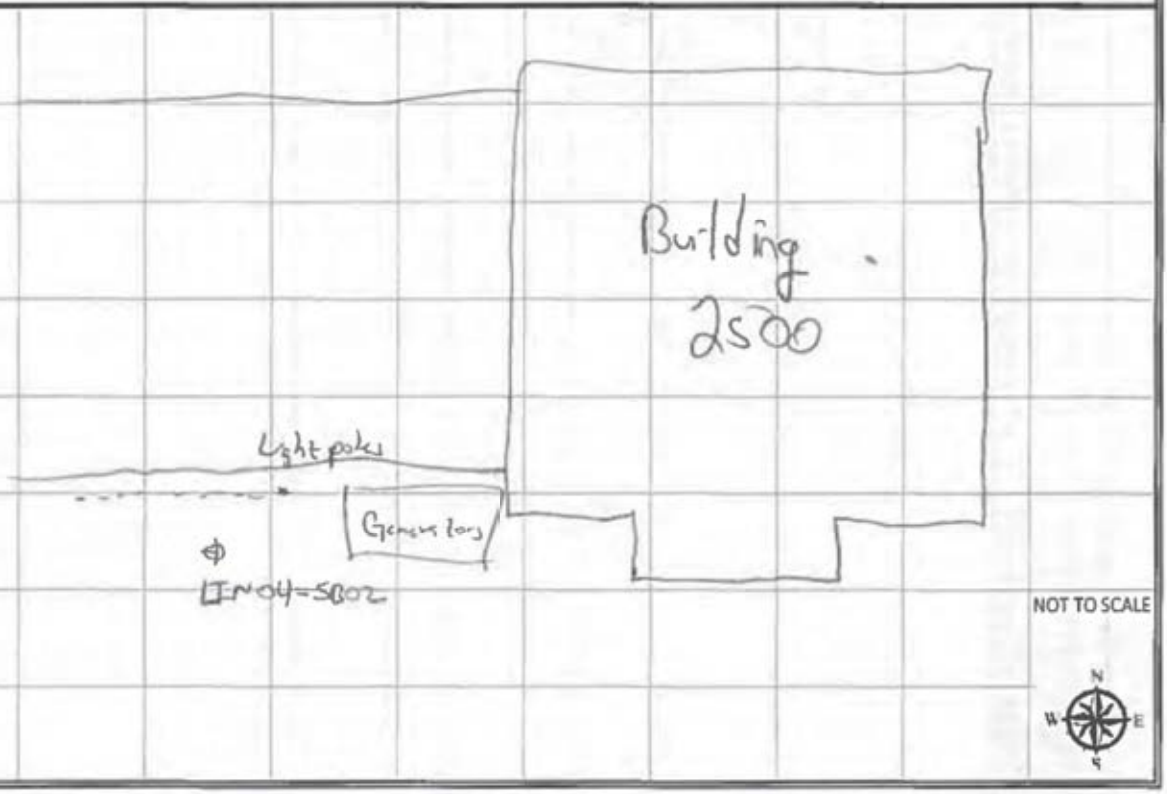
** "X" analysis collected; "IS" insufficient volume; "NR" not required; define other code as appropriate

COMMENTS: None

Client/Installation	Oversight Contractor	Borehole Number
ANG/LINCOLN ANGB	Leidos	LIN04-SB02
Project	**Driller : Stratus**	**Page**
FY17 Phase 3 Regional SI for PFOS/PFOA	ANG/LINCOLN ANGB	Page 1 of 4
Sizes and Type of Drilling and Sampling Equipment		**Borehole Location Description**
DPT Geoprobe		LIN04-SB02 west of fire hose in grass
Date/Time Started :		**Date/Time Finished :**
7/18/18 1200		1220
Overburden Thickness	**Depth to Groundwater (ft)**	**Total Depth (ft)**
> 20ft	17	20
Sample for PFOS/PFOA Analysis		**Sample for PFOS/PFOA Analysis**
Sample ID: LIN04-SB02-01		**Sample ID: LIN04-SB02-02**
Sample Interval: 0 to 2 ft		**Sample Interval: 15 to 17 ft**
Inspector Name		**Inspector Signature**
Tom Messing		
Monitoring Well ID :	**Backfill Type**	**Date Backfilled :**
N/A	Bentonite	7/18/18
Latitude	**Longitude**	**Elevation (ft)**
40.843299762	-96.756065957	1,167

Notes: None

Sketch:



Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	LINOH-SB02	Page 2 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/18/18

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes:
0.5	10YR 4/3, dry, silty clay, low plasticity Brown	0.2	0-2' 1210 7/18/18	
1				
1.5				
2		0.0	—	
2.5				
3				
3.5				
4		0.0		
4.5				
5	2.5YR 4/6 silty clay moist plastic Moderate red			
5.5				
6		0.0		
6.5				
7				
7.5				
8		0.0		
8.5				
9				
9.5				
10		0.0		

Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	LINCH-SB02	Page 3 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/18/18

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes:
10.5				
11.0				
11.5				
12.0	Dark brown 7.5YR 3/3 moist, moderately plastic, silty clay	0.0		
12.5				
13.0				
13.5				
14.0		0.0		
14.5				
15.0				
15.5			15-17' 12:20 7/18/18	
16.0		0.0		
16.5				
17.0	water 7.5YR 3/3 wet, moderately plastic sandy clay dark brown			
17.5				
18.0				
18.5				
19.0				
19.5				
20.0				

SAMPLE COLLECTION/CHAIN-OF-CUSTODY RECORD

PROJECT NAME: LINCOLN ANG DELIVERY ORDER 0011

Borehole Data	
SAMPLING POINT:	LIN04-SB02
SAMPLE LOCATION:	LIN04-SB02
SAMPLE MEDIA:	Soil
SAMPLE TYPE	Grab
LOGBOOK NUMBER:	1

SAC - TestAmerica Sacramento

Sample Data	Sample No. 1
SAMPLE ID NUMBER:	LIN04-SB02-01
SAMPLE DEPTH:	0-2'

FIELD	READING	UNITS
PID	0.0	ppm

Date/Time: 7/18/18 1210

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	~~NR~~ X

Sample Data	Sample No. 2
SAMPLE ID NUMBER:	LIN04-SB02-02
SAMPLE DEPTH (FT):	15-17'

FIELD	READING	UNITS
PID	0.3	ppm

Date/Time: 7/18/18 1220

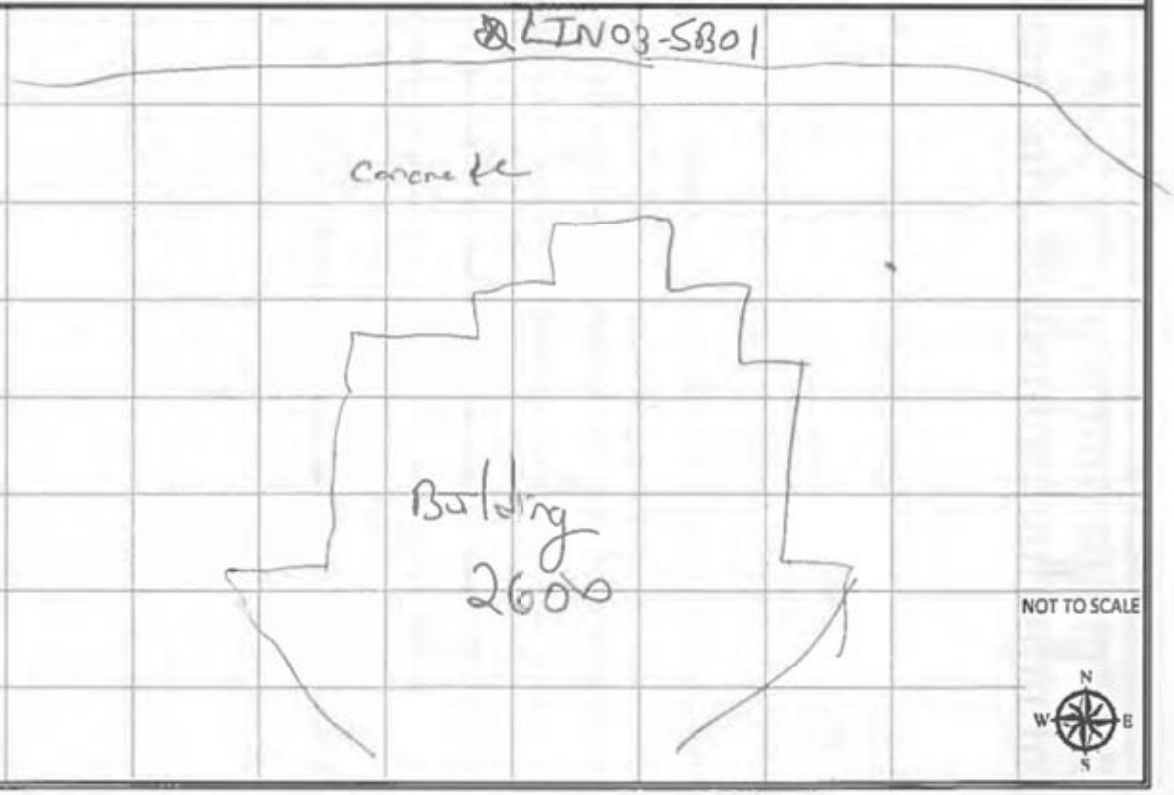
NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	~~NR~~ X

** "X" analysis collected; "IS" insufficient volume; "NR" not required; define other code as appropriate

COMMENTS: None

Client/Installation	Oversight Contractor	Borehole Number
ANG/LINCOLN ANGB	Leidos	LIN03-SB01
Project	**Driller : Stratus**	**Page**
FY17 Phase 3 Regional SI for PFOS/PFOA	ANG/LINCOLN ANGB	Page 1 of 4
Sizes and Type of Drilling and Sampling Equipment		**Borehole Location Description**
DPT Geoprobe		Ingress north of Hanger 2600
Date/Time Started :		**Date/Time Finished :**
7/18/18 1230		7/18/18 1340
Overburden Thickness	**Depth to Groundwater (ft)**	**Total Depth (ft)**
>20 ft	19	20
Sample for PFOS/PFOA Analysis		**Sample for PFOS/PFOA Analysis**
Sample ID: LIN03-SB01-01		**Sample ID: LIN03-SB01-02**
Sample Interval: 0 to 2 ft		**Sample Interval: 17 to 19 ft**
Inspector Name		**Inspector Signature**
Tom Messing		
Monitoring Well ID :	**Backfill Type**	**Date Backfilled :**
N/A	bentonite	7/18/18
Latitude	**Longitude**	**Elevation (ft)**
40.843688238	-96.757097422	1,217
Notes:		
None		

Sketch:



Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	LIN-01-SB01	Page 2 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/18/18

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes:
0.5	10YR 4/3 dry, silty clay low plasticity brown	0.0		
1			1320 7/18/18 0-2ft	
1.5				
2		0.0	—	
2.5				
3				
3.5	fill 2.5YR 4/6 silty clay dry moderately plastic black & reddish marbling	0.0		
4				
4.5				
5				
5.5				
6		0.0		
6.5				
7				
7.5				
8		0.0		
8.5				
9				
9.5				
10		0.0		

ation	Borehole Number	Page
N ANGB	LIN23-SB01	Page 3 of 4
Regional SI for PFOS/PFOA	Inspector Name: Tom Messing	Date: 7/18/18

Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes:
	0.0		
GLEY1 5/10Y, silty clay moderately plastic moist greenish gray	0.0		
7.5YR 3/3 moist, silty clay moderately plastic dark brown	0.0		
		1330 7/18/18 17-19ft	
water 7.5yr/3/3 Sandy dark brown			

10.5 11.0 11.5 12.0 12.5 13.0 13.5 14.0 14.5 15.0 15.5 16.0 16.5 17.0 17.5 18.0 18.5 19.0 19.5

SAMPLE COLLECTION/CHAIN-OF-CUSTODY RECORD

PROJECT NAME: LINCOLN ANG DELIVERY ORDER 0011

Borehole Data	
SAMPLING POINT:	LIN03-SB01
SAMPLE LOCATION:	↓
SAMPLE MEDIA:	Soil
SAMPLE TYPE	Grab
LOGBOOK NUMBER:	1

SAC - TestAmerica Sacramento

Sample Data	Sample No. 1
SAMPLE ID NUMBER:	LIN03-SB01-01
SAMPLE DEPTH:	0-2'

FIELD	READING	UNITS
PID	0.0	ppm

Date/Time: 7/18/18 1320

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	NR X

Sample Data	Sample No. 2
SAMPLE ID NUMBER:	LIN03-SB01-02
SAMPLE DEPTH (FT):	17-19'

FIELD	READING	UNITS
PID	0.0	ppm

Date/Time: 7/18/18 1330

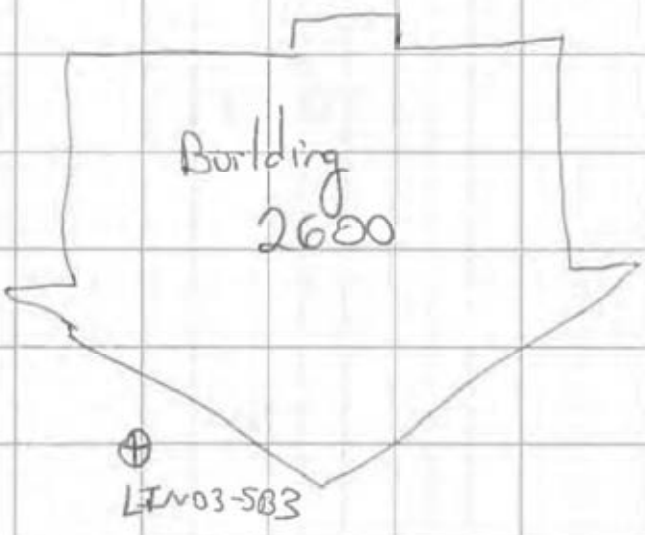
NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	NR X

** "X" analysis collected; "IS" insufficient volume; "NR" not required; define other code as appropriate

COMMENTS: None

Client/Installation	Oversight Contractor	Borehole Number
ANG/LINCOLN ANGB	Leidos	LIN03-SB03
Project	**Driller : Stratus**	**Page**
FY17 Phase 3 Regional SI for PFOS/PFOA	ANG/LINCOLN ANGB	Page 1 of 4
Sizes and Type of Drilling and Sampling Equipment	**Borehole Location Description**	
DPT Geoprobe	~~East~~ South side of building 2600	
Date/Time Started :	**Date/Time Finished :**	
7/18/18 1400	1420 7/18/18	
Overburden Thickness	**Depth to Groundwater (ft)**	**Total Depth (ft)**
>20ft	17	20
Sample for PFOS/PFOA Analysis	**Sample for PFOS/PFOA Analysis**	
Sample ID: LIN03-SB3-01	Sample ID: LIN03-SB3-02	
Sample Interval: ~~0 to 2 ft~~ 1.5-3 ft	Sample Interval: 15 to 17 ft	
Inspector Name	**Inspector Signature**	
Tom Messing		
Monitoring Well ID :	**Backfill Type**	**Date Backfilled :**
MW-LIN03-01	N/A	N/A
Latitude	**Longitude**	**Elevation (ft)**
40.843052106	-96.757505453	1,170
Notes: None		

Sketch:



Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	LIN03-SB3	Page 2 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/18/18

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes:
			0.0	
0.5	concrete			
1				
1.5	sub base			
	5Y 5/2 silt dry moderately plastic olive grey	1410 7/18/18	0.0	Dup collected
2.5		1.5-3ft		
3				
3.5				
4			0.0	
4.5				
5				
5.5				
6			0.0	
6.5				
7				
7.5				
8			0.0	
8.5				
9				
9.5	2.5Y 3/3 dry silt moderately plastic dark olive brown		0.0	
10				

Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	LIN03-SB3	Page 3 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/18/18

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes:
12.0	7.5YR 3/3 silty dry moderate plasticity dark brown		0.0	
14.0			0.0	
15.0				
15.5		5-17ft		
16.0	7.5YR	1420 7/18/18	0.0	
17.0	Sandy wet 7.5YR 3/3 dark brown			

SAMPLE COLLECTION/CHAIN-OF-CUSTODY RECORD

PROJECT NAME: LINCOLN ANG DELIVERY ORDER 0011

Borehole Data	
SAMPLING POINT:	LIN03-SB3
SAMPLE LOCATION:	LIN03-SB3
SAMPLE MEDIA:	Soil
SAMPLE TYPE	Grab
LOGBOOK NUMBER:	1

SAC - TestAmerica Sacramento

Sample Data	Sample No. 1
SAMPLE ID NUMBER:	LIN03-SB3-01
SAMPLE DEPTH:	~~0-2'~~ 1.5-3ft

FIELD	READING	UNITS
PID	0.0	ppm

Date/Time: 7/18/18 1410

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	NR

Sample Data	Sample No. 2
SAMPLE ID NUMBER:	LIN03-SB3-02
SAMPLE DEPTH (FT):	15-17

FIELD	READING	UNITS
PID	0.0	ppm

Date/Time: 7/18/18 1420

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	NR

** "X" analysis collected; "IS" insufficient volume; "NR" not required; define other code as appropriate

COMMENTS: DUP collected from LIN03-SB3-01

Client/Installation	Oversight Contractor	Borehole Number
ANG/LINCOLN ANGB	Leidos	LIN03-SB2
Project	**Driller : Stratus**	**Page**
FY17 Phase 3 Regional SI for PFOS/PFOA	ANG/LINCOLN ANGB	Page 1 of 4

Sizes and Type of Drilling and Sampling Equipment	Borehole Location Description
DPT Geoprobe	West side of building 2600

Date/Time Started :	Date/Time Finished :
7/18/18 1425	1440 7/18/18

Overburden Thickness	Depth to Groundwater (ft)	Total Depth (ft)
>20ft	17	20

Sample for PFOS/PFOA Analysis	Sample for PFOS/PFOA Analysis
Sample ID: LIN03-SB2-01	Sample ID: LIN03-SB2-02
Sample Interval: ~~0 to 2~~ ft 1.5-3.5ft	Sample Interval: 15 to 17 ft

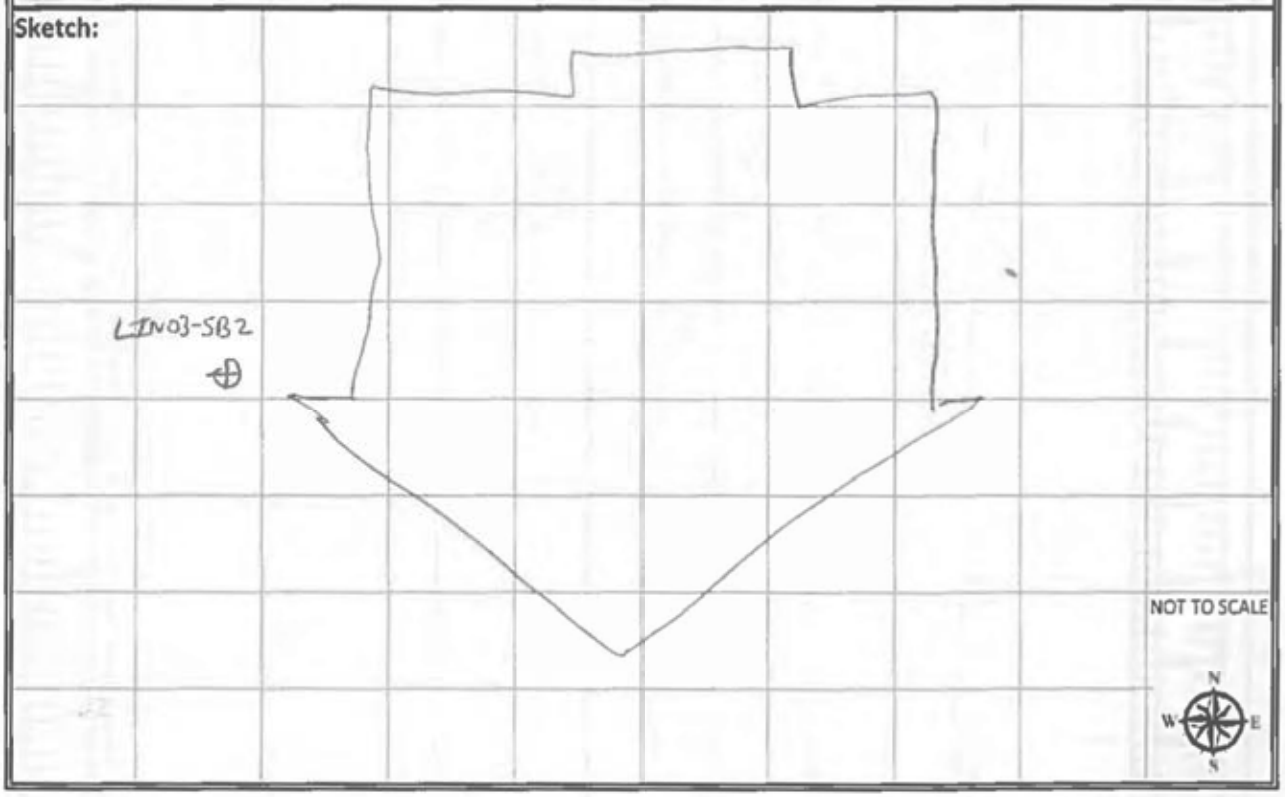
Inspector Name	Inspector Signature
Tom Messing	

Monitoring Well ID :	Backfill Type	Date Backfilled
N/A	Bentonite	7/18/18

Latitude	Longitude	Elevation (ft)
40.843224403	-96.757524123	1,178

Notes:
None

Sketch:



Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	LIN23-SB2	Page 2 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/18/18

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes:
0.5	concrete			
1				
1.5	sub base			
2	5Y 5/2 silt dry moderate plasticity olive grey		0.0	
2.5		1.5-3.5		
3		1435 7/18/18		
3.5				
4			0.0	
4.5				
5				
5.5				
6			0.0	
6.5				
7				
7.5				
8			0.0	
8.5				
9				
9.5				
10			0.6	

Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	LINP3-SB2	Page 3 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/18/18

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes:
10.5				
11.0	2.5Y 5/3 silty clay moderately plastic Light olive brown			
11.5				
12.0		0.0		
12.5				
13.0	2.5Y 3/2 silty clay moderately plastic moist very dark greyish brown			
13.5				
14.0		0.0		
14.5				
15.0				
15.5			15-17ft 7/18/18 1440	
16.0		0.0		
16.5				
17.0	Sandy wet 2.5Y 5/4 not plastic Light olive brown			
17.5				
18.0				
18.5				
19.0				
19.5				
20.0				

SAMPLE COLLECTION/CHAIN-OF-CUSTODY RECORD

PROJECT NAME: LINCOLN ANG DELIVERY ORDER 0011

Borehole Data	
SAMPLING POINT:	LIN03-SB2
SAMPLE LOCATION:	LIN03-S037
SAMPLE MEDIA:	Soil
SAMPLE TYPE	Grab
LOGBOOK NUMBER:	1

SAC - TestAmerica Sacramento

Sample Data	Sample No. 1
SAMPLE ID NUMBER:	LIN03-SB2-01
SAMPLE DEPTH:	~~0-2'~~ 1.5-3.5ft

FIELD	READING	UNITS
PID	2.0	ppm

Date/Time: 7/18/18 1435

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	NR

Sample Data	Sample No. 2
SAMPLE ID NUMBER:	LIN03-SB2-02
SAMPLE DEPTH (FT):	15-17ft

FIELD	READING	UNITS
PID	0.0	ppm

Date/Time: 7/18/18 1440

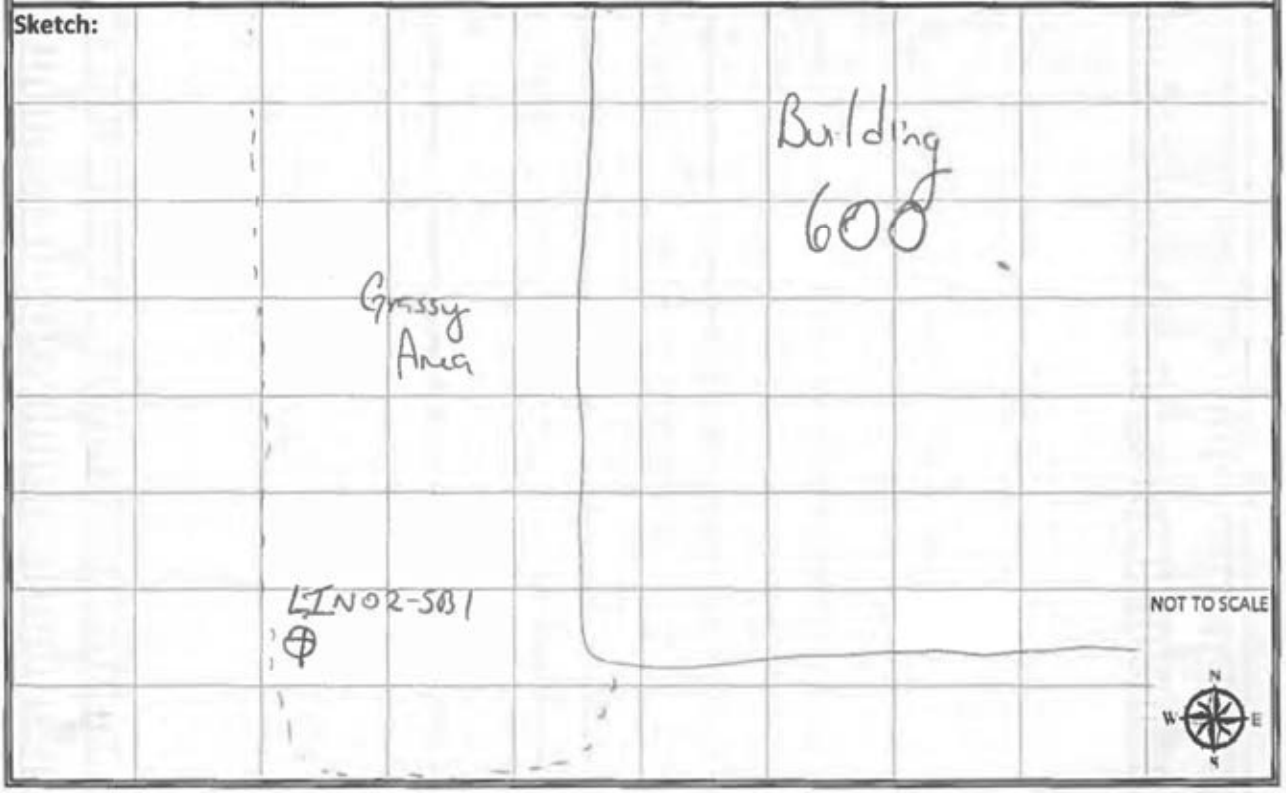
NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	NR

** "X" analysis collected; "IS" insufficient volume; "NR" not required; define other code as appropriate

COMMENTS: None

Client/Installation	Oversight Contractor	Borehole Number
ANG/LINCOLN ANGB	Leidos	LIN02-SB_1
Project	**Driller : Stratus**	**Page**
FY17 Phase 3 Regional SI for PFOS/PFOA	ANG/LINCOLN ANGB	Page 1 of 4
Sizes and Type of Drilling and Sampling Equipment		**Borehole Location Description**
DPT Geoprobe		Southwest corner of building 600 in corner of grass
Date/Time Started :		**Date/Time Finished :**
7/18/18 1500		7/18/18 1515
Overburden Thickness	**Depth to Groundwater (ft)**	**Total Depth (ft)**
>20ft	16	20
Sample for PFOS/PFOA Analysis		**Sample for PFOS/PFOA Analysis**
Sample ID: LIN02-SB_1-01		Sample ID: LIN02-SB_1-02
Sample Interval: 0 to 2 ft		Sample Interval: 14 to 16 ft
Inspector Name		**Inspector Signature**
Tom Messing		
Monitoring Well ID :	**Backfill Type**	**Date Backfilled :**
N/A	Bentonite	7/18/18
Latitude	**Longitude**	**Elevation (ft)**
40.841250070	-96.757621536	1,168
Notes:		
None		

Sketch:



Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	LIN22-SB_1	Page 2 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/18/18

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes:
0.5	10YR4/3 dry silty clay low plasticity brown	0.0		
1			0-2 1505 7/18/18	
1.5				
2		0.0	—	
2.5				
3				
3.5				
4		0.0		
4.5	Sand & gravel dry 10YR 7/2 Light grey not plastic			
5	silty clay 10YR4/3 moderately plastic dry brown			
5.5				
6		0.0		
6.5				
7				
7.5				
8		0.0		
8.5				
9				
9.5				
10		0.0		

Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	LIN-2-SB-1	Page 3 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/18/18

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes:
10.5	Same			
11.0				
11.5				
12.0		0.0		
12.5				
13.0				
13.5				
14.0		0.0	—	
14.5			14-16	
15.0			1515 7/18/18	MS/MSD collect to be run
15.5				
16.0	Wet clayey s.lt 10YR4/3 moderately plastic brown	0.0	—	
16.5				
17.0				
17.5				
18.0				
18.5				
19.0				
19.5				
20.0				

SAMPLE COLLECTION/CHAIN-OF-CUSTODY RECORD

PROJECT NAME: LINCOLN ANG DELIVERY ORDER 0011

Borehole Data	
SAMPLING POINT:	LIN02-SB1
SAMPLE LOCATION:	LIN02-SB1
SAMPLE MEDIA:	Soil
SAMPLE TYPE	Grab
LOGBOOK NUMBER:	1

SAC - TestAmerica Sacramento

Sample Data	Sample No. 1
SAMPLE ID NUMBER:	LIN02-SB1-01
SAMPLE DEPTH:	0-2'

FIELD	READING	UNITS
PID	0.0	ppm

Date/Time: 7/18/18 1505

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	NR X

Sample Data	Sample No. 2
SAMPLE ID NUMBER:	LIN02-SB1-02
SAMPLE DEPTH (FT):	14-16 ft

FIELD	READING	UNITS
PID	0.0	ppm

Date/Time: 7/18/18 1515

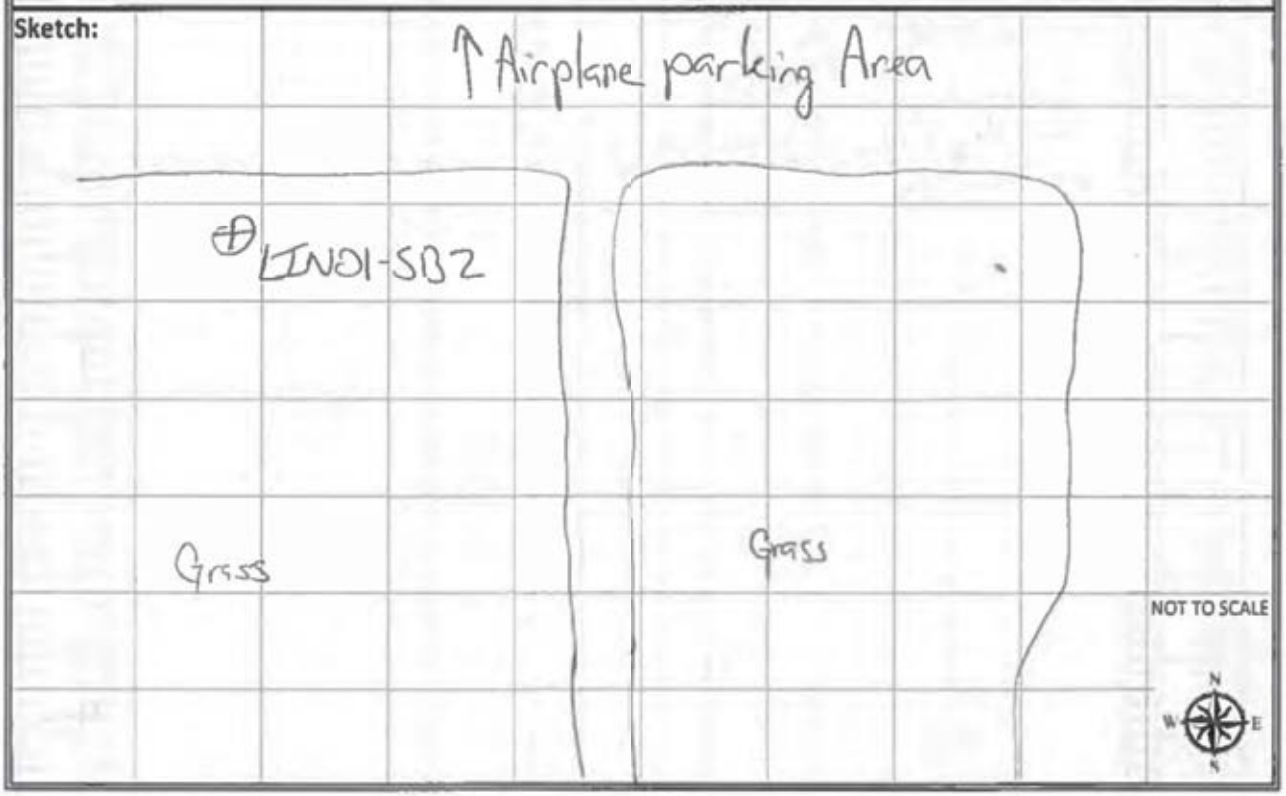
NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	X

** "X" analysis collected; "IS" insufficient volume; "NR" not required; define other code as appropriate

COMMENTS: run MS/MSD on LIN02-SB1-02

Client/Installation	Oversight Contractor	Borehole Number
ANG/LINCOLN ANGB	Leidos	LIN01-SB2
Project	**Driller : Stratus**	**Page**
FY17 Phase 3 Regional SI for PFOS/PFOA	ANG/LINCOLN ANGB	Page 1 of 4
Sizes and Type of Drilling and Sampling Equipment		**Borehole Location Description**
DPT Geoprobe		South side of pkng parking area
Date/Time Started :		**Date/Time Finished :**
7/18/18 1525		1555 7/18/18
Overburden Thickness	**Depth to Groundwater (ft)**	**Total Depth (ft)**
>20 ft	17	20
Sample for PFOS/PFOA Analysis		**Sample for PFOS/PFOA Analysis**
Sample ID: LIN01-SB2-01		Sample ID: LIN01-SB2-02
Sample Interval: 0 to 2 ft		Sample Interval: 15 to 17 ft
Inspector Name		**Inspector Signature**
Tom Messing		
Monitoring Well ID :	**Backfill Type**	**Date Backfilled :**
MW-LIN01-SB2	N/A	N/A
Latitude	**Longitude**	**Elevation (ft)**
40.840874864	-96.758943053	1,164
Notes:		
None		

Sketch:



Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	LIN01-SB3	Page 2 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/18/18

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes:
0	Dark organics 10YR4/3 dry silty low plasticity brown	0.0	0-2	
1	sandy silt 7.54R7/1 dry, not plastic light grey		7/18/18 1540	
2	Black w/tan & red marbling silty clay dry not plastic	0.0		
4		0.0		
5	Black 2.5 GLEY 1 2.5/N Slight hydrocarbon-like odor dry silty clay moderately plastic			
6		0.0		
8		0.0		
10		0.0		

Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	LIN01-SB2	Page 3 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/18/18

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes:
10.5				
11.0				
11.5				
12.0	very dark grey GLEY 1 3/N dry silty clay slight hydrocarbon like odor	0.0		
12.5				
13.0				
13.5				
14.0		0.0		
14.5				
15.0				
15.5			15-17	
16.0	olive light brown silty clay slightly moist 2.5Y 5/3	0.0	1555 7/18/18	
16.5				
17.0	silty Wet Sand 2.5Y 5/3 olive brown light brown TEM 7/18/18			
17.5				
18.0				
18.5				
19.0				
19.5				
20.0				

SAMPLE COLLECTION/CHAIN-OF-CUSTODY RECORD

PROJECT NAME: LINCOLN ANG DELIVERY ORDER 0011

Borehole Data	
SAMPLING POINT:	LIN01-SB2
SAMPLE LOCATION:	LIN01-SB2
SAMPLE MEDIA:	Soil
SAMPLE TYPE	Grab
LOGBOOK NUMBER:	1

SAC - TestAmerica Sacramento

Sample Data	Sample No. 1
SAMPLE ID NUMBER:	LIN01-SB2-01
SAMPLE DEPTH:	0-2'

FIELD	READING	UNITS
PID	0.0	ppm

Date/Time: 7/18/18 1540

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	X

Sample Data	Sample No. 2
SAMPLE ID NUMBER:	LIN01-SB2-02
SAMPLE DEPTH (FT):	15-17'

FIELD	READING	UNITS
PID	0.0	ppm

Date/Time: 7/18/18 1555

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	NR X

** "X" analysis collected; "IS" insufficient volume; "NR" not required; define other code as appropriate

COMMENTS: None

Client/Installation	Oversight Contractor	Borehole Number
ANG/LINCOLN ANGB	Leidos	LIN01-SB1
Project	**Driller : Stratus**	**Page**
FY17 Phase 3 Regional SI for PFOS/PFOA	ANG/LINCOLN ANGB	Page 1 of 4

Sizes and Type of Drilling and Sampling Equipment	Borehole Location Description
DPT Geoprobe	NE corner of grass area, which is due south of the airplane parking area

Date/Time Started :	Date/Time Finished :
7/18/18 1615	7/18/18 1625

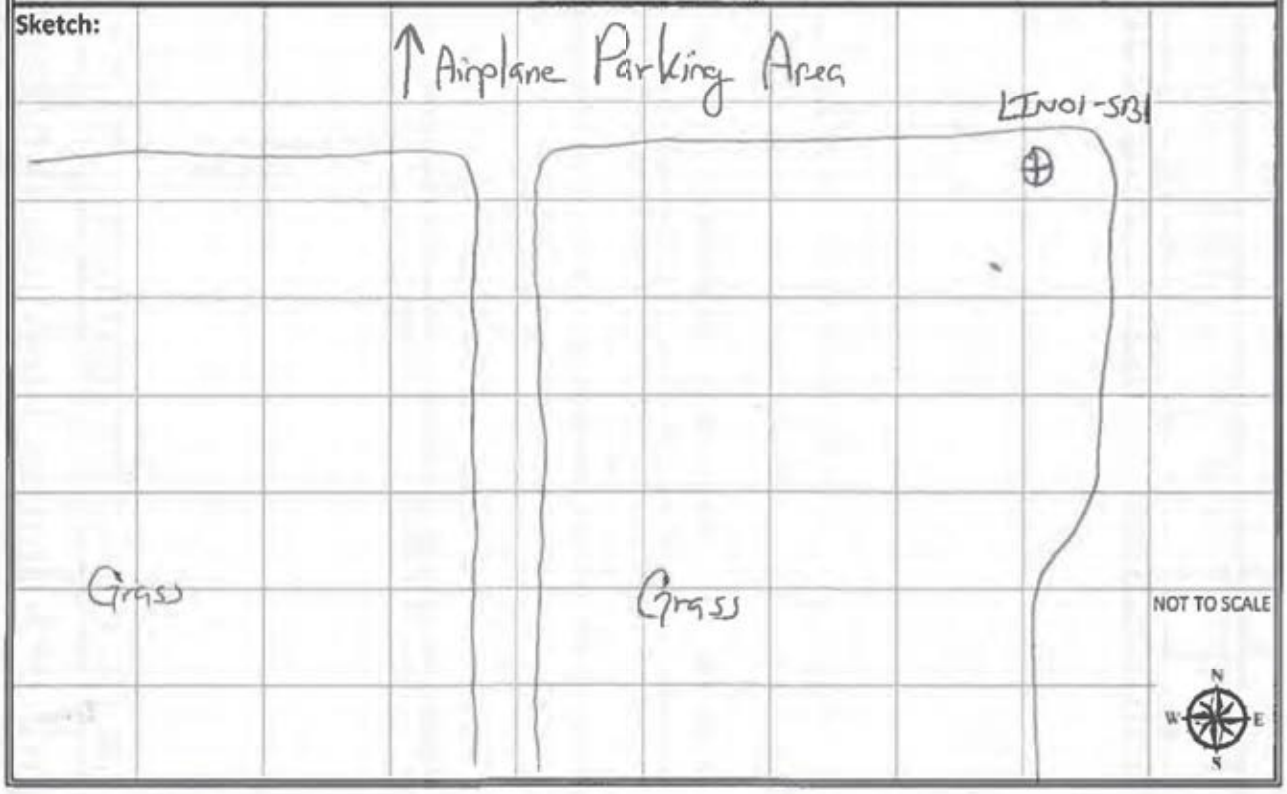
Overburden Thickness	Depth to Groundwater (ft)	Total Depth (ft)
>16ft	12	16

Sample for PFOS/PFOA Analysis	Sample for PFOS/PFOA Analysis
Sample ID: LIN01-SB1-01	Sample ID: LIN01-SB1-02
Sample Interval: 0 to 2 ft	Sample Interval: 10 to 12 ft
Inspector Name	**Inspector Signature**
Tom Messing	

Monitoring Well ID :	Backfill Type	Date Backfilled :
N/A	Bentonite	7/18/18
Latitude	**Longitude**	**Elevation (ft)**
40.840875052	-96.758119390	1,166

Notes:
None

Sketch:



Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	LIN01-SB1	Page 2 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/18/18

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes:
0.5	Dark brown 10YR4/3 silty clay dry, not plastic	0.0		
1			0-2	
1.5			7/18/18	
2		0.0	1620	
2.5				3ft of recovery
3	2.5Y 4/3 light brown silty clay, moist moderately plastic			
3.5				
4		0.0		
4.5				
5				
5.5				
6		0.0		2ft of recovery
6.5				
7				
7.5				
8		0.0		
8.5				
9				
9.5				
10		0.6		1.5ft of recovery

Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	LIN01-SB1	Page 3 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/18/18

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes:
10.5				
11.0			10-12	
11.5			1625 7/18/18	Dup collected
12.0	Water 10YR 4/4 Brown clayey silt moderately plastic	0.0		
12.5				
13.0				
13.5				
14.0		0.0		
14.5				2ft of recovery
15.0				
15.5				
16.0		0.0		
16.5				
17.0				
17.5				
18.0				
18.5				
19.0				
19.5				
20.0				

SAMPLE COLLECTION/CHAIN-OF-CUSTODY RECORD

PROJECT NAME: LINCOLN ANG DELIVERY ORDER 0011

Borehole Data	
SAMPLING POINT:	LIN01-SB_1
SAMPLE LOCATION:	LIN01-SB1
SAMPLE MEDIA:	Soil
SAMPLE TYPE	Grab
LOGBOOK NUMBER:	1

SAC - TestAmerica Sacramento

Sample Data	Sample No. 1
SAMPLE ID NUMBER:	LIN01-SB_1-01
SAMPLE DEPTH:	0-2'

FIELD	READING	UNITS
PID	0.0	ppm

Date/Time: 7/18/18 1620

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	NR

Sample Data	Sample No. 2
SAMPLE ID NUMBER:	LIN01-SB_1-02
SAMPLE DEPTH (FT):	10-12ft

FIELD	READING	UNITS
PID	0.0	ppm

Date/Time: 7/18/18 1625

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	NR

** "X" analysis collected; "IS" insufficient volume; "NR" not required; define other code as appropriate

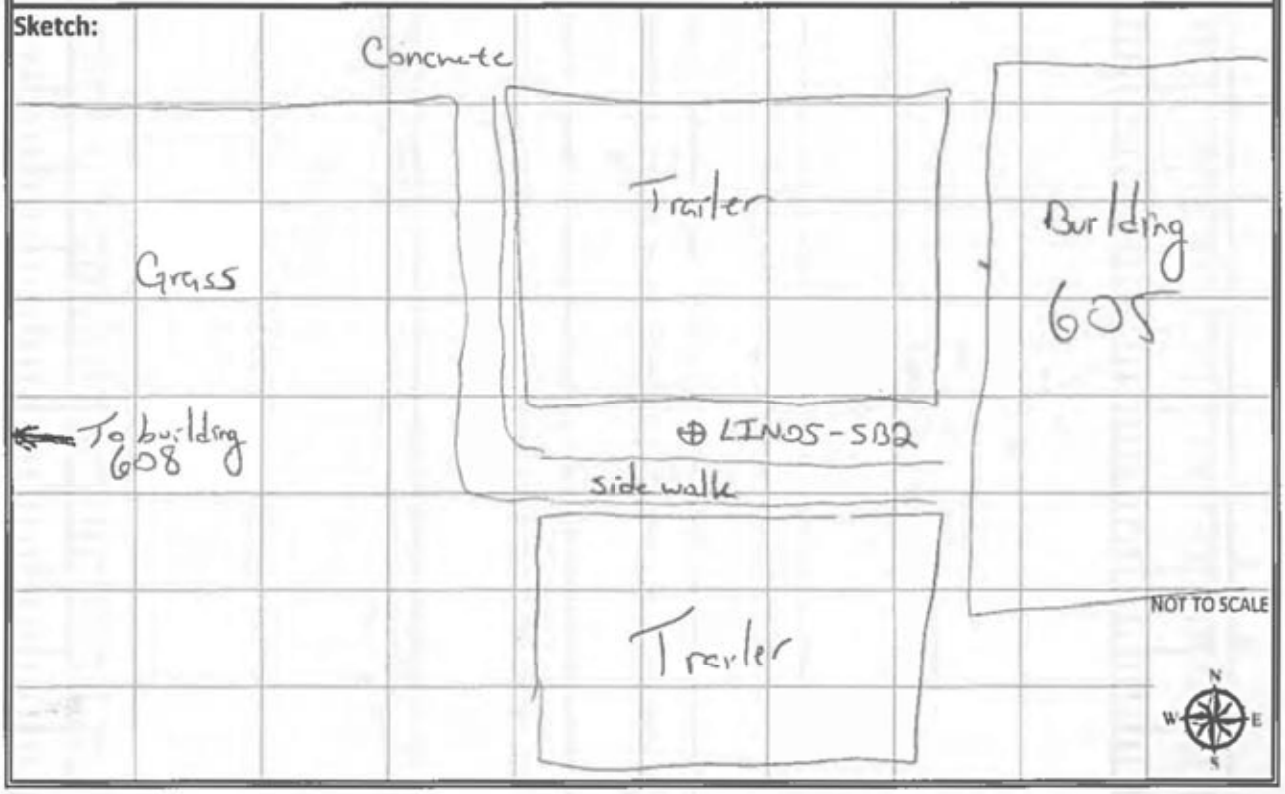
COMMENTS: Dup collected from LIN01-SB1-02

Client/Installation	Oversight Contractor	Borehole Number
ANG/LINCOLN ANGB	Leidos	LIN05-SB2
Project	**Driller : Stratus**	**Page**
FY17 Phase 3 Regional SI for PFOS/PFOA	ANG/LINCOLN ANGB	Page 1 of 4
Sizes and Type of Drilling and Sampling Equipment		**Borehole Location Description**
DPT Geoprobe		Between 2 trailers to the west of building 605, in the grass
Date/Time Started :		**Date/Time Finished :**
7/16/18 1650		7/18/18 1725
Overburden Thickness	**Depth to Groundwater (ft)**	**Total Depth (ft)**
>20ft	14	20
Sample for PFOS/PFOA Analysis		**Sample for PFOS/PFOA Analysis**
Sample ID: LIN05-SB2-01		**Sample ID: LIN05-SB2-02**
Sample Interval: 0 to 2 ft		**Sample Interval: 12 to 14 ft**
Inspector Name		**Inspector Signature**
Tom Messing		
Monitoring Well ID:	**Backfill Type**	**Date Backfilled:**
N/A	Bentonite	7/18/18
Latitude	**Longitude**	**Elevation (ft)**
40.840328926	-96.756736446	1,163

Notes:

None

Sketch:



Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	LIN05-SB2	Page 2 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/18/18

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes:
0.5	Dark brown 10YR 4/3 silty clay dry, not plastic	0.0	0-2ft	
1			1700	
1.5			7/18/18	
2		0.0		2 feet recovery
2.5				
3				
3.5				
4		0.0		
4.5				
5				
5.5				
6		0.0		1.5 ft of recovery
6.5				
7	Dark gray silty clay GLEY 2.5/N			
7.5	dry moderately plastic			
8		0.0		
8.5				
9				4 ft of recovery
9.5				
10		0.6		

Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	LIN05-SB2	Page 3 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/18/18

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes:
10.5				
11.0				
11.5				
12.0		0.0	—	
12.5			12-14	
13.0			1725	
13.5			7/18/18	3ft of recovery
14.0		0.0	—	
14.5	moist dark grey			
15.0				
15.5				
16.0		0.0		
16.5				
17.0				
17.5				4 ft of recovery
18.0	Light brown 5Y 4/2 moderately plastic dry	0.0		
18.5				
19.0				
19.5				
20.0				

SAMPLE COLLECTION/CHAIN-OF-CUSTODY RECORD

PROJECT NAME: LINCOLN ANG DELIVERY ORDER 0011

Borehole Data	
SAMPLING POINT:	LIN25-SB2
SAMPLE LOCATION:	↓
SAMPLE MEDIA:	Soil
SAMPLE TYPE	Grab
LOGBOOK NUMBER:	1

SAC - TestAmerica Sacramento

Sample Data	Sample No. 1
SAMPLE ID NUMBER:	LIN25-SB2-01
SAMPLE DEPTH:	0-2'

FIELD	READING	UNITS
PID	0.0	ppm
Date/Time:	7/18/18	1705

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	X

Sample Data	Sample No. 2
SAMPLE ID NUMBER:	LIN25-SB2-02
SAMPLE DEPTH (FT):	12-14

FIELD	READING	UNITS
PID	0.0	ppm
Date/Time:	7/18/18	1725

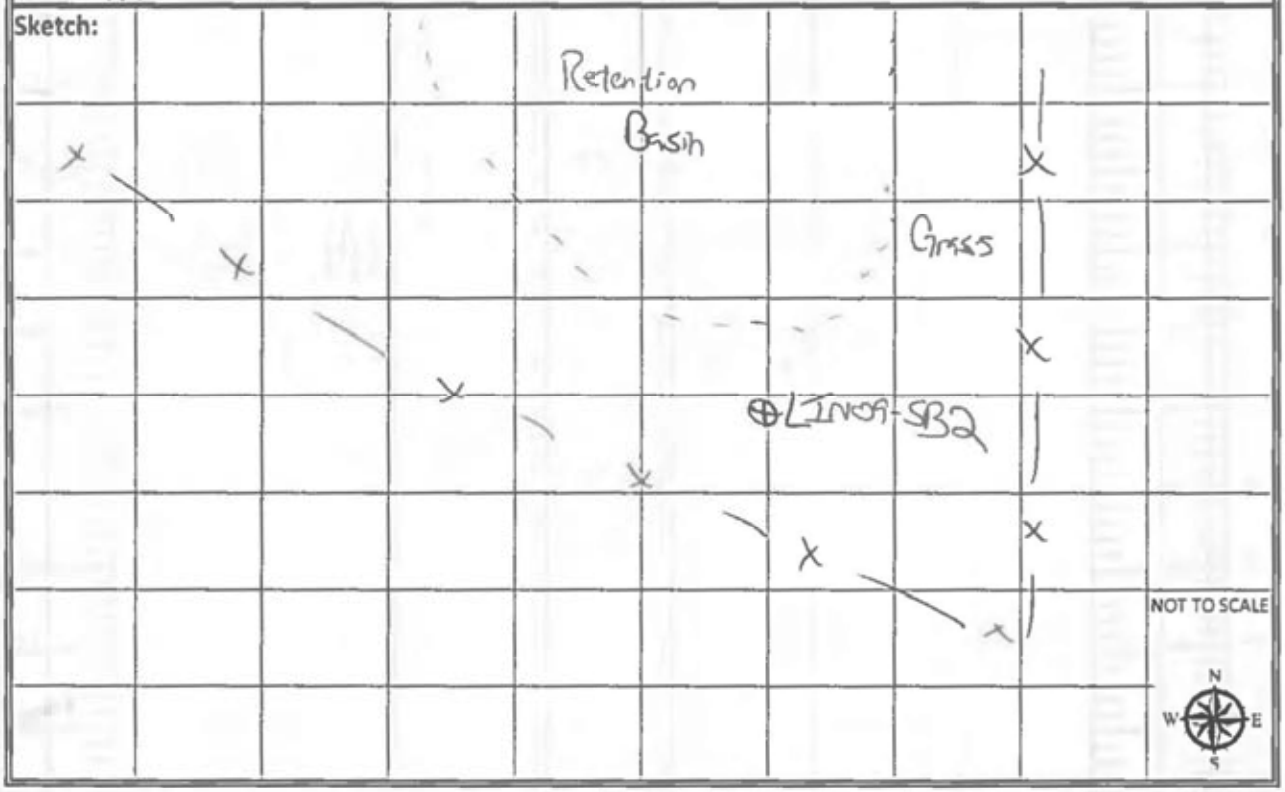
NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	X

** "X" analysis collected; "IS" insufficient volume; "NR" not required; define other code as appropriate

COMMENTS: Non

Client/Installation	Oversight Contractor	Borehole Number
ANG/LINCOLN ANGB	Leidos	LIN09-SB2
Project	**Driller : Stratus**	**Page**
FY17 Phase 3 Regional SI for PFOS/PFOA	ANG/LINCOLN ANGB	Page 1 of 4
Sizes and Type of Drilling and Sampling Equipment		**Borehole Location Description**
DPT Geoprobe		In grass near SE corner of retention basin, next to fence.
Date/Time Started :		**Date/Time Finished :**
7/19/18 1210		7/15/18 1225
Overburden Thickness	**Depth to Groundwater (ft)**	**Total Depth (ft)**
>20ft	18	20
Sample for PFOS/PFOA Analysis		**Sample for PFOS/PFOA Analysis**
Sample ID: LIN09-SB2-01		Sample ID: LIN09-SB2-02
Sample Interval: 0 to 2 ft		Sample Interval: 16 to 18 ft
Inspector Name		**Inspector Signature**
Tom Messing		
Monitoring Well ID :	**Backfill Type**	**Date Backfilled :**
N/A	Bentonite	7/19/18
Latitude	**Longitude**	**Elevation (ft)**
40.83986 9402	-96.756582273	1,157
Notes:		
None		

Sketch:



Client/installation	Borehole Number	Page
ANG/LINCOLN ANGB	LIN09-SB2	Page 2 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/19/15

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes:
0.5	7.5YR 4/2 Brown dry silt, low plasticity with some light brown marbling	0.0		excavating
1			0-2' 1220 7/19/15	
1.5				
2		0.0	-	
2.5				3/4
3				
3.5				
4		0.0		-
4.5				
5				
5.5				
6		0.0		
6.5				3/4
7				
7.5				
8		0.0		-
8.5				
9				
9.5				
10		2.5		

Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	LIN[illegible]-SB2	Page 3 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/19/18

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes: Recovery
10.5	GLEY1 2.5/N Black silty clay			
11.0				3/4
11.5				
12.0		0.0		
12.5				
13.0				
13.5				
14.0		0.0		
14.5				2.5/4
15.0				
15.5				
16.0	5Y 3/1 very dark slightly gray silty clay, moist moderately plastic	0.0		
16.5			16-18' 1225 7/19/18	
17.0				
17.5				
18.0	wet	0.0		
18.5				
19.0				
19.5				
20.0		0.0		

SAMPLE COLLECTION/CHAIN-OF-CUSTODY RECORD

PROJECT NAME: LINCOLN ANG DELIVERY ORDER 0011

Borehole Data	
SAMPLING POINT:	LIN-SB2
SAMPLE LOCATION:	↓
SAMPLE MEDIA:	Soil
SAMPLE TYPE	Grab
LOGBOOK NUMBER:	1

SAC - TestAmerica Sacramento

Sample Data	Sample No. 1
SAMPLE ID NUMBER:	LIN-SB2-01
SAMPLE DEPTH:	0-2'

FIELD	READING	UNITS
PID	2.0	ppm

Date/Time: 7/19/18 1220

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	X

Sample Data	Sample No. 2
SAMPLE ID NUMBER:	LIN-SB2-02
SAMPLE DEPTH (FT):	16-18'

FIELD	READING	UNITS
PID	2.0	ppm

Date/Time: 7/19/18 1225

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	X

** "X" analysis collected; "IS" insufficient volume; "NR" not required; define other code as appropriate

COMMENTS: None

Client/Installation	Oversight Contractor	Borehole Number
ANG/LINCOLN ANGB	Leidos	LIN09-SB1
Project	**Driller : Stratus**	**Page**
FY17 Phase 3 Regional SI for PFOS/PFOA	ANG/LINCOLN ANGB	Page 1 of 4

Sizes and Type of Drilling and Sampling Equipment	Borehole Location Description
DPT Geoprobe	Ingress due west of retention basin

Date/Time Started :	Date/Time Finished
7/19/18 1235	7/19/18 1248

Overburden Thickness	Depth to Groundwater (ft)	Total Depth (ft)
>16'	12	16

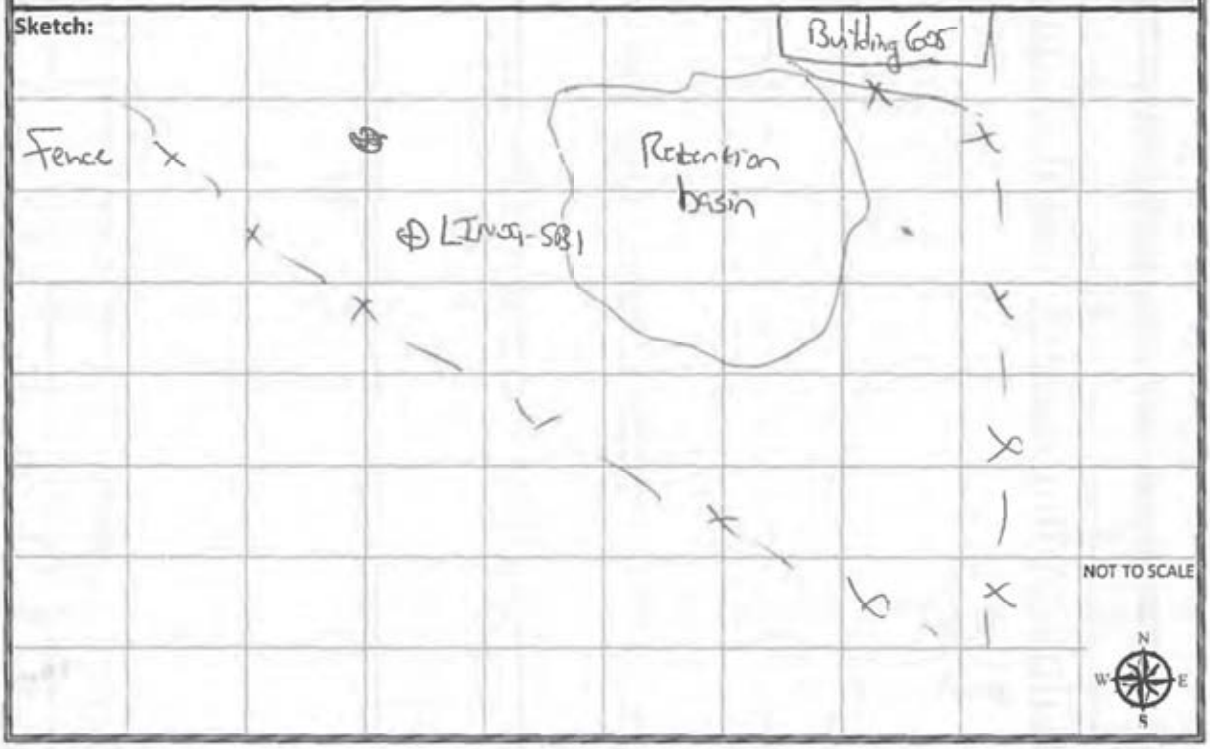
Sample for PFOS/PFOA Analysis	Sample for PFOS/PFOA Analysis
Sample ID: LIN09-SB1-01	Sample ID: LIN09-SB1-02
Sample Interval: 0 to 2 ft	Sample Interval: 10 to 12 ft
Inspector Name: Tom Messing	Inspector Signature:

Monitoring Well ID :	Backfill Type	Date Backfilled :
N/A	Bentonite	7/19/18

Latitude	Longitude	Elevation (ft)
40.839989064	-96.756881537	1,166

Notes: None

Sketch:



Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	LIN09-SB1	Page 2 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/19/18

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes: Recovery
0	7.5YR 4/2, Brown, dry, silt, low plasticity with some light brown marbling	0.0	~~0~~	
0.5			0-2'	
1			7/19/18	
1.5			1240	
2		0.0	~~0~~ 0	1.5/4
2.5				
3				
3.5				
4		0.0	0.2	
4.5				
5				
5.5				
6		0.0		2/4
6.5				
7				
7.5				
8		0.0		
8.5				
9	GLEY 1 2.5/N Black silty clay moderately plastic, moist.			4/4
9.5				
10		0.0		

Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	LIN9-SB1	Page 3 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/19/18

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes:
10.5			10-12	
11.0			1245	
11.5			7/19/18	
12.0	wet, GLEY1 2.5/N	0.0		
12.5	Black moderately plast.c			
13.0				
13.5				
14.0		0.0		
14.5				
15.0				
15.5				
16.0		0.0		
16.5				
17.0				
17.5				
18.0				
18.5				
19.0				
19.5				
20.0				

SAMPLE COLLECTION/CHAIN-OF-CUSTODY RECORD

PROJECT NAME: LINCOLN ANG DELIVERY ORDER 0011

Borehole Data	
SAMPLING POINT:	LIN-SB-1
SAMPLE LOCATION:	↓
SAMPLE MEDIA:	Soil
SAMPLE TYPE	Grab
LOGBOOK NUMBER:	1

SAC - TestAmerica Sacramento

Sample Data	Sample No. 1
SAMPLE ID NUMBER:	LIN-SB-1-01
SAMPLE DEPTH:	0-2'

FIELD	READING	UNITS
PID	0.0	ppm

Date/Time: 7/19/18 1240

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	X

Sample Data	Sample No. 2
SAMPLE ID NUMBER:	LIN-SB-1-02
SAMPLE DEPTH (FT):	10-12

FIELD	READING	UNITS
PID	0.0	ppm

Date/Time: 7/19/18 1245

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	X

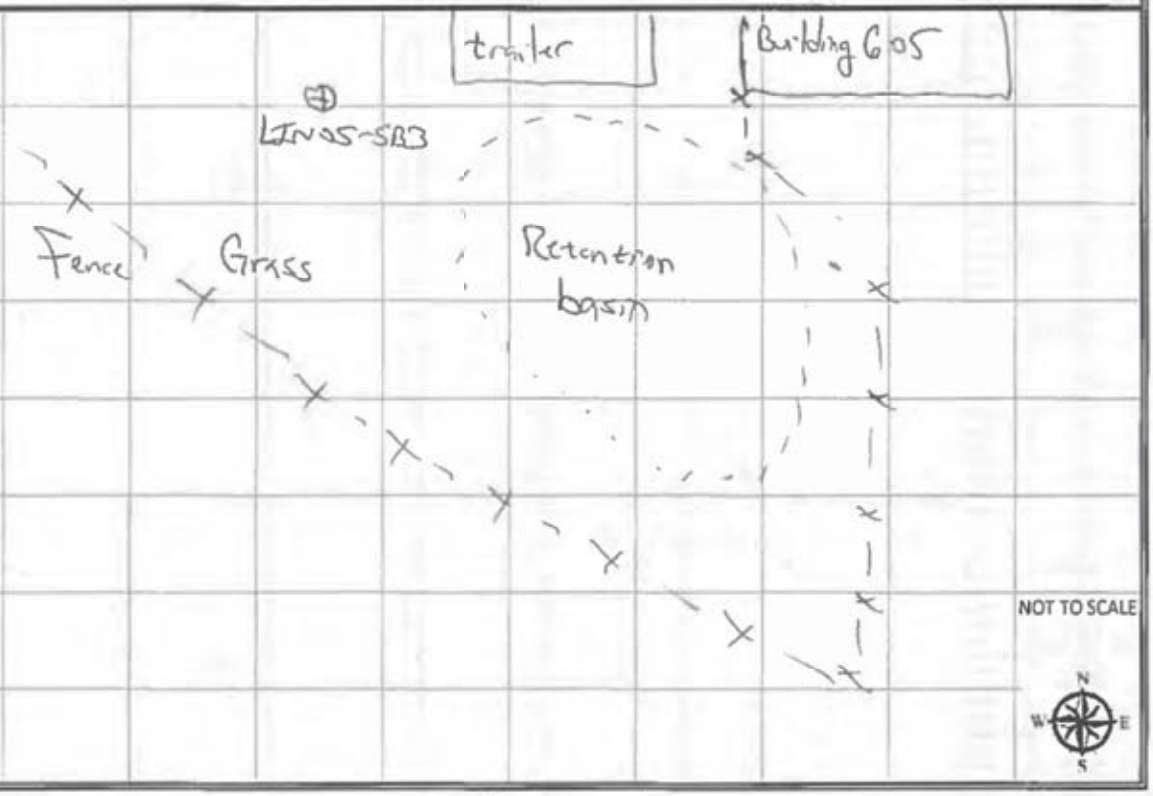
** "X" analysis collected; "IS" insufficient volume; "NR" not required; define other code as appropriate

COMMENTS: None

Client/Installation	Oversight Contractor	Borehole Number
ANG/LINCOLN ANGB	Leidos	LIN05-SB3
Project	**Driller : Stratus**	**Page**
FY17 Phase 3 Regional SI for PFOS/PFOA	ANG/LINCOLN ANGB	Page 1 of 4
Sizes and Type of Drilling and Sampling Equipment		**Borehole Location Description**
DPT Geoprobe		In grass near NW corner of retention basin
Date/Time Started :		**Date/Time Finished :**
7/19/18 1255		7/19/18 1305
Overburden Thickness	**Depth to Groundwater (ft)**	**Total Depth (ft)**
>20ft	20	20
Sample for PFOS/PFOA Analysis		**Sample for PFOS/PFOA Analysis**
Sample ID: LIN05-SB3-01		**Sample ID: LIN05-SB3-02**
Sample Interval: 0 to 2 ft		**Sample Interval: 18 to 20 ft**
Inspector Name		**Inspector Signature**
Tom Messing		
Monitoring Well ID :	**Backfill Type**	**Date Backfilled:**
N/A	Bentonite	7/19/18
Latitude	**Longitude**	**Elevation (ft)**
40.840151551	-96.756959694	1,162

Notes:

Sketch:



Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	LIN05-SB3	Page 2 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/19/18

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes:
0	7.5YR 4/2 Brown dry silt, low plasticity with some light brown mottling	0.0		Recovery
0.5			0-2	
1			1300 7/19/18	Dup collected
1.5	10YR 4/3 Brown, silty clay			
2		0.0		2/4
2.5				
3				
3.5				
4		0.5		
4.5				
5				
5.5				
6		0.0		3/4
6.5				
7				
7.5				
8	GLEY1 2.5/N Black silty clay moderately plastic moist	0.0		
8.5				
9				4/4
9.5				
10		0.6		

Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	LIN15-SB3	Page 3 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/19/18

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes: Recovery
10.5				
11.0				
11.5				
12.0		0.0		
12.5				
13.0				
13.5				
14.0		0.0		3/4
14.5				
15.0				
15.5				
16.0	5Y 2.5/1 silty clay most moderately plastic Black	0.0		
16.5				
17.0				
17.5				4/4
18.0		0.0		
18.5			18-20' 1305 7/17/18	
19.0				
19.5				
20.0	wet	0.0		

SAMPLE COLLECTION/CHAIN-OF-CUSTODY RECORD

PROJECT NAME: LINCOLN ANG DELIVERY ORDER 0011

Borehole Data	
SAMPLING POINT:	LIN05-SB3
SAMPLE LOCATION:	↓
SAMPLE MEDIA:	Soil
SAMPLE TYPE	Grab
LOGBOOK NUMBER:	1

SAC - TestAmerica Sacramento

Sample Data	Sample No. 1
SAMPLE ID NUMBER:	LIN05-SB3-01
SAMPLE DEPTH:	0-2'

FIELD	READING	UNITS
PID	0.0	ppm

Date/Time: 7/19/18 1300

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	X

Sample Data	Sample No. 2
SAMPLE ID NUMBER:	LIN05-SB3-02
SAMPLE DEPTH (FT):	18-20

FIELD	READING	UNITS
PID	0.0	ppm

Date/Time: 7/19/18 1305

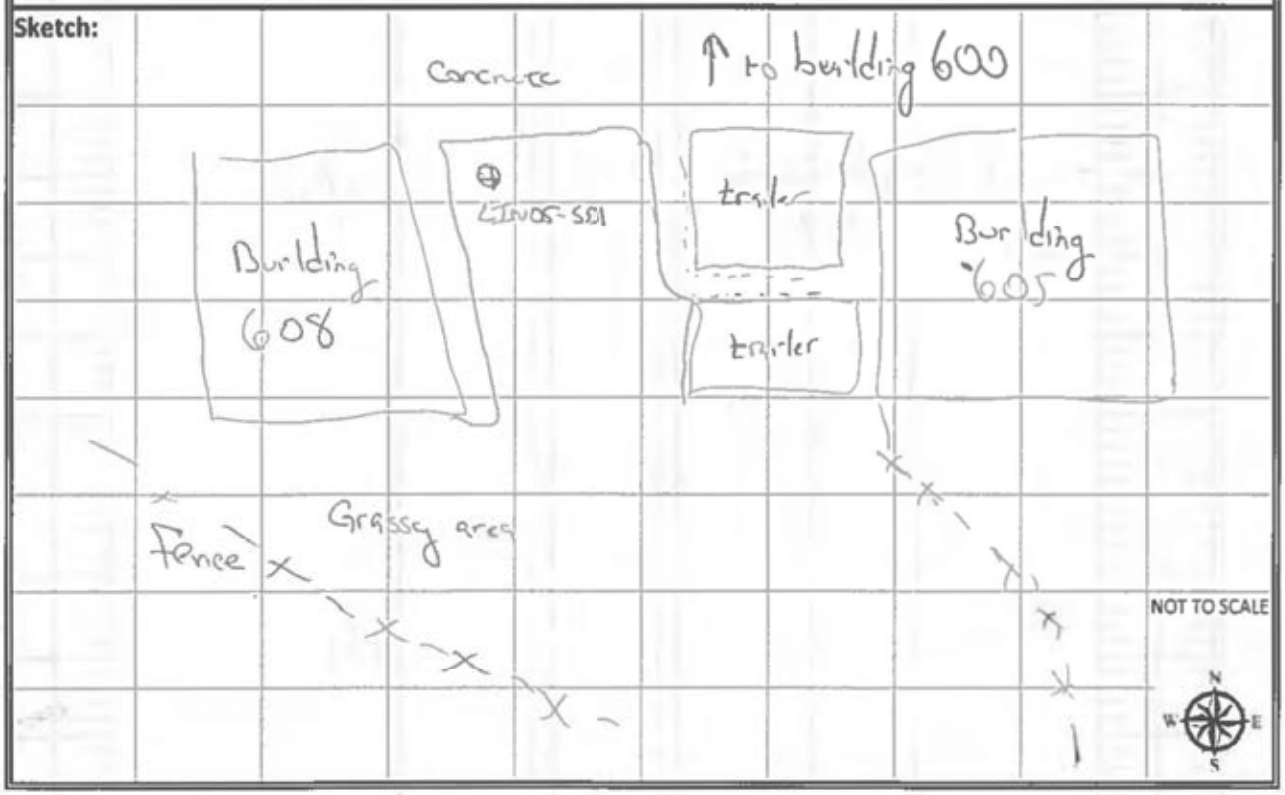
NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	X

** "X" analysis collected; "IS" insufficient volume; "NR" not required; define other code as appropriate

COMMENTS: Dup collected from LIN05-SB3-01

Client/Installation	Oversight Contractor	Borehole Number
ANG/LINCOLN ANGB	Leidos	LIN05-SB1
Project	**Driller : Stratus**	**Page**
FY17 Phase 3 Regional SI for PFOS/PFOA	ANG/LINCOLN ANGB	Page 1 of 4
Sizes and Type of Drilling and Sampling Equipment		**Borehole Location Description**
DPT Geoprobe		Corner of grassy area (northwest) between building 608 & 605
Date/Time Started :		**Date/Time Finished :**
7/19/18 1318		7/19/18 1325
Overburden Thickness	**Depth to Groundwater (ft)**	**Total Depth (ft)**
>16ft	14	16
Sample for PFOS/PFOA Analysis		**Sample for PFOS/PFOA Analysis**
Sample ID: LIN05-SB1-01		Sample ID: LIN05-SB1-02
Sample Interval: 0 to 2 ft		Sample Interval: 12 to 14 ft
Inspector Name		**Inspector Signature**
Tom Messing		
Monitoring Well ID :	**Backfill Type**	**Date Backfilled :**
N/A	Bentonite	7/19/18
Latitude	**Longitude**	**Elevation (ft)**
40.840425996	-96.757021693	1,162
Notes:		

Sketch:



Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	LIN-25-SB_1	Page 2 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/19/18

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes:
0.5	7.5YR 4/2 Brown dry silt low plasticity with some light brown marbling	0.0		Recovery
1			0-2	
1.5			1320 7/19/18	
2	2.5Y 4/4 olive brown silt, low plasticity	0.0		3/4
2.5				
3				
3.5				
4		0.0		
4.5				
5				
5.5				
6	GLEY 1 2.5/N Black silty clay moderately plastic dry	0.0		2.5/4
6.5				
7				
7.5				
8		0.0		4
8.5				
9				4/4
9.5				
10		0.0		

Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	LIN25-SB1	Page 3 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/19/18

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes:
10.5	Same			Recovery
11.0				
11.5				
12.0		0.0		6
12.5			12-14	
13.0			1325	
13.5			7/19/18	
14.0	wet	0.0		4/4
14.5				
15.0				
15.5				
16.0				
16.5				
17.0				
17.5				7/19/18
18.0	Auger Refusal			
18.5				
19.0				
19.5				
20.0				

SAMPLE COLLECTION/CHAIN-OF-CUSTODY RECORD

PROJECT NAME: LINCOLN ANG DELIVERY ORDER 0011

Borehole Data	
SAMPLING POINT:	LIN25-SB1
SAMPLE LOCATION:	
SAMPLE MEDIA:	Soil
SAMPLE TYPE	Grab
LOGBOOK NUMBER:	1

SAC - TestAmerica Sacramento

Sample Data	Sample No. 1
SAMPLE ID NUMBER:	LIN25-SB1-01
SAMPLE DEPTH:	0-2'

FIELD	READING	UNITS	
PID	0.0	ppm	

Date/Time: 7/K/18 1320

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	X

Sample Data	Sample No. 2
SAMPLE ID NUMBER:	LIN25-SB1-02
SAMPLE DEPTH (FT):	

FIELD	READING	UNITS	
PID	0.0	ppm	

Date/Time: 7/K/18 1325

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	X

** "X" analysis collected; "IS" insufficient volume; "NR" not required; define other code as appropriate

COMMENTS: None

MW-LIN05-01

Client/Installation	Oversight Contractor	Borehole Number
ANG/LINCOLN ANGB	Leidos	~~MW LIN05 SB1~~
Project	**Driller : Stratus**	**Page**
FY17 Phase 3 Regional SI for PFOS/PFOA	ANG/LINCOLN ANGB	Page 1 of 4

Sizes and Type of Drilling and Sampling Equipment	Borehole Location Description
~~DPT Geoprobe~~ 6" Auger rig	Adjacent to LIN09-SB1 in grass west of retention basin

Date/Time Started :	Date/Time Finished :
7/19/18 1715	7/19/18 1745

Overburden Thickness	Depth to Groundwater (ft)	Total Depth (ft)
20ft	13	20

Sample for PFOS/PFOA Analysis	Sample for PFOS/PFOA Analysis
~~Sample ID: LIN__-SB__-01~~	Sample ID: LIN__-SB__-02
Sample Interval: 0 to 2 ft	Sample Interval: ___ to ___ ft

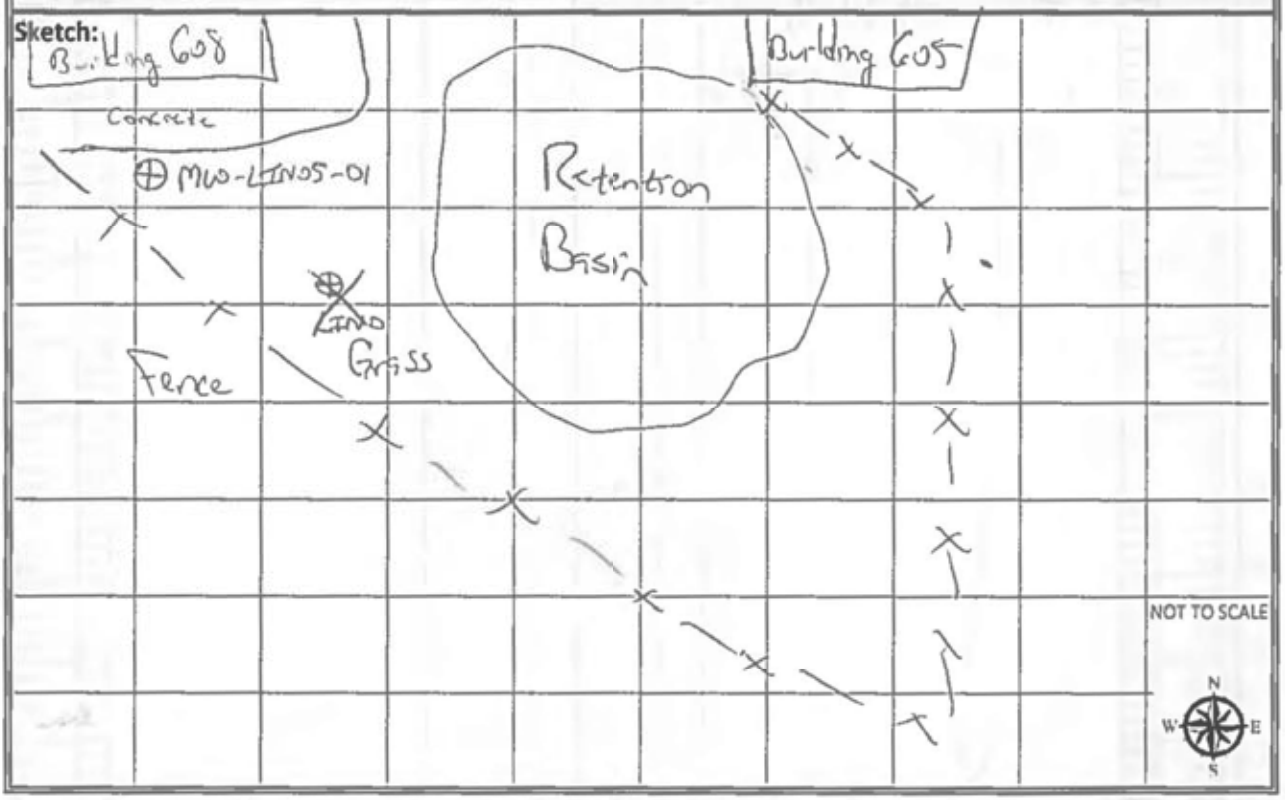
Inspector Name	Inspector Signature
Tom Messing	

Monitoring Well ID :	Backfill Type	Date Backfilled :
MW-LIN05-01	N/A	N/A

Latitude	Longitude	Elevation (ft)
~~40.839965274~~	~~-96.756822156~~	~~1,155~~ TEM 7/19/18

Notes: 40.840132280 -96.757494874
None

Sketch:



MW-LIN05-01

Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	~~LIN__SB__~~	Page 2 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/9/18

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes:
0.5	7.5YR 3/2 dark brown silty clay, dry, low plasticity	0.0	None	
2		0.0		
4		0.0		
5	2.5Y 2.5/1 black silty clay, dry, moderately plastic			
6		0.0		
8		0.0		
10		0.0		

MW-LIN05-01

Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	~~LIN-SB~~	Page 3 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/19/18

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes:
10.5			None	
11.0				
11.5				
12.0		0.0		
12.5				
13.0	Water			
13.5				
14.0		0.0		
14.5				
15.0				
15.5				
16.0		0.0		
16.5				
17.0				
17.5				
18.0		0.0		
18.5				
19.0				
19.5				
20.0		0.0		

SAMPLE COLLECTION/CHAIN-OF-CUSTODY RECORD

PROJECT NAME: LINCOLN ANG DELIVERY ORDER 0011

Borehole Data	
SAMPLING POINT:	~~LIN__SB__~~ MW-LIN05-01
SAMPLE LOCATION:	
SAMPLE MEDIA:	Soil
SAMPLE TYPE	Grab
LOGBOOK NUMBER:	1

No Samples collected

SAC - TestAmerica Sacramento

Sample Data	Sample No. 1
SAMPLE ID NUMBER:	LIN__-SB__-01
SAMPLE DEPTH:	0-2'

FIELD	READING	UNITS	
PID		ppm	

Date/Time: _____

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	

Sample Data	Sample No. 2
SAMPLE ID NUMBER:	LIN__-SB__-02
SAMPLE DEPTH (FT):	

FIELD	READING	UNITS	
PID		ppm	

Date/Time: _____

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	

** "X" analysis collected; "IS" insufficient volume; "NR" not required; define other code as appropriate

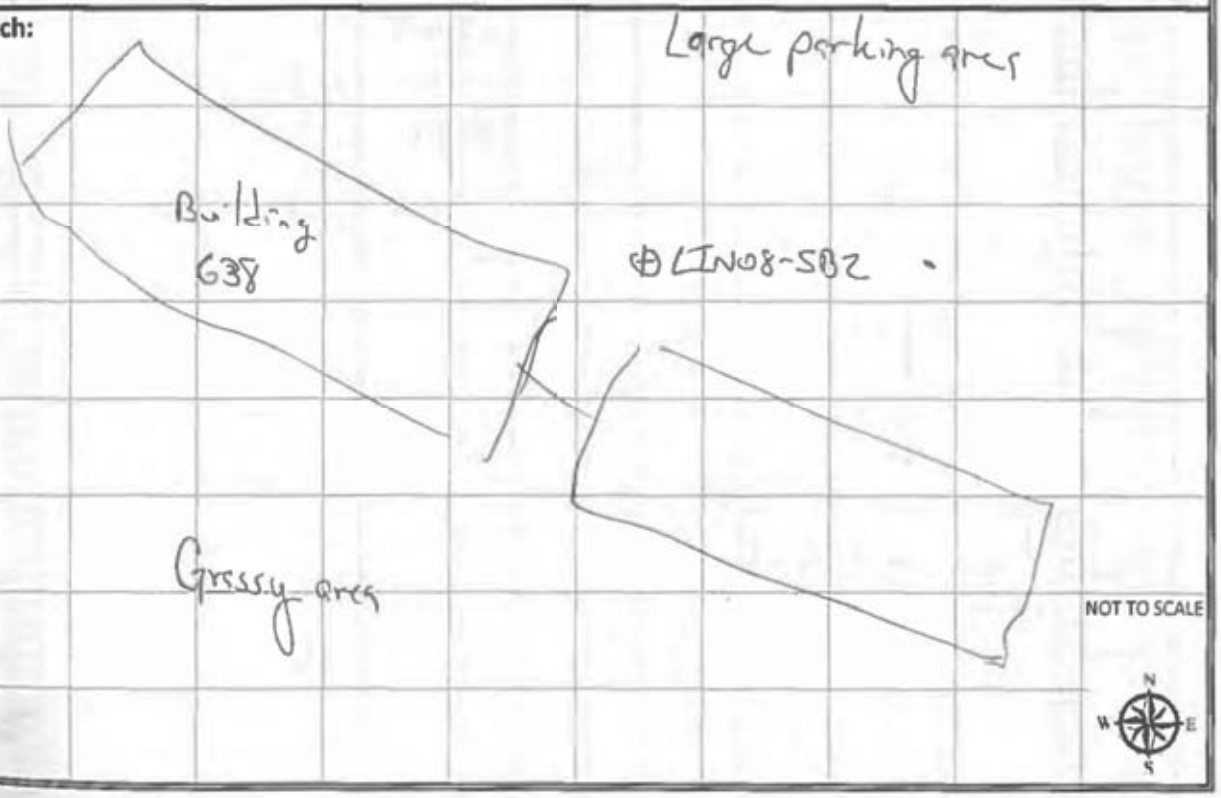
COMMENTS: _____

Client/Installation	Oversight Contractor	Borehole Number
ANG/LINCOLN ANGB	Leidos	LIN08-SB2
Project	**Driller : Stratus**	**Page**
FY17 Phase 3 Regional SI for PFOS/PFOA	ANG/LINCOLN ANGB	Page 1 of 4
Sizes and Type of Drilling and Sampling Equipment		**Borehole Location Description**
DPT Geoprobe		In concrete, near NW SE corner of building 638
Date/Time Started :		**Date/Time Finished :**
7/20/18 1000		7/20/18 1010
Overburden Thickness	**Depth to Groundwater (ft)**	**Total Depth (ft)**
>12 ft	6.5	12
Sample for PFOS/PFOA Analysis		**Sample for PFOS/PFOA Analysis**
Sample ID: LIN08-SB2-01		Sample ID: LIN08-SB2-02
Sample Interval: 0 to 2 ft		Sample Interval: 4.5 to 6.5 ft
Inspector Name		**Inspector Signature**
Tom Messing		
Monitoring Well ID :	**Backfill Type**	**Date Backfilled :**
N/A	Bentonite/concrete	7/20/18
Latitude	**Longitude**	**Elevation (ft)**
40.83952301 0	-96.75489629 9	1,160

Notes:

None

Sketch:



Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	LIN38-SB2	Page 2 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/20/18

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes: recovery
0.5	Concrete			
1				
1.5	sub-base			
2	silty-clay with some gravel 10YR 3/2 very dark grayish brown, moist, moderately plastic	1.5-3.5	0.0	
2.5		1005 7/20/18		2/4
3				
3.5				
4	10YR 4/4 dark yellowish brown, silty clay dry moderately plastic.	0.0ppm		
4.5				
5			4.5-6.5	
5.5			1010 7/20/18	MS/MSD
6		0.0		
6.5	WET same as above			2.5/4
7				
7.5				
8	Black GLEY1 2.5/N dry moist, silty-clay moderately plastic	0.0		
8.5				
9				4/4
9.5				
10		0.6		

Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	LINS-SB2	Page 3 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/20/18

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes:
12.0		0.0		End

Page 83 of 173

SAMPLE COLLECTION/CHAIN-OF-CUSTODY RECORD

PROJECT NAME: LINCOLN ANG DELIVERY ORDER 0011

Borehole Data	
SAMPLING POINT:	LIN08-SB2
SAMPLE LOCATION:	↓
SAMPLE MEDIA:	Soil
SAMPLE TYPE	Grab
LOGBOOK NUMBER:	1

SAC - TestAmerica Sacramento

Sample Data	Sample No. 1
SAMPLE ID NUMBER:	LIN08-SB2-01
SAMPLE DEPTH:	~~0.2'~~ 1.5-3.5

FIELD	READING	UNITS
PID	0.0	ppm

Date/Time: 7/20/18 1005

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	X

Sample Data	Sample No. 2
SAMPLE ID NUMBER:	LIN08-SB2-02
SAMPLE DEPTH (FT):	4.5-6.5

FIELD	READING	UNITS
PID	0.0	ppm

Date/Time: 7/20/18 1010

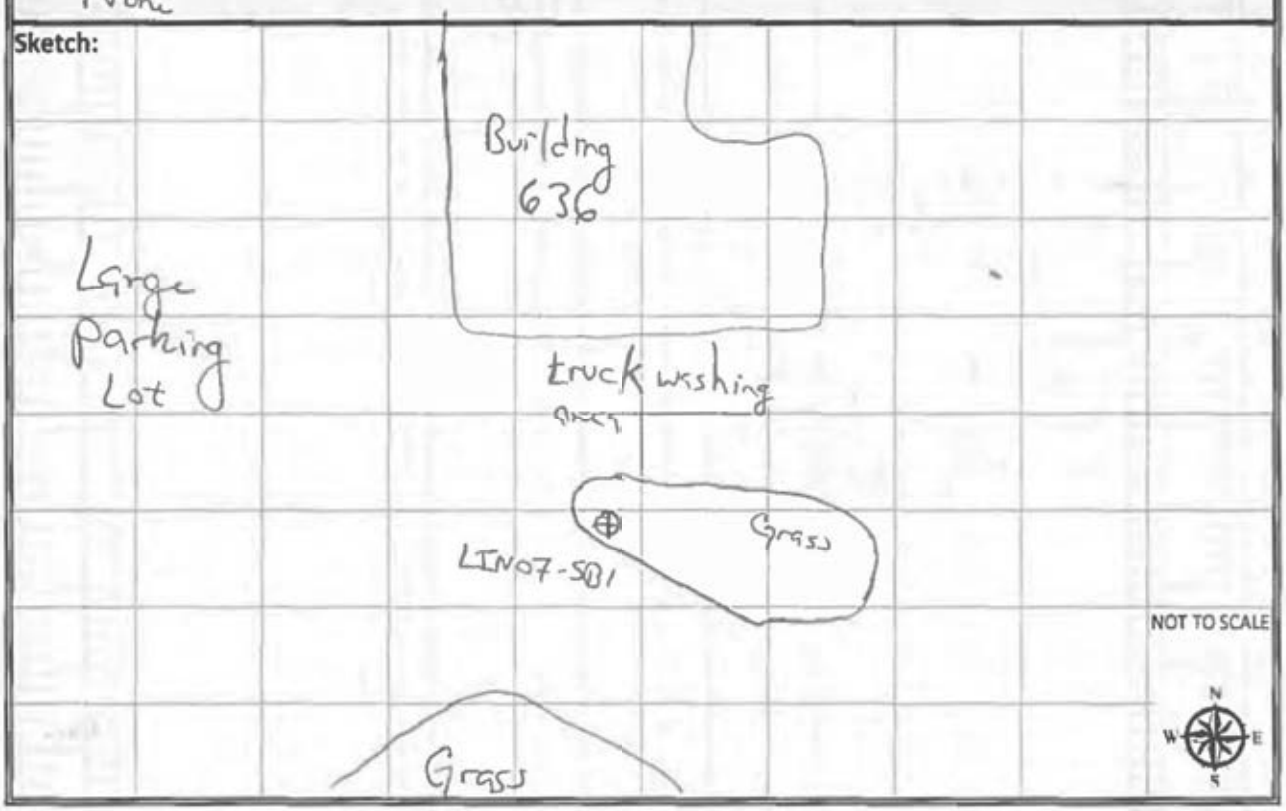
NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	X

** "X" analysis collected; "IS" insufficient volume; "NR" not required; define other code as appropriate

COMMENTS: MS/MSD collected from LIN08-SB2-02

Client/Installation	Oversight Contractor	Borehole Number
ANG/LINCOLN ANGB	Leidos	LIN07-SB1
Project	**Driller : Stratus**	**Page**
FY17 Phase 3 Regional SI for PFOS/PFOA	ANG/LINCOLN ANGB	Page 1 of 4
Sizes and Type of Drilling and Sampling Equipment		**Borehole Location Description**
DPT Geoprobe		In grass island South of building 636
Date/Time Started :		**Date/Time Finished :**
7/20/18 1020		7/20/18 1025
Overburden Thickness	**Depth to Groundwater (ft)**	**Total Depth (ft)**
>12 Ft	6	12
Sample for PFOS/PFOA Analysis		**Sample for PFOS/PFOA Analysis**
Sample ID: LIN07-SB1-01		**Sample ID:** LIN07-SB1-02
Sample Interval: 0 to 2 ft		**Sample Interval:** 4 to 6 ft
Inspector Name		**Inspector Signature**
Tom Messing		
Monitoring Well ID :	**Backfill Type**	**Date Backfilled :**
N/A	Bentonite	7/20/18
Latitude	**Longitude**	**Elevation (ft)**
40.839340952	-96.754147694	1,162
Notes:		
None		

Sketch:



Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	LIN07-SB1	Page 2 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/20/18

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes:
0.5	7.5YR 4/2 brown dry Si/H, low plasticity	0.0		
1			0-2 7/20/18 1020	
1.5				
2		0.0		
2.5				2.5/4
3	10YR 2/2 very dark brown silty dry, not plastic clay			
3.5				
4		0.0		
4.5				Dup collected
5			4-6 7/20/18 1025	
5.5				
6	wet silty sand soil fines 10YR 2/2 not plastic	0.0		
6.5				4/4
7				
7.5	10YR 2/2 very dark brown silty clay moist moderately plastic			
8		0.0		
8.5				
9				3/4
9.5				
10		0.0		

Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	LIN07-SB1	Page 3 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/20/17

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes:
10	10 brwn Silty Sand 50% fines 12 2/2 not plastic Same	0.0		

SAMPLE COLLECTION/CHAIN-OF-CUSTODY RECORD

PROJECT NAME: LINCOLN ANG DELIVERY ORDER 0011

Borehole Data	
SAMPLING POINT:	LIN07-SB1
SAMPLE LOCATION:	↓
SAMPLE MEDIA:	Soil
SAMPLE TYPE	Grab
LOGBOOK NUMBER:	1

SAC - TestAmerica Sacramento

Sample Data	Sample No. 1
SAMPLE ID NUMBER:	LIN07-SB1-01
SAMPLE DEPTH:	0-2'

FIELD	READING	UNITS
PID	0.0	ppm

Date/Time: 7/20/18 1020

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	X

Sample Data	Sample No. 2
SAMPLE ID NUMBER:	LIN07-SB1-02
SAMPLE DEPTH (FT):	

FIELD	READING	UNITS
PID	0.0	ppm

Date/Time: 7/20/18 1025

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	X

** "X" analysis collected; "IS" insufficient volume; "NR" not required; define other code as appropriate

COMMENTS: DUP collected from LIN07-SB1-02

Client/Installation	Oversight Contractor	Borehole Number
ANG/LINCOLN ANGB	Leidos	LIN07-SB2
Project	**Driller : Stratus**	**Page**
FY17 Phase 3 Regional SI for PFOS/PFOA	ANG/LINCOLN ANGB	Page 1 of 4

Sizes and Type of Drilling and Sampling Equipment	Borehole Location Description
DPT Geoprobe	In grass off SE corner of un-numbered garage structure, near building 638

Date/Time Started :	Date/Time Finished :
7/20/18 1040	7/20/18 1100

Overburden Thickness	Depth to Groundwater (ft)	Total Depth (ft)
>12ft	11	12

Sample for PFOS/PFOA Analysis	Sample for PFOS/PFOA Analysis
Sample ID: LIN07-SB2-01	Sample ID: LIN07-SB2-02
Sample Interval: 0 to 2 ft	Sample Interval: 9 to 11 ft

Inspector Name	Inspector Signature
Tom Messing	

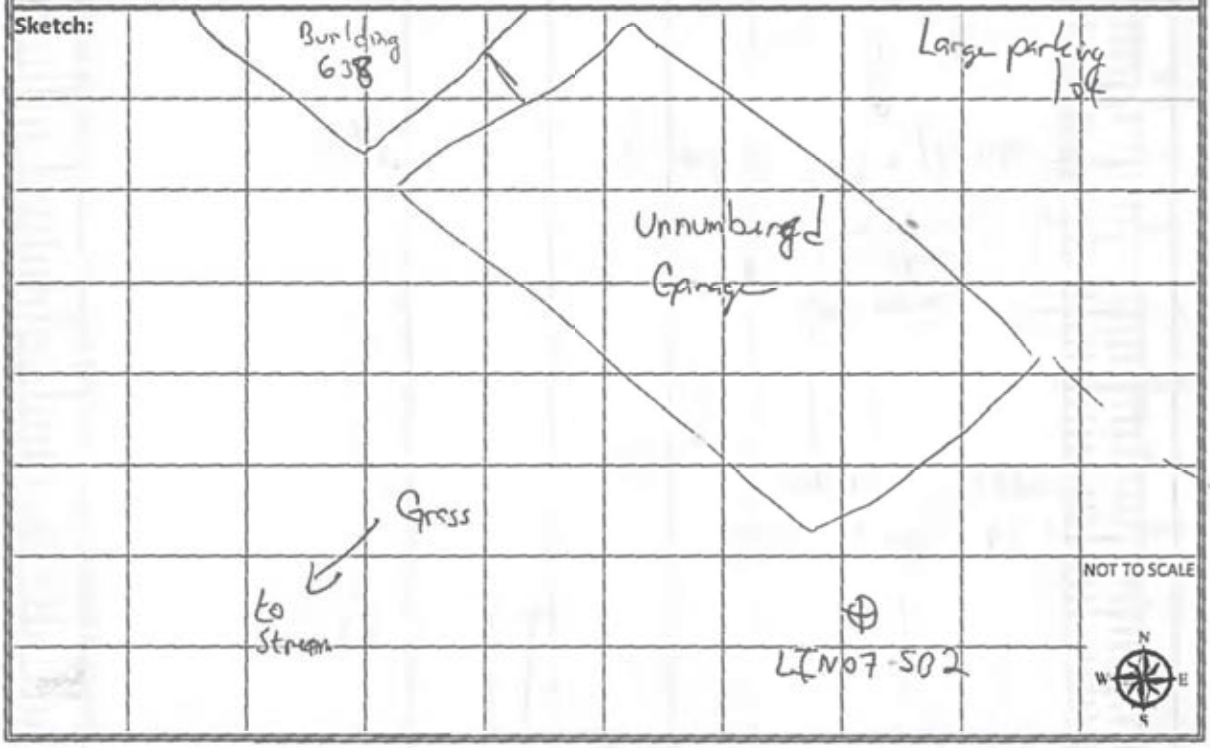
Monitoring Well ID :	Backfill Type	Date Backfilled :
MW-LIN07-01	N/A	N/A

Latitude	Longitude	Elevation (ft)
40.839083084	-96.754398169	1,160

Notes:

None

Sketch:



Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	LIN<u>ST</u>-SB<u>2</u>	Page <u>2</u> of <u>4</u>
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/20/18

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes: Recovery
0.5	7.5YR 4/2 brown dry silt, ~~no~~ low plasticity	0.0		
1			0-2' 7/20/18 1040	
1.5				
2		0.0		
2.5				2.5/4
3				
3.5				
4		0.0		
4.5				
5				
5.5				
6	10YR 4/2 dark grayish brown ~~with brick~~ silty clay with brick fragments moderately plastic, dry	0.0		2/4
6.5				
7	~~end of brick~~			
7.5				
8	GLEY1 2.5/N black silty clay, moist, mod. plastic,	0.0		
8.5				
9				3/5
9.5				
10		0.0		

Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	LIN27-SB2	Page 3 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/20/18

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes:
10.5			9-11'	
11.0	water		1100 7/20/18	
11.5				
12.0			0.0	
12.5				
13.0				
13.5				
14.0				
14.5				
15.0				
15.5				
16.0				
16.5				
17.0				
17.5				
18.0				
18.5				
19.0				
19.5				
20.0				

SAMPLE COLLECTION/CHAIN-OF-CUSTODY RECORD

PROJECT NAME: LINCOLN ANG DELIVERY ORDER 0011

Borehole Data	
SAMPLING POINT:	LIN57-SB2
SAMPLE LOCATION:	↓
SAMPLE MEDIA:	Soil
SAMPLE TYPE	Grab
LOGBOOK NUMBER:	1

SAC - TestAmerica Sacramento

Sample Data	Sample No. 1
SAMPLE ID NUMBER:	LIN57-SB2-01
SAMPLE DEPTH:	0-2'

FIELD	READING	UNITS
PID	0.0	ppm
Date/Time:	7/20/18 1040	

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	X

Sample Data	Sample No. 2
SAMPLE ID NUMBER:	LIN57-SB2-02
SAMPLE DEPTH (FT):	9-11

FIELD	READING	UNITS
PID	0.0	ppm
Date/Time:	7/20/18 1100	

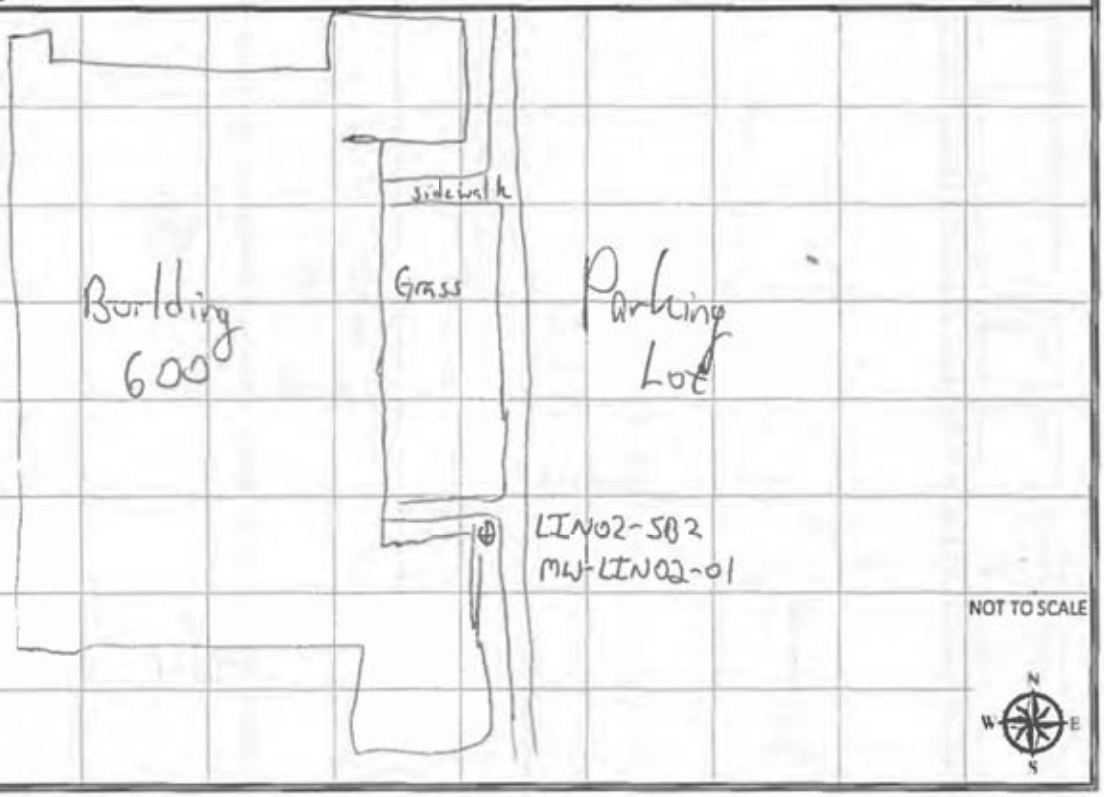
NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	X

** "X" analysis collected; "IS" insufficient volume; "NR" not required; define other code as appropriate

COMMENTS: None

Client/Installation	Oversight Contractor	Borehole Number
ANG/LINCOLN ANGB	Leidos	LIN02-SB2
Project	**Driller : Stratus**	**Page**
FY17 Phase 3 Regional SI for PFOS/PFOA	ANG/LINCOLN ANGB	Page 1 of 4
Sizes and Type of Drilling and Sampling Equipment		**Borehole Location Description**
DPT Geoprobe		In grass, adjacent to central side walk, east side of building 600
Date/Time Started :		**Date/Time Finished :**
7/20/18 1120		7/20/18 1130
Overburden Thickness	**Depth to Groundwater (ft)**	**Total Depth (ft)**
>12ft	8	12
Sample for PFOS/PFOA Analysis		**Sample for PFOS/PFOA Analysis**
Sample ID: LIN02-SB2-01		Sample ID: LIN02-SB2-02
Sample Interval: 0 to 2 ft		Sample Interval: 6 to 8 ft
Inspector Name		**Inspector Signature**
Tom Messing		
Monitoring Well ID :	**Backfill Type**	**Date Backfilled :**
MW-LIN02-01	n/A	N/A
Latitude	**Longitude**	**Elevation (ft)**
40.84119133	-96.75613104 3	1,164
Notes:		
None		

Sketch:



Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	LINP2-SB2	Page 2 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/20/18

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes: Recovery
0.5	7.5YR 2.5/1 black dry silt, low plasticity	0.0		
1	↓		0-2' 1125 7/20/18	
1.5	10YR 4/3 brown dry silty clay, low plasticity			
2		0.0		
2.5				2.5/4
3				
3.5				
4	10YR 3/4 dark yellowish brown with some dark brown marbling, silty-clay dry, low plasticity	0.0		
4.5				
5				
5.5				
6		0.0		
6.5				1.5/4
7			6-8' 1130 7/20/18	
7.5				
8	Wet silty clay 10YR 3/4 dark yellowish brown, moderately plastic	0.0		
8.5				
9				4/4
9.5				
10		0.0		

Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	LIN02-SB 7	Page 3 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/20/18

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes:
10.5	Same			Recovery
11.0	↓			
11.5				
12.0		0.0		
12.5	End			
13.0				
13.5				
14.0				
14.5				
15.0				
15.5				
16.0				
16.5				
17.0				
17.5				
18.0				
18.5				
19.0				
19.5				
20.0				

SAMPLE COLLECTION/CHAIN-OF-CUSTODY RECORD

PROJECT NAME: LINCOLN ANG DELIVERY ORDER 0011

Borehole Data	
SAMPLING POINT:	LIN-SB-2
SAMPLE LOCATION:	↓
SAMPLE MEDIA:	Soil
SAMPLE TYPE	Grab
LOGBOOK NUMBER:	1

SAC - TestAmerica Sacramento

Sample Data	Sample No. 1
SAMPLE ID NUMBER:	LIN-SB-2-01
SAMPLE DEPTH:	0-2'

FIELD	READING	UNITS
PID	0.0	ppm

Date/Time: 7/20/18 1125

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	X

Sample Data	Sample No. 2
SAMPLE ID NUMBER:	LIN-SB-2-02
SAMPLE DEPTH (FT):	6-8

FIELD	READING	UNITS
PID	0.0	ppm

Date/Time: 7/20/18 1130

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	X

** "X" analysis collected; "IS" insufficient volume; "NR" not required; define other code as appropriate

COMMENTS: None

Client/Installation	Oversight Contractor	Borehole Number
ANG/LINCOLN ANGB	Leidos	LIN08-SB1
Project	**Driller : Stratus**	**Page**
FY17 Phase 3 Regional SI for PFOS/PFOA	ANG/LINCOLN ANGB	Page 1 of 4

Sizes and Type of Drilling and Sampling Equipment	Borehole Location Description
DPT Geoprobe	North side of building 635, in grass.

Date/Time Started :	Date/Time Finished :
7/20/18 1140	7/20/18 1147

Overburden Thickness	Depth to Groundwater (ft)	Total Depth (ft)
>12 ft	9	12

Sample for PFOS/PFOA Analysis	Sample for PFOS/PFOA Analysis
Sample ID: LIN08-SB1-01	Sample ID: LIN08-SB1-02
Sample Interval: 0 to 2 ft	Sample Interval: 7 to 9 ft

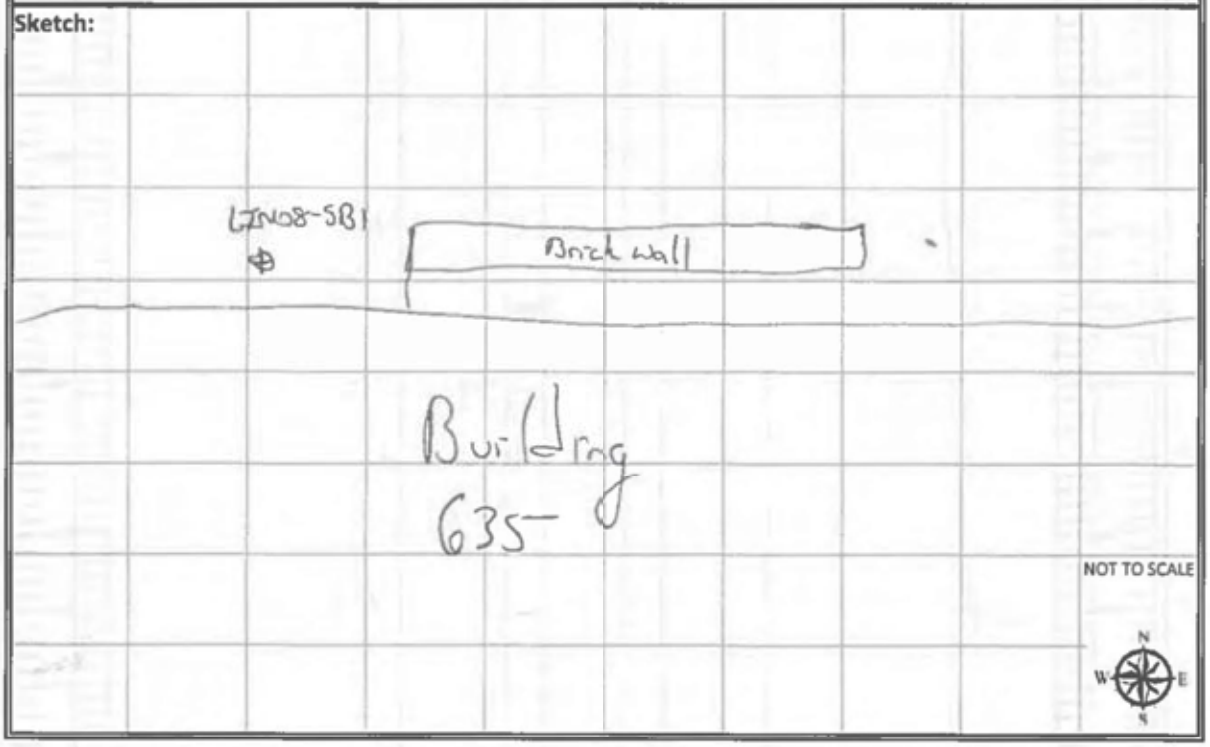
Inspector Name	Inspector Signature
Tom Messing	

Monitoring Well ID :	Backfill Type	Date Backfilled :
N/A	Bentonite	7/20/18

Latitude	Longitude	Elevation (ft)
40.840401156	-96.755167723	1,161

Notes:
None

Sketch:



Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	LIN~~18~~-SB1	Page 2 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/20/18

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes:
0.5	7.5YR 2.5/1 black dry silt, low plasticity	0.0	0-2' 1145 7/20/18	Recovery
1				
1.5				
2		0.0		2.5/4
2.5				
3	10YR 3/1 very dark gray silty clay, moderately plastic			
3.5				
4	GLEY 1 2.5/N black silty clay, moderately plastic, moist	0.0		
4.5				
5				
5.5				
6		0.0		4/4
6.5				
7				
7.5			7-9	
8		0.0	1150 7/20/18	
8.5				
9	wet			4/4
9.5				
10				

Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	LIN-SB-1	Page 3 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/20/18

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes:
10.5	Same			
11.0				
11.5	End			
12.0				
12.5				
13.0				
13.5				
14.0				
14.5				
15.0				
15.5				
16.0				
16.5				
17.0				
17.5				
18.0				
18.5				
19.0				
19.5				
20.0				

SAMPLE COLLECTION/CHAIN-OF-CUSTODY RECORD

PROJECT NAME: LINCOLN ANG DELIVERY ORDER 0011

Borehole Data	
SAMPLING POINT:	LIN-SB-1
SAMPLE LOCATION:	↓
SAMPLE MEDIA:	Soil
SAMPLE TYPE	Grab
LOGBOOK NUMBER:	1

SAC - TestAmerica Sacramento

Sample Data	Sample No. 1
SAMPLE ID NUMBER:	LIN-SB-1-01
SAMPLE DEPTH:	0-2'

FIELD	READING	UNITS
PID	0.0	ppm

Date/Time: 7/20/18 1145

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	X

Sample Data	Sample No. 2
SAMPLE ID NUMBER:	LIN-SB-1-02
SAMPLE DEPTH (FT):	7-9

FIELD	READING	UNITS
PID	0.0	ppm

Date/Time: 7/20/18 1150

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	X

** "X" analysis collected; "IS" insufficient volume; "NR" not required; define other code as appropriate

COMMENTS: None

MW-LIN08-01

Client/Installation	Oversight Contractor	Borehole Number
ANG/LINCOLN ANGB	Leidos	~~LIN__-SB__~~
Project	**Driller : Stratus**	**Page**
FY17 Phase 3 Regional SI for PFOS/PFOA	ANG/LINCOLN ANGB	Page 1 of 4

Sizes and Type of Drilling and Sampling Equipment	Borehole Location Description
~~DPT Geoprobe~~ Augur rig	In grass, ~~adja~~ SE of corner of fence, behind building 638

Date/Time Started :	Date/Time Finished :
7/20/18 1230	7/20/18 1330

Overburden Thickness	Depth to Groundwater (ft)	Total Depth (ft)
>20ft	12	20

Sample for PFOS/PFOA Analysis	Sample for PFOS/PFOA Analysis
Sample ID: ~~LIN__-SB__~~-01	Sample ID: ~~LIN__-SB__~~-02
Sample Interval: 0 to 2 ft	Sample Interval: ___ to ___ ft

Inspector Name	Inspector Signature
Tom Messing	

Monitoring Well ID :	Backfill Type	Date Backfilled :
MW-LIN08-01	N/A	N/A

Latitude	Longitude	Elevation (ft)
40.8396 75559	-96.75615 8685	1,165

Notes:

None

Sketch:



MW-LINCS-01

Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	~~LIN SB~~	Page 2 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/20/19

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes:
0.5	7.5YR 4/2 Brown dry silt, low plasticity	0.0	None	
1				
1.5				
2		0.0		
2.5				
3	5YR 2.5/1 very dark gray, dry mod-stkly plastic			
3.5				
4		0.0		
4.5				
5	5YR			
5.5				
6		0.0		
6.5				
7	5Y 2.5/1 silty clay moist moderately plastic			
7.5				
8		0.0		
8.5				
9				
9.5				
10				

MW-LIN08-01

Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	~~LIN__-SB~~	Page 3 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/20/18

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes:
10.5	Sand	0.0	None	
11.0				
11.5				
12.0	water	0.0		
12.5				
13.0				
13.5				
14.0				
14.5				
15.0				
15.5				
16.0				
16.5				
17.0				
17.5				
18.0				
18.5				
19.0				
19.5				
20.0				

SAMPLE COLLECTION/CHAIN-OF-CUSTODY RECORD

PROJECT NAME: LINCOLN ANG DELIVERY ORDER 0011

Borehole Data	
SAMPLING POINT:	LIN__-SB__
SAMPLE LOCATION:	
SAMPLE MEDIA:	Soil
SAMPLE TYPE	Grab
LOGBOOK NUMBER:	1

No samples collected for MW-LIN08-01

SAC - TestAmerica Sacramento

Sample Data	Sample No. 1
SAMPLE ID NUMBER:	LIN__-SB__-01
SAMPLE DEPTH:	0-2'

FIELD	READING	UNITS
PID		ppm

Date/Time: _____

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	

Sample Data	Sample No. 2
SAMPLE ID NUMBER:	LIN__-SB__-02
SAMPLE DEPTH (FT):	

FIELD	READING	UNITS
PID		ppm

Date/Time: _____

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	

** "X" analysis collected; "IS" insufficient volume; "NR" not required; define other code as appropriate

COMMENTS:

MW-LIN04-01

Client/Installation	Oversight Contractor	Borehole Number
ANG/LINCOLN ANGB	Leidos	~~LIN__-SB__-01~~
Project	**Driller : Stratus**	**Page**
FY17 Phase 3 Regional SI for PFOS/PFOA	ANG/LINCOLN ANGB	Page 1 of 4

Sizes and Type of Drilling and Sampling Equipment	Borehole Location Description
~~DPT Geoprobe~~ Auger Rig	MW installed on grass island due south of Fire house, building 2508

Date/Time Started :	Date/Time Finished :
7/20/18 1620	7/20/18

Overburden Thickness	Depth to Groundwater (ft)	Total Depth (ft)
>20ft	12	20

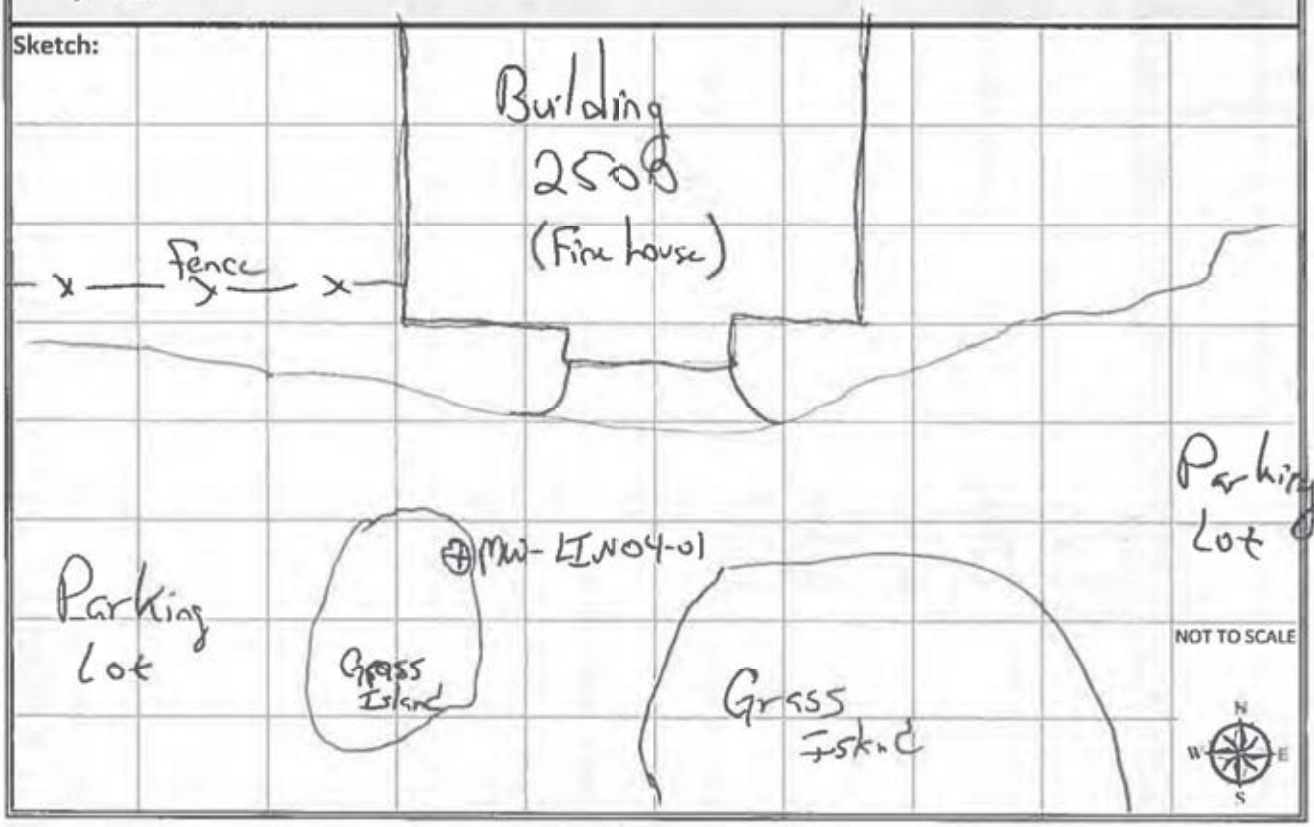
Sample for PFOS/PFOA Analysis	Sample for PFOS/PFOA Analysis
~~Sample ID: LIN__-SB__-01~~ No samples collected Sample Interval: 0 to 2 ft	~~Sample ID: LIN__-SB__-02~~ Sample Interval: ___ to ___ ft
Inspector Name	**Inspector Signature**
Tom Messing	

Monitoring Well ID :	Backfill Type	Date Backfilled :
MW-LIN04-01	None	N/A

Latitude	Longitude	Elevation (ft)
40.843061469	-96.755822011	1,168'

Notes: None

Sketch:



Page 104A (inserted)

MW-2IN04-01

Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	~~LIN SB~~	Page 3 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/20/18

Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes:
12.0	Water, some gravel	0.0		
16.0	10YR 5/4 yellowish-brown silty sand, not plastic.			

Page 104C (inserted)

SAMPLE COLLECTION/CHAIN-OF-CUSTODY RECORD

PROJECT NAME: LINCOLN ANG DELIVERY ORDER 0011

Borehole Data	
SAMPLING POINT:	~~LIN__-SB__~~ MW-LIN04-01
SAMPLE LOCATION:	
SAMPLE MEDIA:	Soil
SAMPLE TYPE	Grab
LOGBOOK NUMBER:	1

No samples collected

SAC - TestAmerica Sacramento

Sample Data	Sample No. 1
SAMPLE ID NUMBER:	LIN__-SB__-01
SAMPLE DEPTH:	0-2'

FIELD	READING	UNITS	
PID		ppm	

Date/Time:

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	

Sample Data	Sample No. 2
SAMPLE ID NUMBER:	LIN__-SB__-02
SAMPLE DEPTH (FT):	

FIELD	READING	UNITS	
PID		ppm	

Date/Time: 9/20/18

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
1-4oz	plastic	PFOS/PFOA	cold, no preservative	SAC	

** "X" analysis collected; "IS" insufficient volume; "NR" not required; define other code as appropriate

COMMENTS:

MW-LIN04-01

Client/Installation	Borehole Number	Page
ANG/LINCOLN ANGB	~~LIN-SB~~	Page 2 of 4
Project	**Inspector Name**	**Date:**
FY17 Phase 3 Regional SI for PFOS/PFOA	Tom Messing	7/20/18

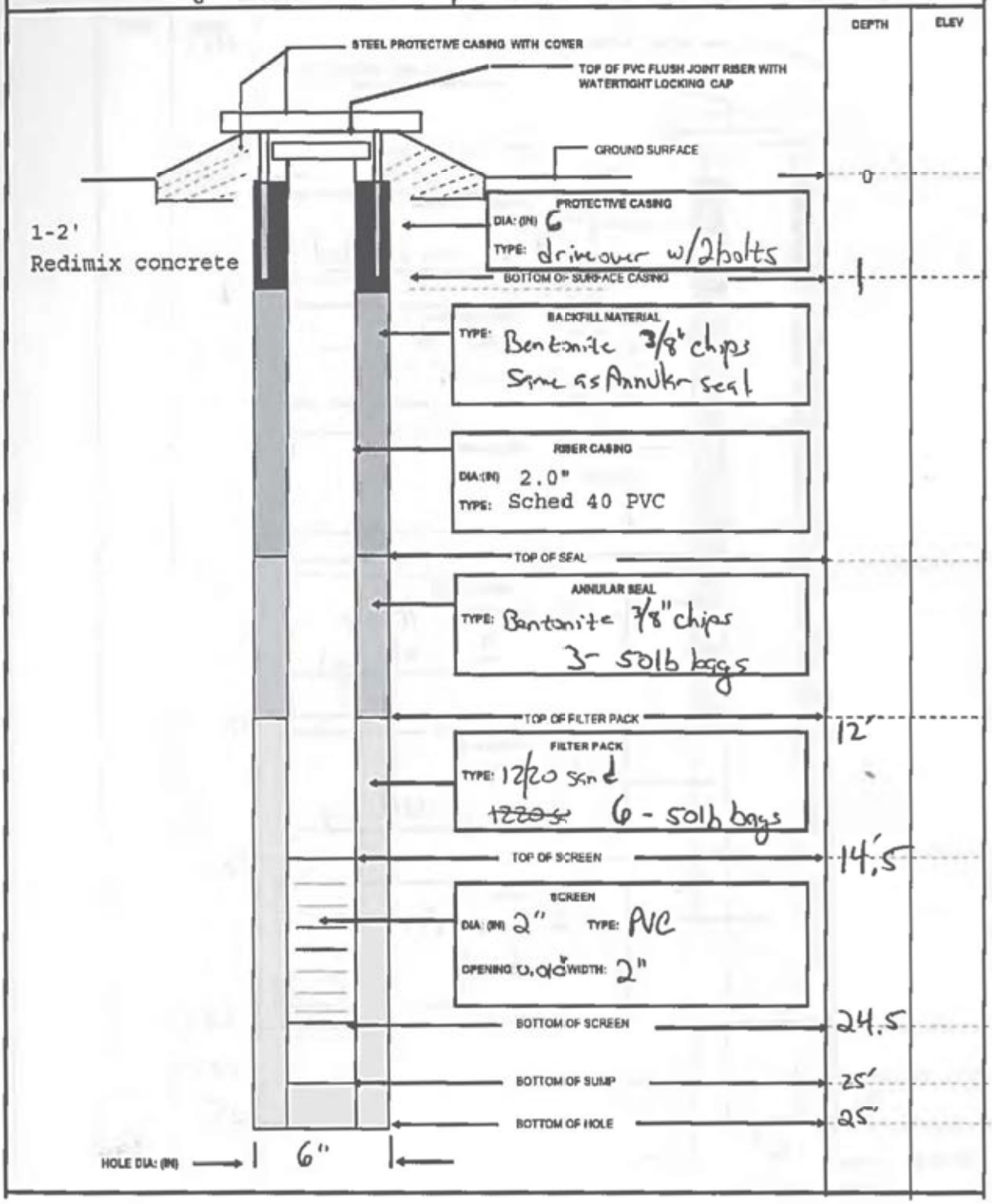
Depth	Description of Materials	Headspace Reading (ppm)	Analytical Sample Interval	Notes:
0.5	2.5Y 4/4 olive brown silty clay, dry, moderate plastic	0.0	No Samples Collected	
1		dry		
1.5				
2		0.0		
2.5				
3				
3.5				
4		0.0		
4.5				
5				
5.5				
6		0.0		
6.5				
7				
7.5				
8	10YR 3/2 very dark grayish brown, silty clay, moderately plastic, moist.	0.0		
8.5				
9				
9.5				
10		0.0		

MONITORING WELL

PROJECT NAME: LINCOLN AIR NATIONAL GUARD **DELIVERY ORDER NO:** 0011

WELL NUMBER: MW-LIN 03 -01 **BEGIN:** 7/18/18 0825 **END:** 7/19/18 0530

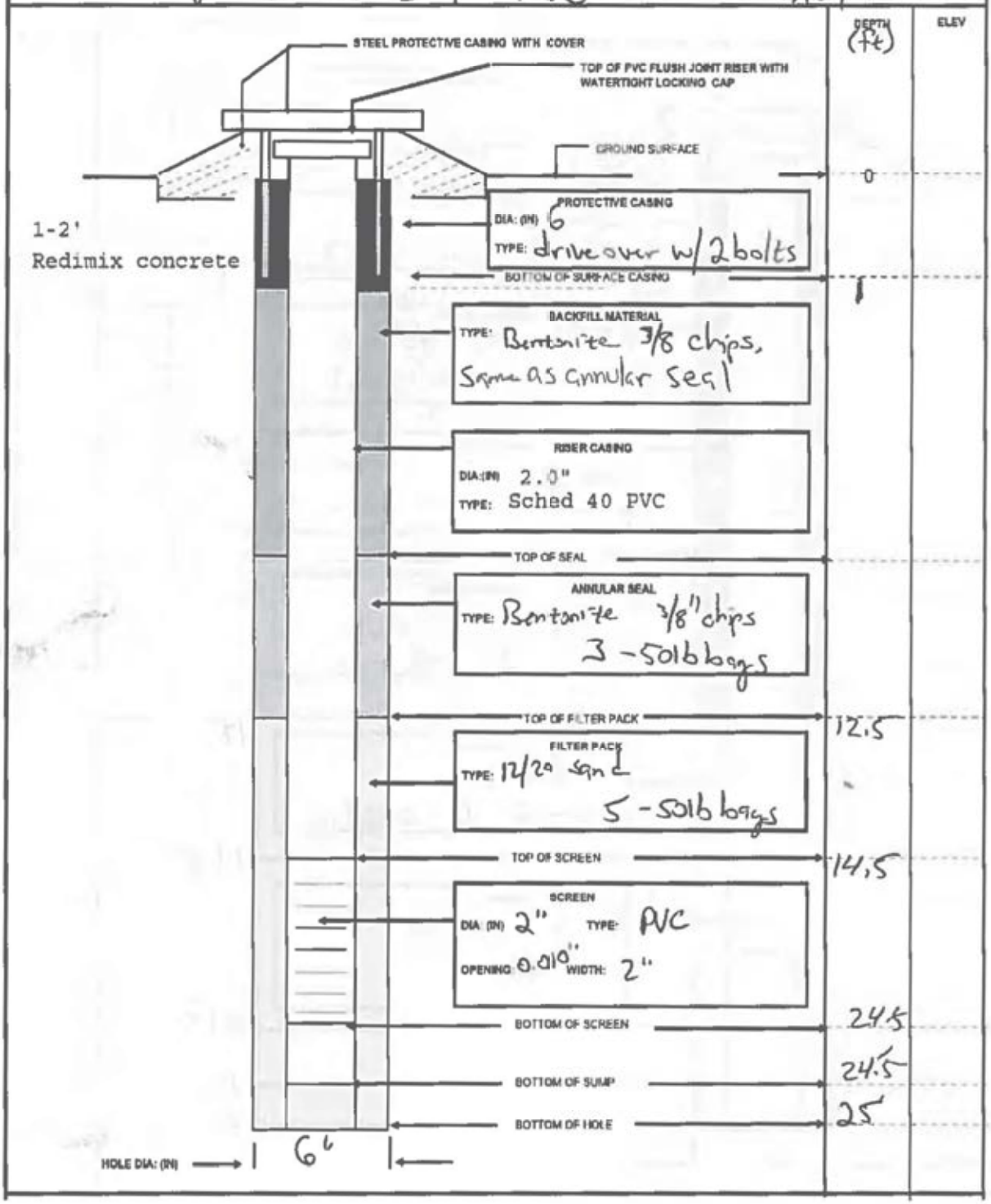
COORDINATES: Lat N: 40.843052106 Long E: -96.757505453 **REFERENCE POINT:** MSL **ELEVATION:** 1,170



MONITORING WELL

PROJECT NAME: LINCOLN AIR NATIONAL GUARD **DELIVERY ORDER NO:** 0011

WELL NUMBER: MW-LIN 01 -01	**BEGIN:** 7/9/18 0945	**END:** 7/19/18 1045
COORDINATES: Lat N: 40.8408 74864 Long E: -96.75894305 3	**REFERENCE POINT:** MSL	**ELEVATION:** 1,164

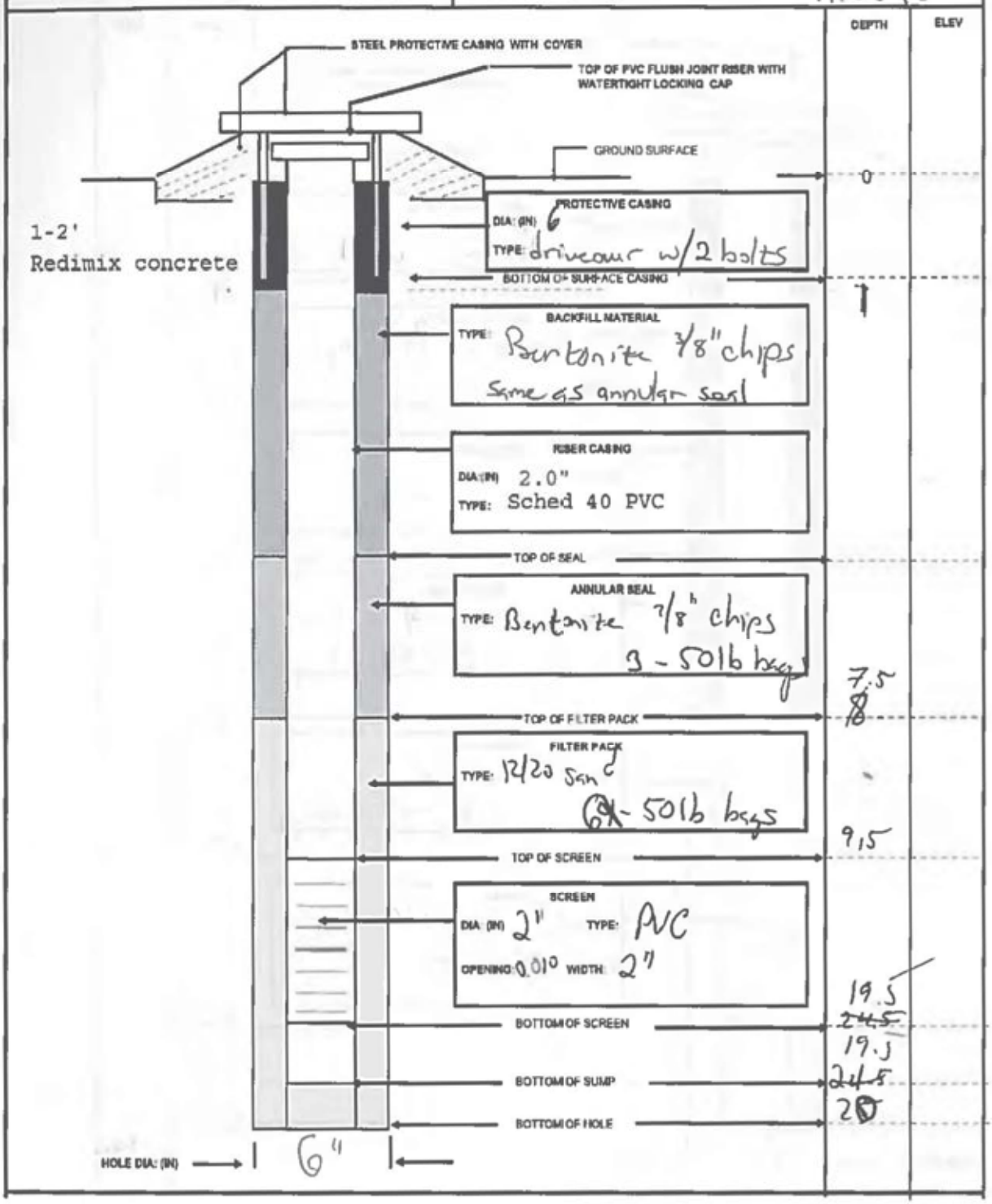


MONITORING WELL

PROJECT NAME: LINCOLN AIR NATIONAL GUARD **DELIVERY ORDER NO:** 0011

WELL NUMBER: MW-LIN 09 -01 **BEGIN:** 7/19/18 1435 **END:** 7/19/18 1650

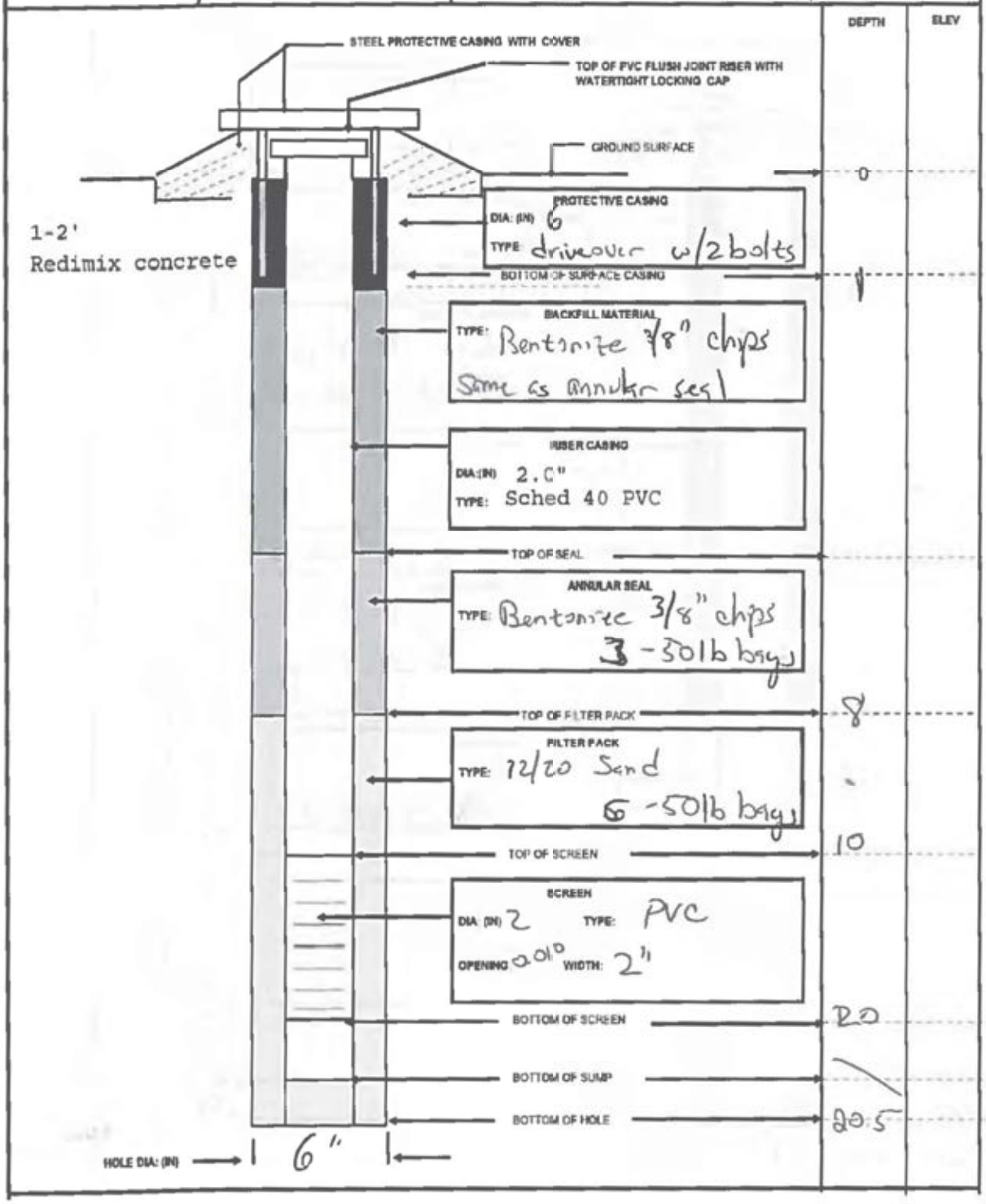
COORDINATES: Lat N: 40.83496 5274 Long E: -96.75682 2156 **REFERENCE POINT:** MSL **ELEVATION:** 1,155 ft



MONITORING WELL

PROJECT NAME: LINCOLN AIR NATIONAL GUARD **DELIVERY ORDER NO:** 0011

WELL NUMBER: MW-LIN05-01	**BEGIN:** 7/19/18 1715	**END:** 7/19/18 1745
COORDINATES: Lat N: 40.840132280 Long E: -96.75749474	**REFERENCE POINT:** MSL	**ELEVATION:** 1,163'

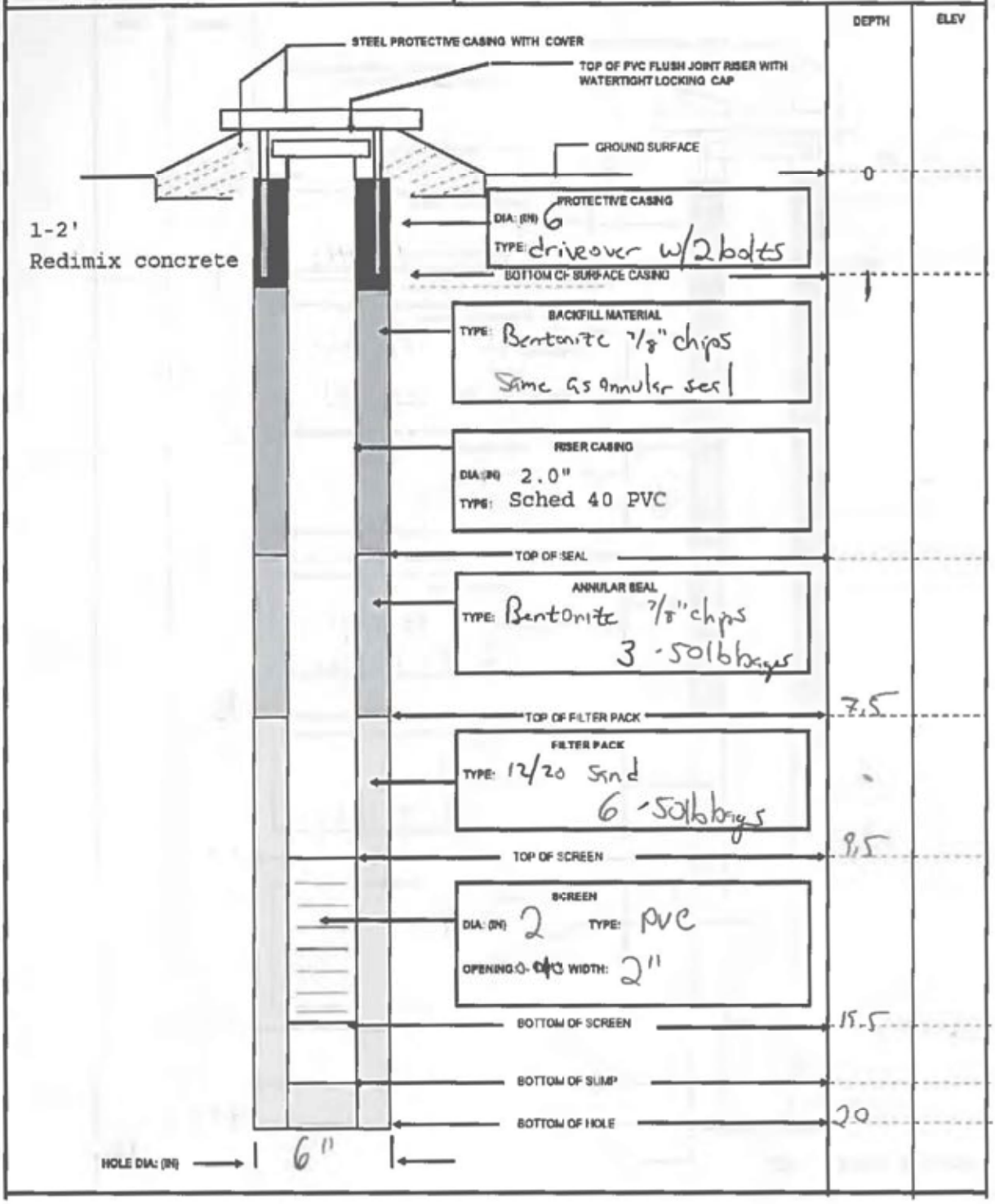


MONITORING WELL

PROJECT NAME: LINCOLN AIR NATIONAL GUARD **DELIVERY ORDER NO:** 0011

WELL NUMBER: MW-LIN08-01 **BEGIN:** 7/20/18 1230 **END:** 7/20/18 1330

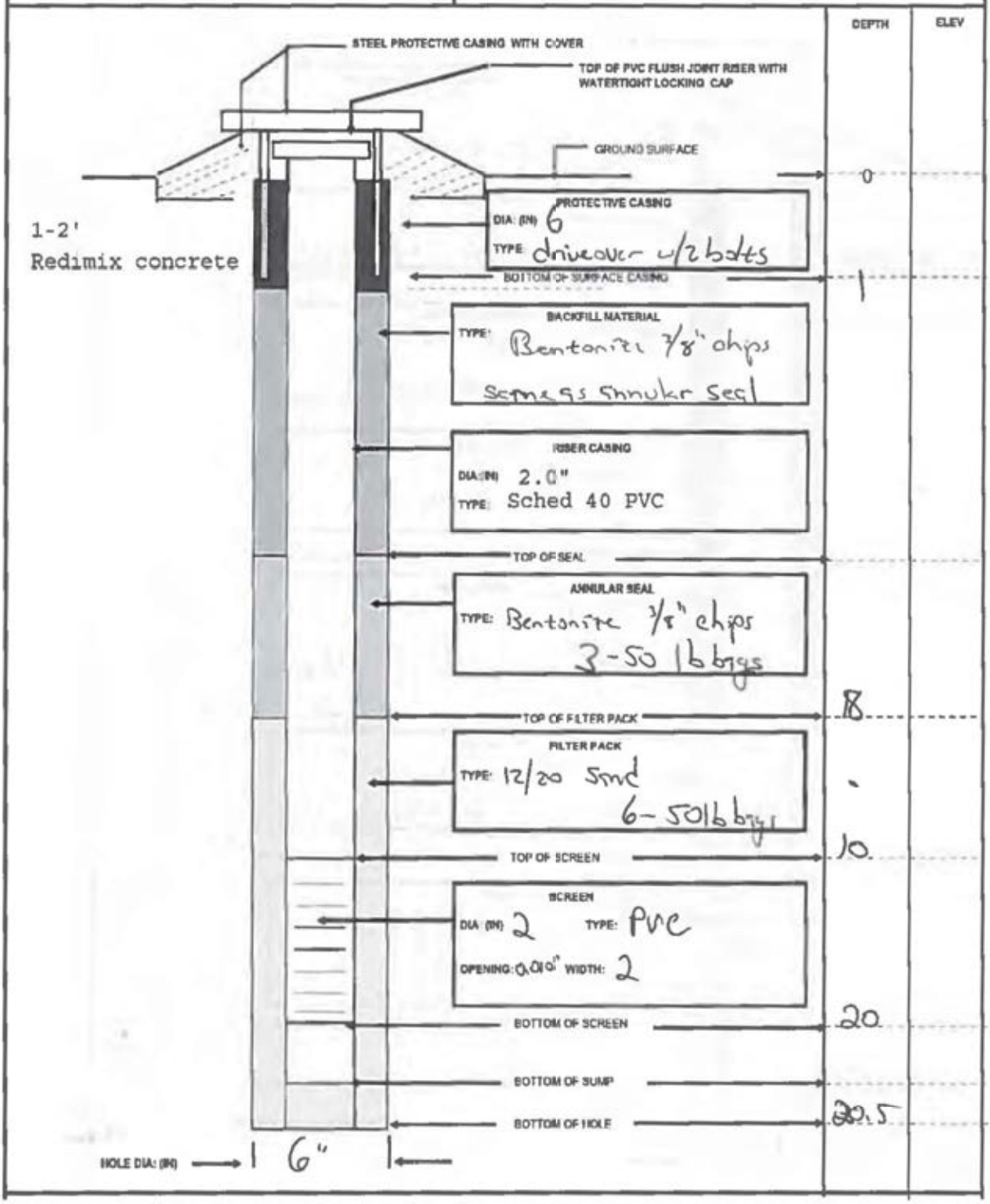
COORDINATES: N: E: **REFERENCE POINT:** **ELEVATION:**



MONITORING WELL

PROJECT NAME: LINCOLN AIR NATIONAL GUARD **DELIVERY ORDER NO:** 0011

WELL NUMBER: MW-LIN 07 -01	**BEGIN:** 7/20/18 1400	**END:** 7/20/18 1550
COORDINATES: N: E:	**REFERENCE POINT:**	**ELEVATION:**

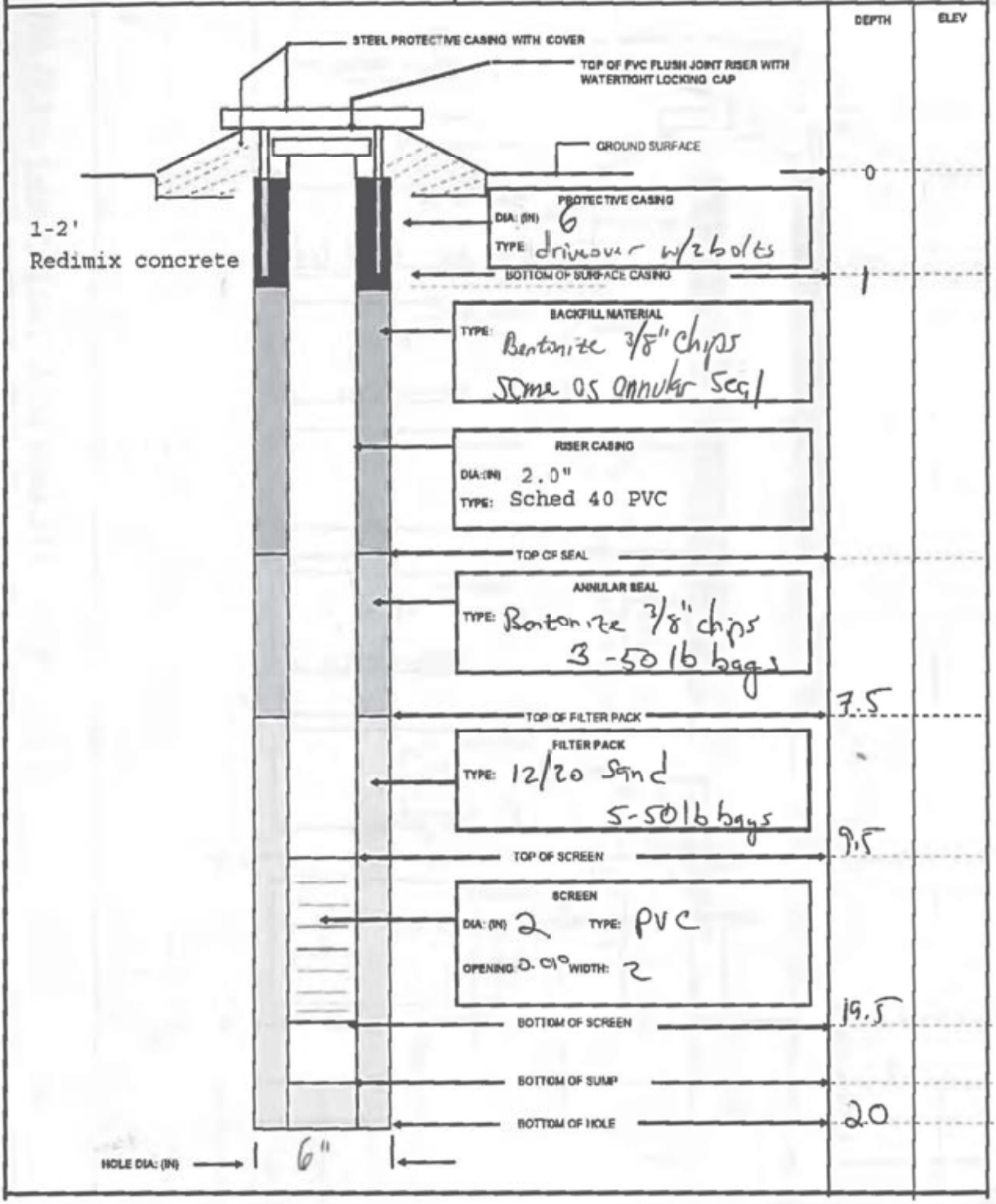


MONITORING WELL

PROJECT NAME: LINCOLN AIR NATIONAL GUARD **DELIVERY ORDER NO:** 0011

WELL NUMBER: MW-LIN 04 -01 **BEGIN:** 1620 7/20/18 **END:** 7/20/18 1730

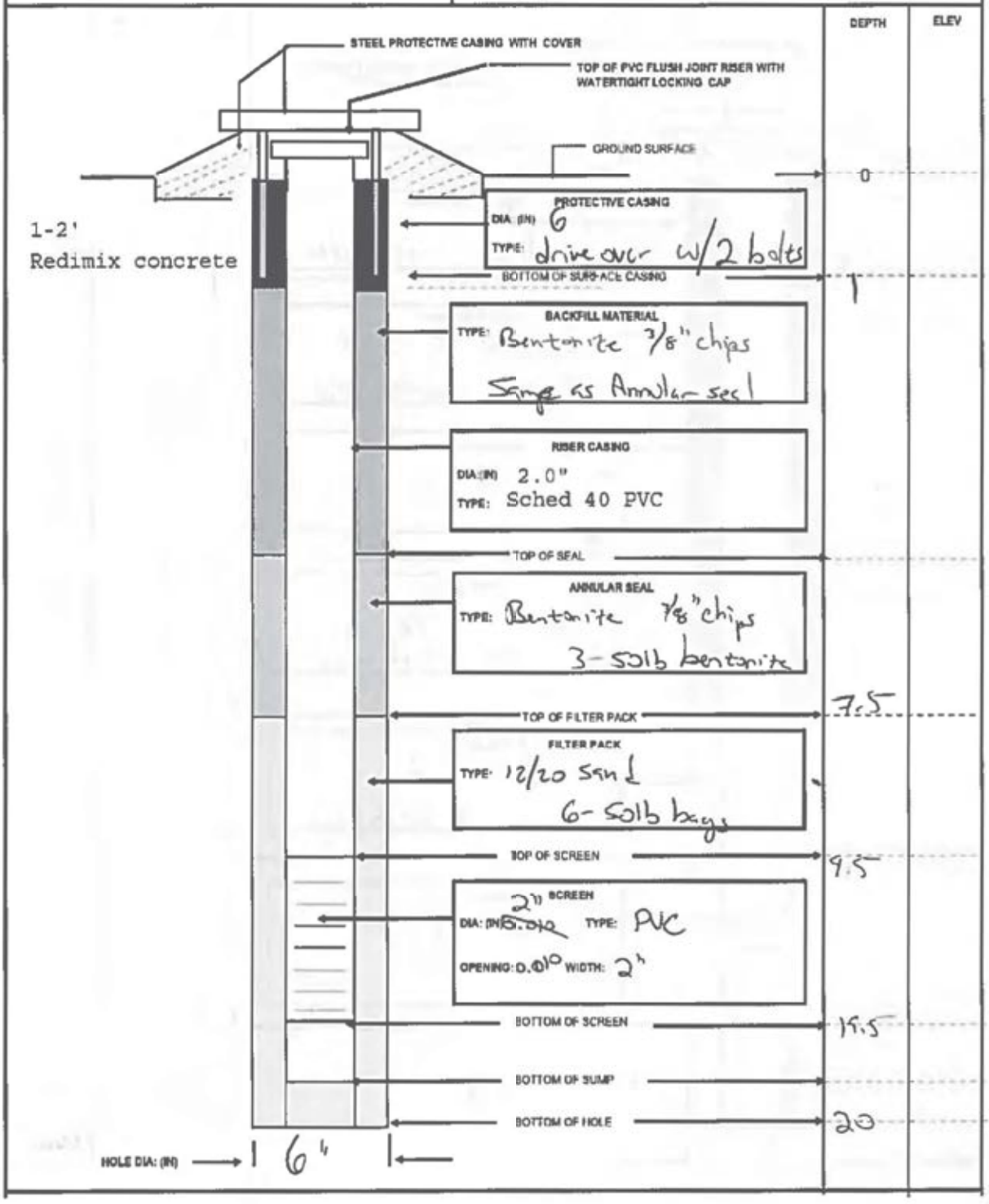
COORDINATES: N: E: **REFERENCE POINT:** **ELEVATION:**



MONITORING WELL

PROJECT NAME: LINCOLN AIR NATIONAL GUARD **DELIVERY ORDER NO:** 0011

WELL NUMBER: MW-LIN-02-01	**BEGIN:** 7/20/18 1755	**END:** 1845
COORDINATES: N: E:	**REFERENCE POINT:**	**ELEVATION:**



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APPENDIX B

GROUNDWATER SAMPLING LOGS

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GROUND WATER LOW-FLOW/DEVELOPMENT PURGE SHEET-NEW WELL

PROJECT NAME: LINCOLN ANG, LINCOLN Airport DELIVERY ORDER 0011

DATE: 7/25/18 TIME: 0955

WELL ID NUMBER: MW-LIN03-01

DEPTH OF SCREENED INTERVAL (toc notch): 14.5 ft. to 24.5 ft.

INNER CASING: TYPE: PVC ID: 2 inches

WATER QUALITY METER ID: 16893

WATER LEVEL INDICATOR ID: 82662

PUMP ID: ~~83078~~ 15322

TURBIDITY ID: 82899

PID ID: 82695

DEPTH TO WATER: 12.70 FT FROM MEASURE POINT

DEPTH TO TOP OF SCREEN: ~14.7 FT FROM MEASURE POINT

DEPTH TO PUMP INTAKE: 24.7 FT FROM MEASURE POINT

PURGE/SAMPLE METHOD: [ ] Monsoon [X] Peristaltic Pump [ ] Other Pump Type _____

PURGE START TIME: 1011 PURGE END TIME: 1031

TOTAL VOLUME PURGED: 5000 (mL)

S&A PLAN SAMPLING PROCEDURE FOLLOWED: [X] Yes [ ] No IF NO, WHY WAS A DEVIATION NECESSARY: _____

RECORDED BY: _____ (Signature) QA CHECKED BY: _____ (Signature)

GROUND WATER LOW-FLOW/DEVELOPMENT PURGE LOG-NEW WELL

WELL ID: MW-LIN03-01

PROJECT NAME: LINCOLN ANG, LINCOLN Airport

DELIVERY ORDER 0011

Date: 7/25/18 TIME	Volume Purged (mL)	PURGE RATE (mL/min)	ORP (mv)	TEMP (°C)	pH (S.U.)	SpecCond (µS/cm)	DO (mg/L)	TURBIDITY (NTU)	DEPTH TO WATER (FT BTOC)	COMMENTS
1011	0	250	80.4	16.20	7.70	701	6.25	311	—	Start purge
1016	1250	250	95.0	15.85	7.52	686	4.95	427	12.75	
1021	2500	250	97.6	16.00	7.48	685	4.49	112	12.75	
1026	3750	250	101.1	16.03	7.47	688	4.30	108	12.75	
1031	5,000	250	103.1	16,03	7.46	688	4.41	114	12.75	End purge

7/25/18

RECORDED BY: _____ (Signature)

QA CHECKED BY: _____ (Signature)

SAMPLE COLLECTION-NEW WELL

PROJECT NAME: LINCOLN ANG

DELIVERY ORDER 0011

DATE: 7/25/18

TIME: 1035

Sample Location: MW-LIN 03 -01

SAMPLE ID NUMBER:	MW-LIN 03 -01-01
SAMPLE LOCATION:	MW-LIN 03 -01
SAMPLE DEPTH:	24.7
SAMPLING POINT:	TOC
SAMPLE MEDIA:	GW
SAMPLE TYPE	Grab

FIELD	READING	UNITS	H&S (Y/N)
Conductivity	688	µS/cm	Y
DO	4.41	mg/L	↓
ORP	103.1	mV	
Temperature	16.03	°C	
Turbidity	114	NTUs	
pH	7.46	S.U.	
PID	0.0	ppm	↓

COMMENTS: DUP collected MW-LIN03-01-01D

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
2 ea - 250-mL polypropylene with polypropylene cap		PFOS/PFOA	Cool to 4°C ±2°	SAC	X

** "X" analysis collected; "IS" insufficient volume; "NR" not required; define other code as appropriate

SAC - TestAmerica Sacramento

GROUND WATER LOW-FLOW/DEVELOPMENT PURGE SHEET-NEW WELL

PROJECT NAME: LINCOLN ANG, LINCOLN Airport DELIVERY ORDER 0011

DATE: 7/25/18 TIME: 1050

WELL ID NUMBER: MW-LIN 01 -01

DEPTH OF SCREENED INTERVAL (toc notch): 14.5 ft. to 24.5 ft.

INNER CASING: TYPE: PVC ID: 2 inches

WATER QUALITY METER ID: 16893

WATER LEVEL INDICATOR ID: 82662

PUMP ID: ~~83078~~ 15322

TURBIDITY ID: 82899

PID ID: 82695

DEPTH TO WATER: 10.62 FT FROM MEASURE POINT

DEPTH TO TOP OF SCREEN: 15.28 FT FROM MEASURE POINT

DEPTH TO PUMP INTAKE: 14.00 FT FROM MEASURE POINT

PURGE/SAMPLE METHOD: [ ] Monsoon [X] Peristaltic Pump [ ] Other Pump Type _____

PURGE START TIME: 1058 PURGE END TIME: 1118

TOTAL VOLUME PURGED: 5,000 (mL)

S&A PLAN SAMPLING PROCEDURE FOLLOWED: [X] Yes [ ] No IF NO, WHY WAS A DEVIATION NECESSARY: _____

RECORDED BY: _____ (Signature) QA CHECKED BY: _____ (Signature)

GROUND WATER LOW-FLOW/DEVELOPMENT PURGE LOG-NEW WELL

WELL ID: MW-LIN 01 -01

PROJECT NAME: LINCOLN ANG, LINCOLN Airport

DELIVERY ORDER 0011

Date: 7/27/18 TIME	Volume Purged (mL)	PURGE RATE (mL/min)	ORP (mv)	TEMP (°C)	pH (S.U.)	SpecCond (µS/cm)	DO (mg/L)	TURBIDITY (NTU)	DEPTH TO WATER (FT BTOC)	COMMENTS
1058	0	250	104.6	16.53	7.80	811	7.18	42.3	—	Start purge
1103	1,250	250	103.1	15.61	7.61	862	3.94	21.4	10.64	
1108	2,500	250	106.8	15.59	7.47	911	5.68	22.0	10.64	
1113	3,750	250	107.3	15.61	7.46	911	5.88	20.8	10.64	
1118	5,000	250	107.8	15.75	7.45	916	5.81	20.6	10.64	End purge

RECORDED BY: _____ (Signature)

QA CHECKED BY: _____ (Signature)

SAMPLE COLLECTION-NEW WELL

PROJECT NAME: LINCOLN ANG

DELIVERY ORDER 0011

DATE: 7/25/18

TIME: 1120

Sample Location: MW-LIN_01_-01

SAMPLE ID NUMBER:	MW-LIN_01_-01-01
SAMPLE LOCATION:	MW-LIN_01_-01
SAMPLE DEPTH:	14.00
SAMPLING POINT:	TOC
SAMPLE MEDIA:	GW
SAMPLE TYPE	Grab

FIELD	READING	UNITS	H&S (Y/N)
Conductivity	916	µS/cm	Y
DO	5.81	mg/L	Y
ORP	107.8	mV	
Temperature	15.75	°C	
Turbidity	20.6	NTUs	
pH	7.45	S.U.	
PID	0.0	ppm	Y

COMMENTS: None

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
2 ea - 250-mL polypropylene with polypropylene cap		PFOS/PFOA	Cool to 4°C ±2°	SAC	X

** "X" analysis collected; "IS" insufficient volume; "NR" not required; define other code as appropriate

SAC - TestAmerica Sacramento

GROUND WATER LOW-FLOW/DEVELOPMENT PURGE SHEET-NEW WELL

PROJECT NAME: LINCOLN ANG, LINCOLN Airport DELIVERY ORDER 0011

DATE: 7/25/18 TIME: 1320

WELL ID NUMBER: MW-LIN05-01

DEPTH OF SCREENED INTERVAL (toc notch): 20 ft. to 10 ft.

INNER CASING: TYPE: PVC ID: 2 inches

WATER QUALITY METER ID: 16893

WATER LEVEL INDICATOR ID: 82662

PUMP ID: 15322

TURBIDITY ID: 82899

PID ID: 82695

DEPTH TO WATER: 12.62 FT FROM MEASURE POINT TD: 20.05

DEPTH TO TOP OF SCREEN: 10.05 FT FROM MEASURE POINT

DEPTH TO PUMP INTAKE: 20.05 FT FROM MEASURE POINT

PURGE/SAMPLE METHOD: [ ] Monsoon [X] Peristaltic Pump [ ] Other Pump Type _____

PURGE START TIME: 1325 PURGE END TIME: 1351

TOTAL VOLUME PURGED: 6,250 (mL)

S&A PLAN SAMPLING PROCEDURE FOLLOWED: [X] Yes [ ] No IF NO, WHY WAS A DEVIATION NECESSARY: _____

RECORDED BY: _____ (Signature) QA CHECKED BY: _____ (Signature)

GROUND WATER LOW-FLOW/DEVELOPMENT PURGE LOG-NEW WELL

WELL ID: MW-LIN 05 -01

PROJECT NAME: LINCOLN ANG, LINCOLN Airport

DELIVERY ORDER 0011

Date: 7/25/11 TIME	Volume Purged (mL)	PURGE RATE (mL/min)	ORP (mv)	TEMP (°C)	pH (S.U.)	SpecCond (µS/cm)	DO (mg/L)	TURBIDITY (NTU)	DEPTH TO WATER (FT BTOC)	COMMENTS
1326	0	250	100.7	16.75	7.56	870	5.44	635	—	Start purge
1331	1,250	250	102.0	16.73	7.58	850	5.43	346	12.63	
1336	2,500	250	103.1	16.74	7.49	840	5.75	90.0	12.63	
1341	3,750	250	103.5	16.80	7.44	825	6.66	27.7	12.63	
1346	5,000	250	104.3	16.80	7.40	818	6.79	26.9	12.67	
1351	6,250	250	105.3	16.83	7.38	821	6.85	25.2	12.63	End purge

RECORDED BY: _____ (Signature)

QA CHECKED BY: _____ (Signature)

SAMPLE COLLECTION-NEW WELL

PROJECT NAME: LINCOLN ANG

DELIVERY ORDER 0011

DATE: 7/25/18

TIME: 1355

Sample Location: MW-LIN05-01

SAMPLE ID NUMBER:	MW-LIN05-01-01
SAMPLE LOCATION:	MW-LIN05-01
SAMPLE DEPTH:	20ft
SAMPLING POINT:	TOC
SAMPLE MEDIA:	GW
SAMPLE TYPE	Grab

FIELD	READING	UNITS	H&S (Y/N)
Conductivity	821	µS/cm	yes
DO	6.85	mg/L	
ORP	105.3	mV	
Temperature	16.83	°C	
Turbidity	25.2	NTUs	
pH	7.38	S.U.	
PID	0.0	ppm	

COMMENTS: MS/MSD collected

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
2 ea - 250-mL polypropylene with polypropylene cap		PFOS/PFOA	Cool to 4°C ±2°	SAC	X

** "X" analysis collected; "IS" insufficient volume; "NR" not required; define other code as appropriate

SAC - TestAmerica Sacramento

GROUND WATER LOW-FLOW/DEVELOPMENT PURGE SHEET-NEW WELL

PROJECT NAME: LINCOLN ANG, LINCOLN Airport DELIVERY ORDER 0011

DATE: 7/25/18 TIME: 1405

WELL ID NUMBER: MW-LIN 09 -01

DEPTH OF SCREENED INTERVAL (toc notch): 9.5 ft. to 19.5 ft.

INNER CASING: TYPE: PVC ID: 2 inches

WATER QUALITY METER ID: 16893

WATER LEVEL INDICATOR ID: 82662

PUMP ID: 15322

TURBIDITY ID: 82899

PID ID: 82695

DEPTH TO WATER: 10.16 FT FROM MEASURE POINT

DEPTH TO TOP OF SCREEN: 9.04 FT FROM MEASURE POINT

DEPTH TO PUMP INTAKE: 19.04 FT FROM MEASURE POINT

PURGE/SAMPLE METHOD: [ ] Monsoon [X] Peristaltic Pump [ ] Other Pump Type _____

PURGE START TIME: 1410 PURGE END TIME: 1440

TOTAL VOLUME PURGED: 7500, (mL)

S&A PLAN SAMPLING PROCEDURE FOLLOWED: [X] Yes [ ] No IF NO, WHY WAS A DEVIATION NECESSARY: _____

RECORDED BY: _____ (Signature) QA CHECKED BY: _____ (Signature)

GROUND WATER LOW-FLOW/DEVELOPMENT PURGE LOG-NEW WELL

WELL ID: MW-LIN09-01

PROJECT NAME: LINCOLN ANG, LINCOLN Airport

DELIVERY ORDER 0011

Date: 7/25/18 TIME	Volume Purged (mL)	PURGE RATE (mL/min)	ORP (mv)	TEMP (°C)	pH (S.U.)	SpecCond (µS/cm)	DO (mg/L)	TURBIDITY (NTU)	DEPTH TO WATER (FT BTOC)	COMMENTS
1410	0	250	98.6	15.24	7.56	2455	8.12	57.3	—	Start purge
1415	1,250	250	98.0	15.21	7.50	2459	7.97	11.3	10.70	
1420	2,500	250	102.7	15.21	7.39	2455	8.78	8.12	11.02	
1425	3,750	250	105.0	15.31	7.39	2455	3.85	7.49	11.42	
1430	5,000	250	115.0	15.38	7.22	2411	3.86	9.47	11.92	
1435	6,250	250	116.2	15.31	7.18	2407	3.92	11.2	12.30	
1440	7,500	250	119.4	15.25	7.19	2388	4.01	12.6	12.60	End purge
1										

RECORDED BY: _____ (Signature)

QA CHECKED BY: _____ (Signature)

SAMPLE COLLECTION-NEW WELL

PROJECT NAME: LINCOLN ANG

DELIVERY ORDER 0011

DATE: 7/25/18

TIME: 1445

Sample Location: MW-LIN 09 -01

SAMPLE ID NUMBER:	MW-LIN 09 -01-01
SAMPLE LOCATION:	MW-LIN 09 -01
SAMPLE DEPTH:	19.04
SAMPLING POINT:	TOC
SAMPLE MEDIA:	GW
SAMPLE TYPE	Grab

FIELD	READING	UNITS	H&S (Y/N)
Conductivity	2388	µS/cm	Y
DO	4.01	mg/L	
ORP	119.4	mV	
Temperature	15.25	°C	
Turbidity	12.6	NTUs	
pH	7.19	S.U.	
PID	0.0	ppm	

COMMENTS: None

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
2 ea - 250-mL polypropylene with polypropylene cap		PFOS/PFOA	Cool to 4°C ±2°	SAC	X

** "X" analysis collected; "IS" insufficient volume; "NR" not required; define other code as appropriate

SAC - TestAmerica Sacramento

GROUND WATER LOW-FLOW/DEVELOPMENT PURGE SHEET-NEW WELL

PROJECT NAME: LINCOLN ANG, LINCOLN Airport DELIVERY ORDER 0011

DATE: 7/25/18 TIME: 0715

WELL ID NUMBER: MW-LIN 08 -01

DEPTH OF SCREENED INTERVAL (toc notch): 4.5 ft. to 9.5 ft.

INNER CASING: TYPE: PVC ID: 2 inches

WATER QUALITY METER ID: 16893

WATER LEVEL INDICATOR ID: 82662

PUMP ID: ~~83078~~ 15322

TURBIDITY ID: 82899

PID ID: 82695

DEPTH TO WATER: 9.44 FT FROM MEASURE POINT

DEPTH TO TOP OF SCREEN: 9.56 FT FROM MEASURE POINT

DEPTH TO PUMP INTAKE: 19.56 FT FROM MEASURE POINT

PURGE/SAMPLE METHOD: [ ] Monsoon [X] Peristaltic Pump [ ] Other Pump Type _____

PURGE START TIME: 0732 PURGE END TIME: 0747

TOTAL VOLUME PURGED: 3,750 (mL)

S&A PLAN SAMPLING PROCEDURE FOLLOWED: [X] Yes [ ] No IF NO, WHY WAS A DEVIATION NECESSARY: _____

RECORDED BY: _____ (Signature) QA CHECKED BY: _____ (Signature)

GROUND WATER LOW-FLOW/DEVELOPMENT PURGE LOG-NEW WELL

WELL ID: MW-LIN 08 -01

PROJECT NAME: LINCOLN ANG, LINCOLN Airport

DELIVERY ORDER 0011

Date: 7/25/18 TIME	Volume Purged (mL)	PURGE RATE (mL/min)	ORP (mv)	TEMP (°C)	pH (S.U.)	SpecCond (µS/cm)	DO (mg/L)	TURBIDITY (NTU)	DEPTH TO WATER (FT BTOC)	COMMENTS
0732	0	250 340	185.8	14.45	7.37	1005	7.10	645	–	begin purge
0737	1250	250	169.5	14.35	7.52	966	6.96	111	10.22	
0742	2500	250	165.1	14.66	7.52	959	6.42	105	10.40	
0747	3750	250	161.6	14.64	7.52	956	6.66	116	10.61	End purge

RECORDED BY: _____ (Signature)

QA CHECKED BY: _____ (Signature)

SAMPLE COLLECTION-NEW WELL

PROJECT NAME: LINCOLN ANG

DELIVERY ORDER 0011

DATE: 7/25/18

TIME: 0750

Sample Location: MW-LIN 08 -01

SAMPLE ID NUMBER:	MW-LIN 08 -01-01
SAMPLE LOCATION:	MW-LIN 08 -01
SAMPLE DEPTH:	19.56
SAMPLING POINT:	TOC
SAMPLE MEDIA:	GW
SAMPLE TYPE	Grab

FIELD	READING	UNITS	H&S (Y/N)
Conductivity	956	µS/cm	Y
DO	6.66	mg/L	
ORP	161.6	mV	
Temperature	14.64	°C	
Turbidity	116	NTUs	
pH	7.52	S.U.	
PID	0.0	ppm	

COMMENTS: None

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
2 ea - 250-mL polypropylene with polypropylene cap		PFOS/PFOA	Cool to 4°C ±2°	SAC	X

** "X" analysis collected; "IS" insufficient volume; "NR" not required; define other code as appropriate

SAC - TestAmerica Sacramento

GROUND WATER LOW-FLOW/DEVELOPMENT PURGE SHEET-NEW WELL

PROJECT NAME: LINCOLN ANG, LINCOLN Airport DELIVERY ORDER 0011

DATE: 7/25/18 TIME: 0655

WELL ID NUMBER: MW-LIN07-01

DEPTH OF SCREENED INTERVAL (toc notch): 10 ft. to 20 ft.

INNER CASING: TYPE: PVC ID: 2 inches

WATER QUALITY METER ID: 16893

WATER LEVEL INDICATOR ID: 82662

PUMP ID: ~~83078~~ / 15322

TURBIDITY ID: 82859

PID ID: 87695

DEPTH TO WATER: 10.26 FT FROM MEASURE POINT

DEPTH TO TOP OF SCREEN: 9.70 FT FROM MEASURE POINT

DEPTH TO PUMP INTAKE: 19.70 FT FROM MEASURE POINT

PURGE/SAMPLE METHOD: [ ] Monsoon [X] Peristaltic Pump [ ] Other Pump Type _____

PURGE START TIME: 0903 PURGE END TIME: 0918

TOTAL VOLUME PURGED: 3750 (mL)

S&A PLAN SAMPLING PROCEDURE FOLLOWED: [ ] Yes [X] No IF NO, WHY WAS A DEVIATION NECESSARY: _____

RECORDED BY: _____ (Signature) QA CHECKED BY: _____ (Signature)

GROUND WATER LOW-FLOW/DEVELOPMENT PURGE LOG-NEW WELL

WELL ID: MW-LIN07-01

PROJECT NAME: LINCOLN ANG, LINCOLN Airport

DELIVERY ORDER 0011

Date: 7/25/16 TIME	Volume Purged (mL)	PURGE RATE (mL/min)	ORP (mv)	TEMP (°C)	pH (S.U.)	SpecCond (µS/cm)	DO (mg/L)	TURBIDITY (NTU)	DEPTH TO WATER (FT BTOC)	COMMENTS
0903	0	250	61.2	15.15	7.35	1210	2.83	16.5	—	Start purge
0908	1,250	250	76.5	15.04	7.38	1182	3.85	7.61	10.94	
0913	2,500	250	84.0	15.03	7.40	1174	3.89	7.29	11.25	
0918	3,750	250	85.3	15.09	7.41	1169	3.79	6.99	11.50	End purge

RECORDED BY: _____ (Signature)

QA CHECKED BY: _____ (Signature)

SAMPLE COLLECTION-NEW WELL

PROJECT NAME: LINCOLN ANG

DELIVERY ORDER 0011

DATE: 7/25/18

TIME: 0920

Sample Location: MW-LIN 07 -01

SAMPLE ID NUMBER:	MW-LIN07 -01-01
SAMPLE LOCATION:	MW-LIN07-01
SAMPLE DEPTH:	9.70
SAMPLING POINT:	TOC
SAMPLE MEDIA:	GW
SAMPLE TYPE	Grab

FIELD	READING	UNITS	H&S (Y/N)
Conductivity	1169	µS/cm	y
DO	3.79	mg/L	
ORP	85.3	mV	
Temperature	15.09	°C	
Turbidity	6.99	NTUs	
pH	7.41	S.U.	
PID	0.0	ppm	V

COMMENTS: N Odor

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
2 ea - 250-mL polypropylene with polypropylene cap		PFOS/PFOA	Cool to 4°C ±2°	SAC	X

** "X" analysis collected; "IS" insufficient volume; "NR" not required; define other code as appropriate

SAC - TestAmerica Sacramento

GROUND WATER LOW-FLOW/DEVELOPMENT PURGE SHEET-NEW WELL

PROJECT NAME: LINCOLN ANG, LINCOLN Airport DELIVERY ORDER 0011

DATE: 7/25/18 TIME: 1505

WELL ID NUMBER: MW-LIN 04 -01

DEPTH OF SCREENED INTERVAL (toc notch): 9.5 ft. to 19.5 ft.

INNER CASING: TYPE: PVC ID: 2 inches

WATER QUALITY METER ID: 16893

WATER LEVEL INDICATOR ID: 82662

PUMP ID: 15322

TURBIDITY ID: 82899

PID ID: 82695

DEPTH TO WATER: 13.52 FT FROM MEASURE POINT

DEPTH TO TOP OF SCREEN: 9.68 FT FROM MEASURE POINT

DEPTH TO PUMP INTAKE: 19.68 FT FROM MEASURE POINT

PURGE/SAMPLE METHOD: [ ] Monsoon [X] Peristaltic Pump [ ] Other Pump Type _____

PURGE START TIME: 1530 PURGE END TIME: 1600

TOTAL VOLUME PURGED: 7500 (mL)

S&A PLAN SAMPLING PROCEDURE FOLLOWED: [X] Yes [ ] No IF NO, WHY WAS A DEVIATION NECESSARY: _____

RECORDED BY: _____ (Signature) QA CHECKED BY: _____ (Signature)

GROUND WATER LOW-FLOW/DEVELOPMENT PURGE LOG-NEW WELL

WELL ID: MW-LIN 04 -01

PROJECT NAME: LINCOLN ANG, LINCOLN Airport

DELIVERY ORDER 0011

Date: 7/25/18 TIME	Volume Purged (mL)	PURGE RATE (mL/min)	ORP (mv)	TEMP (°C)	pH (S.U.)	SpecCond (µS/cm)	DO (mg/L)	TURBIDITY (NTU)	DEPTH TO WATER (FT BTOC)	COMMENTS
1530	0	250	155.0	15.64	7.27	777	13.86	45.6	—	Start purge
1535	1,250	250	163.7	15.17	6.91	777	13.39	14.6	13.52	
1540	2500	250	178.2	15.24	6.66	760	13.06	11.3	13.52	
1545	3,750	250	186.6	15.26	6.51	755	12.95	6.99	13.52	
1550	5,000	250	204.1	15.31	6.38	752	12.88	4.30	13.53	
1555	6,250	250	208.9	15.16	6.33	751	12.62	2.89	13.53	
1600	7,500	250	212.2	15.11	6.38	748	12.20	2.37	13.53	End purge

RECORDED BY: _____ (Signature)

QA CHECKED BY: _____ (Signature)

SAMPLE COLLECTION-NEW WELL

PROJECT NAME: LINCOLN ANG

DELIVERY ORDER 0011

DATE: 7/25/18

TIME: 1605

Sample Location: MW-LIN04-01

SAMPLE ID NUMBER:	MW-LIN04-01-01
SAMPLE LOCATION:	MW-LIN04-01
SAMPLE DEPTH:	19.68
SAMPLING POINT:	TOC
SAMPLE MEDIA:	GW
SAMPLE TYPE	Grab

FIELD	READING	UNITS	H&S (Y/N)
Conductivity	748	µS/cm	
DO	12.20	mg/L	
ORP	212.2	mV	
Temperature	15.11	°C	
Turbidity	2.37	NTUs	
pH	6.38	S.U.	
PID	0.0	ppm	

COMMENTS: None

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
2 ea - 250-mL polypropylene with polypropylene cap		PFOS/PFOA	Cool to 4°C ±2°	SAC	X

** "X" analysis collected; "IS" insufficient volume; "NR" not required; define other code as appropriate

SAC - TestAmerica Sacramento

GROUND WATER LOW-FLOW/DEVELOPMENT PURGE SHEET-NEW WELL

PROJECT NAME: LINCOLN ANG, LINCOLN Airport DELIVERY ORDER 0011

DATE: 7/25/18 TIME: 1630

WELL ID NUMBER: MW-LIN 02 -01

DEPTH OF SCREENED INTERVAL (toc notch): 9.5 ft. to 19.5 ft.

INNER CASING: TYPE: PVC ID: 2 inches

WATER QUALITY METER ID: 16893

WATER LEVEL INDICATOR ID: 82662

PUMP ID: 15322

TURBIDITY ID: 82899

PID ID: 82695

DEPTH TO WATER: 13.84 FT FROM MEASURE POINT

DEPTH TO TOP OF SCREEN: 9.72 FT FROM MEASURE POINT

DEPTH TO PUMP INTAKE: 19.72 FT FROM MEASURE POINT

PURGE/SAMPLE METHOD: [ ] Monsoon [X] Peristaltic Pump [ ] Other Pump Type _____

PURGE START TIME: 1646 PURGE END TIME: 1711

TOTAL VOLUME PURGED: 6250 (mL)

S&A PLAN SAMPLING PROCEDURE FOLLOWED: [X] Yes [ ] No IF NO, WHY WAS A DEVIATION NECESSARY: _____

RECORDED BY: _____ (Signature) QA CHECKED BY: _____ (Signature)

GROUND WATER LOW-FLOW/DEVELOPMENT PURGE LOG-NEW WELL

WELL ID: MW-LIN_02_-01

PROJECT NAME: LINCOLN ANG, LINCOLN Airport

DELIVERY ORDER 0011

Date: 7/25/14 TIME	Volume Purged (mL)	PURGE RATE (mL/min)	ORP (mv)	TEMP (°C)	pH (S.U.)	SpecCond (µS/cm)	DO (mg/L)	TURBIDITY (NTU)	DEPTH TO WATER (FT BTOC)	COMMENTS
1646	0	250	134.1	15.50	7.11	874	19.15	33.1	—	Start purge
1651	1,250	250	143.9	15.21	6.78	851	14.29	7.21	13.89	
1656	2500	250	147.7	15.02	6.68	845	14.44	2.86	13.89	
1701	3,250	250	143.7	14.94	6.86	840	15.29	2.33	13.89	
1706	5,000	250	138.6	14.94	6.92	842	15.35	4.09	13,89	
1711	6,250	250	135.2	14.90	6.93	843	15.25	2.30	13,89	End purge

RECORDED BY: _____ (Signature)

QA CHECKED BY: _____ (Signature)

SAMPLE COLLECTION-NEW WELL

PROJECT NAME: LINCOLN ANG

DELIVERY ORDER 0011

DATE: 7/25/18

TIME: 1715

Sample Location: MW-LIN_02_-01

SAMPLE ID NUMBER:	MW-LIN02 -01-01
SAMPLE LOCATION:	MW-LIN_02_-01
SAMPLE DEPTH:	19.72
SAMPLING POINT:	TOC
SAMPLE MEDIA:	GW
SAMPLE TYPE	Grab

FIELD	READING	UNITS	H&S (Y/N)
Conductivity	843	µS/cm	Y
DO	15.25	mg/L	
ORP	135.2	mV	
Temperature	14.90	°C	
Turbidity	2.30	NTUs	
pH	6.93	S.U.	
PID	0.0	ppm	V

COMMENTS: None

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
2 ea - 250-mL polypropylene with polypropylene cap		PFOS/PFOA	Cool to 4°C ±2°	SAC	X

** "X" analysis collected; "IS" insufficient volume; "NR" not required; define other code as appropriate

SAC - TestAmerica Sacramento

GROUND WATER LOW-FLOW PURGE SHEET-EXISTING WELL

PROJECT NAME: LINCOLN ANG, LINCOLN Airport DELIVERY ORDER 0011

DATE: 7/25/18 TIME: 1225

WELL ID NUMBER: TU015-MW005-PRL02

DEPTH OF SCREENED INTERVAL (toc notch): _____ ft. to _____ ft. Unknown

INNER CASING: TYPE: PVC ID: 2 inches / 4 inches

WATER QUALITY METER ID: 16893

WATER LEVEL INDICATOR ID: 82662

PUMP ID: 15322

TURBIDITY ID: 82899

PID ID: 82695

DEPTH TO WATER: 12.79 FT FROM MEASURE POINT TD: 19.88

DEPTH TO TOP OF SCREEN: Unknown FT FROM MEASURE POINT

DEPTH TO PUMP INTAKE: 17ft FT FROM MEASURE POINT

PURGE/SAMPLE METHOD: [ ] Monsoon [X] Peristaltic Pump [ ] Other Pump Type _____

PURGE START TIME: 1241 PURGE END TIME: BOC

TOTAL VOLUME PURGED: 6,250 (mL)

S&A PLAN SAMPLING PROCEDURE FOLLOWED: [X] Yes [ ] No IF NO, WHY WAS A DEVIATION NECESSARY: _____

RECORDED BY: _____ QA CHECKED BY: _____

(Signature) (Signature)

GROUND WATER LOW-FLOW PURGE LOG-EXISTING WELL

WELL ID: TU015-MW005-PRL02

PROJECT NAME: LINCOLN ANG, LINCOLN Airport

DELIVERY ORDER 0011

Date: 7/25/18 TIME	Volume Purged (mL)	PURGE RATE (mL/min)	ORP (mv)	TEMP (°C)	pH (S.U.)	SpecCond (µS/cm)	DO (mg/L)	TURBIDITY (NTU)	DEPTH TO WATER (FT BTOC)	COMMENTS
1241	0	250	119.0	16.76	7.46	875	1.28	42.1	—	Start purge
1246	1,250	250	95.4	16.79	7.47	880	0.86	51.6	12.82	
1251	2,500	250	59.3	16.67	7.47	862	2.82	46.9	12.83	
1256	3,750	250	59.3	16.57	7.43	842	2.91	30.7	12.83	
1301	5,000	250	53.3	16.60	7.41	836	2.88	29.5	12.83	
1306	6,250	250	54.9	16.55	7.40	832	2.79	31.6	12.83	End purge

RECORDED BY: _____ (Signature) QA CHECKED BY: _____ (Signature)

SAMPLE COLLECTION-NEW WELL

PROJECT NAME: LINCOLN ANG

DELIVERY ORDER 0011

DATE: 7/25/18

TIME: 1310

Sample Location : **TU015-MW005-PRL02**

SAMPLE ID NUMBER:	TU015-MW005-PRL02-01
SAMPLE LOCATION:	TU015-MW005-PRL02
SAMPLE DEPTH:	17ft
SAMPLING POINT:	TOC
SAMPLE MEDIA:	GW
SAMPLE TYPE	Grab

FIELD	READING	UNITS	H&S (Y/N)
Conductivity	832	µS/cm	y
DO	2.79	mg/L	
ORP	54.9	mV	
Temperature	16.55	°C	
Turbidity	31.6	NTUs	
pH	7.40	S.U.	
PID	0.0	ppm	↓

COMMENTS: None

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
2 ea - 250-mL polypropylene with polypropylene cap		PFOS/PFOA	Cool to 4°C ±2°	SAC	X

** "X" analysis collected; "IS" insufficient volume; "NR" not required; define other code as appropriate

SAC - TestAmerica Sacramento

SAMPLE COLLECTION SEDIMENT/SURFACE WATER

PROJECT NAME: LINCOLN ANG

DELIVERY ORDER 0011

DATE: 7/25/18

TIME: 0805

Sample Location: LIN13-SW1

SAMPLE ID NUMBER:	LIN13-SW1-01
SAMPLE LOCATION:	LIN13-SW1
SAMPLE DEPTH:	surface ~~0.5-1 ft~~
SAMPLING POINT:	surface outfall
SAMPLE MEDIA:	Surface Water
SAMPLE TYPE	Grab

FIELD	READING	UNITS	H&S (Y/N)
Conductivity	982	µS/cm	y
DO	2.15	mg/L	
ORP	326.5	mV	
Temperature	17.82	°C	
Turbidity	34.4	NTUs	
pH	7.52	S.U.	
PID	0.0	ppm	

DATE: 7/25/18

TIME: 0810

Sample Location: LIN13-SD1

SAMPLE ID NUMBER:	LIN13-SD1-01
SAMPLE LOCATION:	LIN13-SD1
SAMPLE DEPTH:	0.5-1 ft

SAMPLING POINT:	outfall sediment
SAMPLE MEDIA:	Sediment
SAMPLE TYPE	Grab

COMMENTS: None

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
2 ea - 250-mL polypropylene with polypropylene cap		PFOS/PFOA	Cool to 4°C ±2°	SAC	X

** "X" analysis collected; "IS" insufficient volume; "NR" not required; define other code as appropriate

SAC - TestAmerica Sacramento

SAMPLE COLLECTION SEDIMENT/SURFACE WATER

PROJECT NAME: LINCOLN ANG | DELIVERY ORDER 0011

DATE: 7/25/18 | TIME: _____

Sample Location: LIN12-SW1

SAMPLE ID NUMBER:	LIN1___-SW1-01
SAMPLE LOCATION:	LIN1___-SW1
SAMPLE DEPTH:	
SAMPLING POINT:	
SAMPLE MEDIA:	Surface Water
SAMPLE TYPE	Grab

FIELD	READING	UNITS	H&S (Y/N)
Conductivity		µS/cm	
DO		mg/L	
ORP		mV	
Temperature		°C	
Turbidity		NTUs	
pH		S.U.	
PID		ppm	

DATE: _____ | TIME: _____

Sample Location: LIN12-SD1

SAMPLE ID NUMBER:	LIN1___-SD1-01
SAMPLE LOCATION:	LIN1___-SD1
SAMPLE DEPTH:	
SAMPLING POINT:	
SAMPLE MEDIA:	Sediment
SAMPLE TYPE	Grab

COMMENTS: No samples collected. No water or sediment present in outfall (concrete bottom). photos collected

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
2 ea - 250-mL polypropylene with polypropylene cap		PFOS/PFOA	Cool to 4°C ±2°	SAC	

** "X" analysis collected; "IS" insufficient volume; "NR" not required; define other code as appropriate

SAC - TestAmerica Sacramento

SAMPLE COLLECTION SEDIMENT/SURFACE WATER

PROJECT NAME: LINCOLN ANG

DELIVERY ORDER 0011

DATE: 7/25/18

TIME: 0925

Sample Location: LIN14-SW1

SAMPLE ID NUMBER:	LIN14-SW1-01
SAMPLE LOCATION:	LIN14-SW1
SAMPLE DEPTH:	Surface
SAMPLING POINT:	Surface
SAMPLE MEDIA:	Surface Water
SAMPLE TYPE	Grab

FIELD	READING	UNITS	H&S (Y/N)
Conductivity	953	µS/cm	Y
DO	1.52	mg/L	
ORP	-176.1	mV	
Temperature	17.75	°C	
Turbidity	21.2	NTUs	
pH	7.52	S.U.	
PID	0.0	ppm	

DATE: 7/25/18

TIME: 0930

Sample Location: LIN14-SD1

SAMPLE ID NUMBER:	LIN14-SD1-01
SAMPLE LOCATION:	LIN14-SD1
SAMPLE DEPTH:	0.5-1.0ft

SAMPLING POINT:	Sediment
SAMPLE MEDIA:	Sediment
SAMPLE TYPE	Grab

COMMENTS: None

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
2 ea - 250-mL polypropylene with polypropylene cap		PFOS/PFOA	Cool to 4°C ±2°	SAC	X

** "X" analysis collected; "IS" insufficient volume; "NR" not required; define other code as appropriate

SAC - TestAmerica Sacramento

SAMPLE COLLECTION SEDIMENT/SURFACE WATER

PROJECT NAME: LINCOLN ANG

DELIVERY ORDER 0011

DATE: 7/25/18

TIME: _____

Sample Location: LIN10-SW1

SAMPLE ID NUMBER:	LIN10-SW1-01
SAMPLE LOCATION:	LIN10-SW1
SAMPLE DEPTH:	
SAMPLING POINT:	
SAMPLE MEDIA:	Surface Water
SAMPLE TYPE	Grab

FIELD	READING	UNITS	H&S (Y/N)
Conductivity		µS/cm	
DO		mg/L	
ORP		mV	
Temperature		°C	
Turbidity		NTUs	
pH		S.U.	
PID		ppm	

7/25/18

DATE: _____

TIME: _____

Sample Location: LIN10-SD1

SAMPLE ID NUMBER:	LIN10-SD1-01
SAMPLE LOCATION:	LIN10-SD1
SAMPLE DEPTH:	

SAMPLING POINT:	
SAMPLE MEDIA:	Sediment
SAMPLE TYPE	Grab

COMMENTS: No water or sediment available for sampling, concrete rip-rap at bottom. Photos collected.

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
2 ea - 250-mL polypropylene with polypropylene cap		PFOS/PFOA	Cool to 4°C ±2°	SAC	Not Sampled

** "X" analysis collected; "IS" insufficient volume; "NR" not required; define other code as appropriate

SAC - TestAmerica Sacramento

SAMPLE COLLECTION SEDIMENT/SURFACE WATER

PROJECT NAME: LINCOLN ANG

DELIVERY ORDER 0011

DATE: 7/25/18

TIME: 1205

Sample Location: LIN1__-SW1

SAMPLE ID NUMBER:	LIN1__-SW1-01
SAMPLE LOCATION:	LIN1__-SW1
SAMPLE DEPTH:	discharge pipe
SAMPLING POINT:	↓
SAMPLE MEDIA:	Surface Water
SAMPLE TYPE	Grab

FIELD	READING	UNITS	H&S (Y/N)
Conductivity	463	µS/cm	N
DO	4.04	mg/L	
ORP	93.5	mV	
Temperature	20.04	°C	
Turbidity	18.9	NTUs	
pH	8.04	S.U.	
PID	0.0	ppm	↓

DATE: 7/25/18

TIME: 1210

Sample Location: LIN1__-SD1

SAMPLE ID NUMBER:	LIN1__-SD1-01
SAMPLE LOCATION:	LIN1__-SD1
SAMPLE DEPTH:	0.5-1 ft

SAMPLING POINT:	Sediment
SAMPLE MEDIA:	Sediment
SAMPLE TYPE	Grab

COMMENTS: None

NO. CONTAINERS & VOLUME	CONTAINER TYPE	ANALYSIS	PRESERVATION TYPE (TYPE/VOL)	LABORATORY	COLLECTION CODE**
2 ea - 250-mL polypropylene with polypropylene cap		PFOS/PFOA	Cool to 4°C ±2°	SAC	X

** "X" analysis collected; "IS" insufficient volume; "NR" not required; define other code as appropriate

SAC - TestAmerica Sacramento

APPENDIX C

SURVEY REPORT FOR NEW MONITORING WELLS

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2018 Monitor Well Location Survey

GEODETIC DATUM: NAD 83
VERTICAL DATUM: NAVD 88

Phone (402) 434-2686
Fax (866) 215-8747

Job No. 2018-0151
July 30th, 2018





CONTROL POINT TABLE

POINT #	NORTHING	EASTING	LATITUDE	LONGITUDE	ELEVATION	DESCRIPTION
2	384615.04	2537121.02	N40° 50' 34.94"	W96° 45' 26.96"	1165.42	MW-LIN03-01 TOP 2" PVC
3	384615.11	2537121.11	N40° 50' 34.94"	W96° 45' 26.96"	1165.52	MW-LIN03-01 TOP CTR PVC WELL CAP
4	384615.14	2537120.67	N40° 50' 34.94"	W96° 45' 26.97"	1165.71	MW-LIN03-01 GROUND
5	383808.78	2536751.82	N40° 50' 27.12"	W96° 45' 32.16"	1160.45	MW-LIN01-01 TOP 2" PVC
6	383808.80	2536751.94	N40° 50' 27.12"	W96° 45' 32.16"	1160.54	MW-LIN01-01 TOP CTR PVC WELL CAP
7	383808.91	2536751.45	N40° 50' 27.12"	W96° 45' 32.16"	1160.96	MW-LIN01-01 GROUND
8	383556.60	2537159.07	N40° 50' 24.47"	W96° 45' 26.99"	1161.32	MW-LIN05-01 TOP 2" PVC
9	383556.59	2537159.13	N40° 50' 24.47"	W96° 45' 26.99"	1161.40	MW-LIN05-01 TOP CTR PVC WELL CAP
10	383556.81	2537158.75	N40° 50' 24.48"	W96° 45' 26.99"	1161.64	MW-LIN05-01 GROUND
11	383502.03	2537350.70	N40° 50' 23.88"	W96° 45' 24.52"	1158.94	MW-LIN09-01 TOP 2" PVC
12	383502.01	2537350.77	N40° 50' 23.88"	W96° 45' 24.52"	1159.08	MW-LIN09-01 TOP CTR PVC WELL CAP
13	383502.16	2537350.49	N40° 50' 23.87"	W96° 45' 24.52"	1159.31	MW-LIN09-01 GROUND
14	383399.27	2537540.58	N40° 50' 22.78"	W96° 45' 22.10"	1157.31	MW-LIN08-01 TOP 2" PVC
15	383399.29	2537540.68	N40° 50' 22.78"	W96° 45' 22.10"	1157.37	MW-LIN08-01 TOP CTR PVC WELL CAP
16	383399.40	2537540.27	N40° 50' 22.78"	W96° 45' 22.11"	1157.78	MW-LIN08-01 GROUND
17	383953.61	2537525.13	N40° 50' 28.26"	W96° 45' 22.03"	1164.65	MW-LIN02-01 TOP 2" PVC
18	383953.62	2537525.22	N40° 50' 28.26"	W96° 45' 22.03"	1164.70	MW-LIN02-01 TOP CTR PVC WELL CAP
19	383953.58	2537524.91	N40° 50' 28.26"	W96° 45' 22.03"	1165.08	MW-LIN02-01 GROUND
20	384638.24	2537584.54	N40° 50' 35.00"	W96° 45' 20.93"	1166.32	MW-LIN04-01 TOP 2" PVC
21	384638.24	2537584.61	N40° 50' 35.00"	W96° 45' 20.92"	1166.48	MW-LIN04-01 TOP CTR PVC WELL CAP
22	384638.28	2537584.19	N40° 50' 35.00"	W96° 45' 20.93"	1166.64	MW-LIN04-01 GROUND
23	383205.59	2538031.91	N40° 50' 20.68"	W96° 45' 15.81"	1157.95	MW-LIN07-01 TOP 2" PVC
24	383205.56	2538032.00	N40° 50' 20.68"	W96° 45' 15.81"	1158.06	MW-LIN07-01 TOP CTR PVC WELL CAP
25	383205.62	2538031.58	N40° 50' 20.68"	W96° 45' 15.81"	1158.47	MW-LIN07-01 GROUND

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APPENDIX D

DATA VALIDATION REPORTS

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LEIDOS
Laboratory Data Verification Checklist

Project: Lincoln

SDG No: J41403

Analyte Group: PFAs

Sample Matrix: Soil

EDD (Y/N):

Disposition of Data Package:

NCR No. (if applicable):

1. Case Narrative

Read SDG Case Narrative	Y
Check Laboratory sample ID vs. Project sample ID lists	Y
Check that discussion covers each analytical type included in the SDG	Y
Check for identified nonconforming items (e.g., missed holding times, etc.)	Y

2. Chain-of-Custody (COC)

Check COC sample collection, shipping, and receiving dates	Y
Check that COC signature blocks are complete	Y
Check COC project sample IDs vs. Lab IDs and Result Form IDs	Y
Match COC requested analyses with Case Narrative and with data package content (Result Forms)	Y

3. Analytical Results Form

Verify that a Result Form is present for each sample and analysis	Y
On each Result Form check:	
SDG No.	Y
Sample ID	Y
Lab ID	Y
Date Collected	Y
Date Extracted	Y
Date Analyzed	Y
Result Matrix	Y
Result Units	Y

4. Project Verification

Check project analyte list vs. analytes reported	Y
Check project requested methods vs. analytical methods performed	Y
Check analyte reporting levels vs. project reporting level goals	Y

5. Analytical Quality Control Information

Check for surrogate recovery results (e.g., org. form II)		Y
Check for LCS results (e.g., org. form III, inorg. form XII)		Y
Check for method blank results (e.g., org. form IV, inorg. form III)		Y
Check for MS/MSD results (e.g., inorg. form V)		Y
Check for laboratory duplicate results (e.g., inorg. form VI)		NA
Check for Method Calibration and Run Documentation		
organic:	instrument performance check	Y
	initial calibration data	Y
	continuing calibration data	Y
	internal standard areas	Y
	internal standard retention times	Y
	sample clean-up documentation (org. forms V through X)	Y
metal:	initial calibration data	
	continuing calibration data	
	method detection limits	
	method linear range	
	sample run sequence (inorg. forms II, IV, and VIII through XIV)	
other:	initial calibration data	
	continuing calibration data	
	method detection limits	
	sample run sequence	

6. Incorrect Information

Identify missing items or incorrect information (i.e., missing forms, unsigned forms, incorrect sample IDs, etc.)

Contact the laboratory or project personnel to obtain missing information or correct information

Document corrections below:

7. Nonconforming Items

Document all nonconforming items that can not be resolved above in a Non-Conformance Report (NCR), complete form, file, and follow-up

NCR # Item

Reviewed By: Brooke Francis Date: 8/31/18

QA Review By: Joseph C Peters Date: 9/4/18

LEIDOS
Laboratory Data Package Detail Form

Project: Lincoln

SDG No: J41403

Analyte Group: PFAs

SEE ATTACHED

Field Sample ID	Lab ID #	Matrix	Analysis	Notes:

Comments:

Sample Summary

Client: Leidos, Inc.
Project/Site: Phase III, ANG - Lincoln ANG

TestAmerica Job ID: 320-41403-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-41403-1	LIN04-SB1-01	Solid	07/18/18 11:35	07/24/18 09:00
320-41403-2	LIN04-SB1-02	Solid	07/18/18 11:40	07/24/18 09:00
320-41403-3	LIN04-SB2-01	Solid	07/18/18 12:10	07/24/18 09:00
320-41403-4	LIN04-SB2-02	Solid	07/18/18 12:20	07/24/18 09:00
320-41403-5	LIN03-SB1-01	Solid	07/18/18 13:20	07/24/18 09:00
320-41403-6	LIN03-SB1-02	Solid	07/18/18 13:30	07/24/18 09:00
320-41403-7	LIN03-SB3-01	Solid	07/18/18 14:10	07/24/18 09:00
320-41403-8	LIN03-SB3-01D	Solid	07/18/18 14:10	07/24/18 09:00
320-41403-9	LIN03-SB3-02	Solid	07/18/18 14:20	07/24/18 09:00
320-41403-10	LIN03-SB2-01	Solid	07/18/18 14:35	07/24/18 09:00
320-41403-11	LIN03-SB2-02	Solid	07/18/18 14:40	07/24/18 09:00
320-41403-12	LIN02-SB1-01	Solid	07/18/18 15:05	07/24/18 09:00
320-41403-13	LIN02-SB1-02	Solid	07/18/18 15:15	07/24/18 09:00
320-41403-14	LIN01-SB2-01	Solid	07/18/18 15:40	07/24/18 09:00
320-41403-15	LIN01-SB2-02	Solid	07/18/18 15:55	07/24/18 09:00
320-41403-16	LIN01-SB1-01	Solid	07/18/18 16:20	07/24/18 09:00
320-41403-17	LIN01-SB1-02	Solid	07/18/18 16:25	07/24/18 09:00
320-41403-18	LIN01-SB1-02D	Solid	07/18/18 16:25	07/24/18 09:00
320-41403-19	LIN05-SB2-01	Solid	07/18/18 17:00	07/24/18 09:00
320-41403-20	LIN05-SB2-02	Solid	07/18/18 17:25	07/24/18 09:00
320-41403-21	ER-01	Water	07/18/18 16:05	07/24/18 09:00
320-41403-22	FB-01	Water	07/19/18 09:25	07/24/18 09:00
320-41403-24	LIN09-SB2-01	Solid	07/19/18 12:20	07/24/18 09:00
320-41403-25	LIN09-SB2-02	Solid	07/19/18 12:25	07/24/18 09:00
320-41403-26	LIN09-SB1-01	Solid	07/19/18 12:40	07/24/18 09:00
320-41403-27	LIN09-SB1-02	Solid	07/19/18 12:45	07/24/18 09:00
320-41403-28	LIN05-SB3-01	Solid	07/19/18 13:00	07/24/18 09:00
320-41403-29	LIN05-SB3-01D	Solid	07/19/18 13:00	07/24/18 09:00
320-41403-30	LIN05-SB3-02	Solid	07/19/18 13:05	07/24/18 09:00
320-41403-31	ER-02	Water	07/19/18 13:15	07/24/18 09:00
320-41403-32	ER-03	Water	07/19/18 15:35	07/24/18 09:00
320-41403-33	LIN05-SB1-01	Solid	07/19/18 13:20	07/24/18 09:00
320-41403-34	LIN05-SB1-02	Solid	07/19/18 13:25	07/24/18 09:00
320-41403-35	LIN08-SB2-01	Solid	07/20/18 10:05	07/24/18 09:00
320-41403-36	LIN08-SB2-02	Solid	07/20/18 10:10	07/24/18 09:00
320-41403-37	LIN07-SB1-01	Solid	07/20/18 10:20	07/24/18 09:00
320-41403-38	LIN07-SB1-02	Solid	07/20/18 10:25	07/24/18 09:00
320-41403-39	LIN07-SB1-02D	Solid	07/20/18 10:25	07/24/18 09:00
320-41403-40	LIN07-SB2-01	Solid	07/20/18 10:40	07/24/18 09:00
320-41403-41	LIN07-SB2-02	Solid	07/20/18 11:00	07/24/18 09:00
320-41403-42	LIN02-SB2-01	Solid	07/20/18 11:25	07/24/18 09:00
320-41403-43	LIN02-SB2-02	Solid	07/20/18 11:30	07/24/18 09:00
320-41403-44	ER-04	Water	07/20/18 11:35	07/24/18 09:00
320-41403-45	LIN08-SB1-01	Solid	07/20/18 11:45	07/24/18 09:00
320-41403-46	LIN08-SB1-02	Solid	07/20/18 11:50	07/24/18 09:00
320-41403-47	Field Reagent Blank	Water	07/19/18 09:40	07/24/18 09:00

Leidos - Horsham Project Specific
PFASs by LC/MS/MS Methods Data Verification/Validation

Project: Lincoln

SDG No: J41403 **Analysis:** PFC

Method: E537

Laboratory: Test America **Matrix:** Water/Soil

The above data package has been reviewed and the analytical quality control/quality assurance performance data have been summarized. The general criteria used to assess the analytical integrityof the data were based on DOD QSM 5.1 guidance and examination of the following:

Case Narrative	Instrument Sensitivity Checks
Analytical Holding Times	Internal Standard Performance
Sample Preservation	MS/MSD Recoveries and Differences
Method Calibration	LCS Recoveries
Method and Project Blanks	Re-analysis and Secondary Dilution

Project Specific QA/QC or contract requirements may take priority over validation criteria in this procedure.

*** If this SDG requires full validation; recalculations from the raw data are required for one point for each ICAL, one CCV, one of each QC sample, and one field sample.**

Data verification and data validation are essentially identical, with the exception that validation requires results to be recalculated from the raw data.

Remarks: DoD QSM

Some results were qualified as estimated due to MS/MSD, LCS, surrogate, and/or IS discrepancies

Some results were qualified as non-detect due to blank contamination

QA review of validation found no discrepancies.

Definition of Qualifiers:

"U", not detected at the associated level
"UJ", not detected and associated value estimated
"J", associated value estimated
"R", associated value unusable or analyte identity unfounded

Verification/Validation by: Brooke Francis

Date: 8/31/18

QA Reviewed by: Joseph C. Peters

Date: 9/4/18

Case Narrative

Verify direct statements made within the Laboratory Case Narrative (note discrepancies).

Remarks: Calibration blank contamination were not noted

Re-analysis and Secondary Dilutions

Verify that re-analysis and secondary dilutions were performed and reported as necessary. Determine appropriate results to report.

Remarks: Some samples were reanalyzed at a dilution

Holding Times

Waters - Cool 4°C; 14 days to extraction; 28 days to analysis
collection. Note: Trizma preservative is recommended for aqueous samples, but not required.

Soils - Cool 4°C ; extraction within 28 days of sample collection; analysis within 28 days of sample extraction

Deviations:

Sample #	Date Collected	Date Analyzed	Comments

Actions:

1. If holding times are exceeded, all results are qualified as estimated (J/UJ)
2. If holding times are exceeded by more than 2X, reviewer may qualify non-detected results as unusable (R)

Remarks: All holding times were met

Injection Internal Standards (IS)

List any field samples, field QC samples, or laboratory QC samples where injection internal standards are not within 50 to 150% of the peak areas from the ICAL midpoint or daily initial CCV, as applicable.

Deviations:

Sample #	Injection IS/% Rec	Affected PFAS Compounds
LIN04-SB1-01DL	PFOA 978971	All detections (J)
LIN04-SB1-02DL	PFOA 222793	
LIN03-SB2-01DL	PFOA 482208	
LIN01-SB1-02DL	PFOA 228899	
LIN01-SB1-02D DL	PFOA 220621	
LIN05-SB1-01DL	PFOA 36275	
	0.....+	

Actions:

If any injection IS is <25%, qualify detects as J; non-detects as R

If any Injection IS is > upper control limit; qualify detects as J, no action for non-detects

If any surrogate is ≥ 25%, but < the lower control limit, then qualify detects as J, non-detects as UJ

Injection IS - Target PFAS Compounds Associations:

13C3-PFBA: PFBS

13C2-PFOA: PFOA, PFHxS, PFHpA

13C4-PFOS: PFOS, PFNA

13C2-PFDA: No PFAS project compounds

Remarks: Only one IS was injected and associated with all analtyes

Surrogates/Extraction Internal Standards (IS)

List any field samples, field QC samples, or laboratory QC samples where surrogates/extraction internal standards are not within 50% ± of their true value.
Note: Extraction Internal Standards and surrogates are the same thing. For purposes of data validation and applying validation reason codes, they will be treated as surrogates. Injection internal standards will be treated as internal standards and the use of internal standard reason codes will be used.

Deviations:

Sample #	Surrogate - % Rec	Affected PFAS Compounds
LIN01-SB1-02	PFNA 47%	(J)
LIN01-SB1-02D	PFNA 47%	
LIN05-SB1-01	PFNA 40%	
	PFOS 31%	
ER-03	PFOS 47%	

Actions:

If any injection IS is <25%, qualify detects as J; non-detects as R

If any Injection IS is > upper control limit; qualify detects as J, no action for non-detects

If any surrogate is ≥ 25%, but < the lower control limit, then qualify detects as J, non-detects as UJ

Surrogate - Target PFAS Compounds Associations:

13C3-PFBS - PFBS
13C3-PFHxS - PFHxS
13C4-PFHpA - PFHpA
13C8-PFOA - PFOA
13C9-PFNA - PFNA
13C8-PFOS - PFOS

Remarks: _____

VI. Blanks

A method blank was reported for each aqueous analytical batch and one method blank was reported for each soil extraction batch? (Y/N)
Review associated laboratory and project blank samples. List documented contamination below:

Laboratory Method Blanks:

Date:	Sample ID #	Compound	Conc.

Associated Project Blanks (e.g., equipment rinsates, field reagent blanks, source blanks, etc.)

Date	Sample ID #	Compound	Conc.

Remarks:

VI. Blanks (continued)

Calculate the action level based on 5X the highest blank concentration

Sample weights, volumes, and dilution factors must be taken into account when applying the 5X criteria.

0.0104 ng/mL * 10mL/0.250L = 0.416 ng/L

0.0104 ng/mL * 10mL/5g * 1000g/1kg * 1 ug/1000ng =

Deviations:

Compound	Maximum Conc. Detected, (ppb)	Action Level (ppb)	Samples Affected
PFHxS	0.0104 ng/mL	0.104 ug/kg or 2.1 ng/L	CCB, All samples
PFHxS	2.2 ng/L	0.022 ug/kg	ER-03 MW data, SDG41568
PFOS	25 ng/L	0.25 ug/kg	
PFOS	1.1 ng/L	0.011 ug/kg	ER-01 7/18
PFHpA	2.8 ng/L		FB-01 Tap Water, not used for validation
PFOA	2.1 ng/L		
PFNA	0.78 ng/L		
PFBS	1.1 ng/L		
PFHxS	4.3 ng/L		
PFOS	16 ng/L		

Actions:

1. If compound results exceed the action levels, the data are not qualified
2. If compound results are below the required reporting level, report results as non-detect (U) at the LOD
3. If the compound is detected above the reporting level, but below the action level, qualify as not-detected (U)
4. If contamination exists in method blanks < 1/2 LOQ, samples must be re-extracted and reanalyzed.
   Unlesss the MB results are < 1/10 the amount in associated samples or < 10 the action level, which ever is greater

Remarks:

VII. Initial & Contining Calibration

Date of initial calibration: _____

%RSD of RFs < 20% or $r^2 \geq 0.99$ for each analyte?
Analytes within 70-130% of their true value in each ICAL standard?
ICV within ± 30% of true value?

Date(s) of continuing calibration: _____

CCV analyzed at beginning and end of analytical sequence and after every 10 field samples?
CCV within ± 30% of true value?

Instrument sensitivity check (ISC) performed at the LOQ prior to analysis and every 12 hours?
ICS within ± 30% of true value?

Deviations:

Compound	Date	r value	%Drift	Samples Affected

Actions:

1. If initial calibration curve criteria are not met, qualify positive results as estimated (J) and non-detects as estimated (UJ), using professional judgement (i.e. if only the low standard is out, and the higher stards are in, then only qualify those results near the low standard).
2. Only evaluate the ICV if it brackets field samples. If the ICV does bracket field samples, then CCV actions apply
3. If a CCV is above the upper control limit, qualify detects as estimated (J). Nondects require no action.
4. If a CCV is below the lower control limit but > 40% recovery, qualify results as estimated (J/UJ).
5. If a CCV is ≤ 40% recovery, qualify detects as estimated (J) and nondetects as rejected (R)
6. If CCVs were not analyzed at the proper frequency, use professional judgement.
7. If ISC is > UCL, estimate (J) detects, no action for non-detects; If ISC is < LCL, estimate data (J/UJ), if ISC is < 30% reject (R) non-detects

Remarks: All calibration results met control limits

IX. Matrix Spike/Matrix Spike Duplicate Information

General MS/MSD Criteria:
percent recovery (%R) in-house limits
relative percent difference (RPD) 30% RPD

Project Sample(s) Spiked: LIN02-SB1-02, LIN08-SB2-02

Deviations:

Compound	%R	%R Limits	RPD	RPD Limits	Samples Affected
PFOS	234%	69-131	43	30	LIN08-SB2-02

Actions:

1. If the spike recovery is above the upper control limit (UCL), qualify all positive values in the unspiked sample as estimated (J) and non-detects as estimated (UJ).
2. If the spike recovery is below the lower control limit (LCL), qualifty positive values as estimated (J). And non-detects as estimated (UJ).
3. If the spike recovery is <10%, qualify non-detect values as unusable (R)
4. If the RPD does not meet criteria, qualify positive values in the unspiked sample as estimated (J)
5. Use professional judgement to qualify additional samples in the analytical group based on MS/MSD results
6. Use professional judgement for qualification of data for unspiked compounds

*** If this SDG requires full validation; recalculate at least one % recovery and one % RPD from the raw data. Attach all calculations at the end of the validation checklist.**

Remarks:

X. Laboratory Control Sample Information

General LCS Criteria:
Percent recovery (%R) = in-house limits
RPD if LCSD performed = 30% RPD

Laboratory LCS Identifications: LCS 320-236486, LCS 320-237139, LCS 320-237168
LCS/D 320-237294

Deviations:

Compound	Date	%R	Samples Affected/Qualifiers Applied
PFOA		111%	LCS/D 320-237294 41403-21, 22, 31, 32, 44, 47
PFBS		126%	↓
PFOS		128%	↓

Actions:

*** If this SDG requires full validation; recalculate at least one % recovery and one % RPD (if LCSD was performed) from the raw data. Attach all calculations at the end of the validation checklist.**

Action should be based on both the number of compounds outside the criterion and the magnitude of the exceedance.

1. If the LCS recovery is below limits but > one- half the lower limit, qualify valves as estimated (J/UJ).
2. If the LCS recovery is < one-half the lower limit, qualify detect (J) and non-detects (R)
3. If the LCS recovery is greater than the upper limit, qualify positive valves for that analyte as estimated (J).

5. Use professional judgement for qualification of data for compounds with no LCS information

Remarks:

LEIDOS
Laboratory Data Verification Checklist

Project: Lincoln

SDG No: J41568

Analyte Group: PFAs

Sample Matrix: Water/Soil

EDD (Y/N):

Disposition of Data Package:

NCR No. (if applicable):

1. Case Narrative

Read SDG Case Narrative	Y
Check Laboratory sample ID vs. Project sample ID lists	Y
Check that discussion covers each analytical type included in the SDG	Y
Check for identified nonconforming items (e.g., missed holding times, etc.)	Y

2. Chain-of-Custody (COC)

Check COC sample collection, shipping, and receiving dates	Y
Check that COC signature blocks are complete	Y
Check COC project sample IDs vs. Lab IDs and Result Form IDs	Y
Match COC requested analyses with Case Narrative and with data package content (Result Forms)	Y

3. Analytical Results Form

Verify that a Result Form is present for each sample and analysis	Y
On each Result Form check:	
SDG No.	Y
Sample ID	Y
Lab ID	Y
Date Collected	Y
Date Extracted	Y
Date Analyzed	Y
Result Matrix	Y
Result Units	Y

4. Project Verification

Check project analyte list vs. analytes reported	Y
Check project requested methods vs. analytical methods performed	Y
Check analyte reporting levels vs. project reporting level goals	Y

5. Analytical Quality Control Information

Check for surrogate recovery results (e.g., org. form II)	Y
Check for LCS results (e.g., org. form III, inorg. form XII)	Y
Check for method blank results (e.g., org. form IV, inorg. form III)	Y
Check for MS/MSD results (e.g., inorg. form V)	Y
Check for laboratory duplicate results (e.g., inorg. form VI)	NA

Check for Method Calibration and Run Documentation

organic:	instrument performance check	Y
	initial calibration data	Y
	continuing calibration data	Y
	internal standard areas	Y
	internal standard retention times	Y
	sample clean-up documentation (org. forms V through X)	Y
metal:	initial calibration data	
	continuing calibration data	
	method detection limits	
	method linear range	
	sample run sequence (inorg. forms II, IV, and VIII through XIV)	
other:	initial calibration data	
	continuing calibration data	
	method detection limits	
	sample run sequence	

6. Incorrect Information

Identify missing items or incorrect information (i.e., missing forms, unsigned forms, incorrect sample IDs, etc.)

Contact the laboratory or project personnel to obtain missing information or correct information

Document corrections below:

7. Nonconforming Items

Document all nonconforming items that can not be resolved above in a Non-Conformance Report (NCR), complete form, file, and follow-up

NCR # Item

Reviewed By: Brooke Francis Date: 8/31/18

QA Review By: Joseph C Peters Date: 9/5/18

LEIDOS
Laboratory Data Package Detail Form

Project: Lincoln

SDG No: J41568

Analyte Group: PFAs

SEE ATTACHED

Field Sample ID	Lab ID #	Matrix	Analysis	Notes:

Comments:

Sample Summary

Client: Leidos, Inc.
Project/Site: Phase III, ANG- Lincoln ANG

TestAmerica Job ID: 320-41568-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-41568-1	MW-LIN08-01-01	Water	07/25/18 07:50	07/27/18 09:10
320-41568-2	LIN13-SW1-01	Water	07/25/18 08:05	07/27/18 09:10
320-41568-3	LIN13-SD1-01	Solid	07/25/18 08:10	07/27/18 09:10
320-41568-4	MW-LIN07-01-01	Water	07/25/18 09:20	07/27/18 09:10
320-41568-5	LIN14-SW1-01	Water	07/25/18 09:25	07/27/18 09:10
320-41568-6	LIN14-SD1-01	Solid	07/25/18 09:30	07/27/18 09:10
320-41568-7	MW-LIN03-01-01	Water	07/25/18 10:35	07/27/18 09:10
320-41568-8	MW-LIN03-01-01D	Water	07/25/18 10:35	07/27/18 09:10
320-41568-9	MW-LIN01-01-01	Water	07/25/18 11:20	07/27/18 09:10
320-41568-10	LIN11-SW1-01	Water	07/25/18 12:05	07/27/18 09:10
320-41568-11	LIN11-SD1-01	Solid	07/25/18 12:10	07/27/18 09:10
320-41568-12	TU015-MW005-PRL02-01	Water	07/25/18 13:10	07/27/18 09:10
320-41568-13	MW-LIN05-01-01	Water	07/25/18 13:55	07/27/18 09:10
320-41568-14	MW-LIN09-01-01	Water	07/25/18 14:45	07/27/18 09:10
320-41568-15	MW-LIN04-01-01	Water	07/25/18 16:05	07/27/18 09:10
320-41568-16	MW-LIN02-01-01	Water	07/25/18 17:15	07/27/18 09:10
320-41568-17	ER-05	Water	07/24/18 18:15	07/27/18 09:10
320-41568-18	IDW-Water-01	Water	07/25/18 17:35	07/27/18 09:10

Leidos - Horsham Project Specific
PFASs by LC/MS/MS Methods Data Verification/Validation

Project: Lincoln

SDG No: J41568 **Analysis:** PFC

Method: E537

Laboratory: Test America **Matrix:** Water/Soil

The above data package has been reviewed and the analytical quality control/quality assurance performance data have been summarized. The general criteria used to assess the analytical integrityof the data were based on DOD QSM 5.1 guidance and examination of the following:

Case Narrative	Instrument Sensitivity Checks
Analytical Holding Times	Internal Standard Performance
Sample Preservation	MS/MSD Recoveries and Differences
Method Calibration	LCS Recoveries
Method and Project Blanks	Re-analysis and Secondary Dilution

Project Specific QA/QC or contract requirements may take priority over validation criteria in this procedure.

*** If this SDG requires full validation; recalculations from the raw data are required for one point for each ICAL, one CCV, one of each QC sample, and one field sample.**

Data verification and data validation are essentially identical, with the exception that validation requires results to be recalculated from the raw data.

Remarks: DoD QSM

Some results were qualified as estimated due to MS/MSD, surrogate, and IS discrepancies

Some results were qualified U due to blank contamination

Definition of Qualifiers:

"U", not detected at the associated level
"UJ", not detected and associated value estimated
"J", associated value estimated
"R", associated value unusable or analyte identity unfounded

Verification/Validation by: Brooke Francis

Date: 8/31/18

QA Reviewed by: Joseph C Peters

Date: 9/5/18

Case Narrative

Verify direct statements made within the Laboratory Case Narrative (note discrepancies).

Remarks: No additional discrepancies were noted

Re-analysis and Secondary Dilutions

Verify that re-analysis and secondary dilutions were performed and reported as necessary. Determine appropriate results to report.

Remarks: Some samples were reanalyzed at a dilution

Holding Times

Waters - Cool 4°C; 14 days to extraction; 28 days to analysis
collection. Note: Trizma preservative is recommended for aqueous samples, but not required.

Soils - Cool 4°C ; extraction within 28 days of sample collection; analysis within 28 days of sample extraction

Deviations:

Sample #	Date Collected	Date Analyzed	Comments

Actions:

1. If holding times are exceeded, all results are qualified as estimated (J/UJ)
2. If holding times are exceeded by more than 2X, reviewer may qualify non-detected results as unusable (R)

Remarks: All holding times were met

Injection Internal Standards (IS)

List any field samples, field QC samples, or laboratory QC samples where injection internal standards are not within 50 to 150% of the peak areas from the ICAL midpoint or daily initial CCV, as applicable.

**SEE Attached for additional discrepancies **

Deviations:

Sample #	Injection IS/% Rec	Affected PFAS Compounds
LIN13-SD1-01DL	PFOA 88904	
MW-LIN04-01-01DL	PFOA 455335	
MW-LIN02-01-01DL	PFOA 429553	
	0.....+	

Actions:

If any injection IS is <25%, qualify detects as J; non-detects as R

If any Injection IS is > upper control limit; qualify detects as J, no action for non-detects

If any surrogate is ≥ 25%, but < the lower control limit, then qualify detects as J, non-detects as UJ

Injection IS - Target PFAS Compounds Associations:

13C3-PFBA: PFBS

13C2-PFOA: PFOA, PFHxS, PFHpA

13C4-PFOS: PFOS, PFNA

13C2-PFDA: No PFAS project compounds

Remarks:

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41568-1

SDG No.:

Sample No.: CCV 320-239064/3 Date Analyzed: 08/09/2018 04:32

Instrument ID: A9 GC Column: Acquity ID: 2.1(mm)

Lab File ID (Standard): 2018.08.08LLCC_005. Heated Purge: (Y/N) N

Calibration ID: 40486

		13PFOA					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		7632122	2.74				
UPPER LIMIT		11448183	2.94				
LOWER LIMIT		3816061	2.54				
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCB 320-239064/1		7679887	2.72				
CCVL 320-239064/2		7801512	2.74				
CCV 320-239081/1		7826343	2.72				
320-41568-1 DL	MW-LIN08-01-01 DL	843869Q	2.72				
320-41568-2 DL	LIN13-SW1-01 DL	87587Q	2.72				
320-41568-2	LIN13-SW1-01	1039236Q	2.72				
320-41568-4 DL	MW-LIN07-01-01 DL	883568Q	2.72				
320-41568-4	MW-LIN07-01-01	8370384	2.72				
320-41568-5 DL	LIN14-SW1-01 DL	1042440Q	2.72				
320-41568-7 DL	MW-LIN03-01-01 DL	502002Q	2.72				
320-41568-8 DL	MW-LIN03-01-01D DL	546978Q	2.72				
CCV 320-239081/12		7479803	2.72				
320-41568-12 DL	TU015-MW005-PRL02-01 DL	420857Q	2.72				
320-41568-13 DL	MW-LIN05-01-01 DL	954282Q	2.72				
320-41568-13 MS DL	MW-LIN05-01-01 MS DL	1019921Q	2.72				
320-41568-13 MSD DL	MW-LIN05-01-01 MSD DL	927511Q	2.72				
320-41568-14 DL	MW-LIN09-01-01 DL	987940Q	2.72				
320-41568-15 DL2	MW-LIN04-01-01 DL2	85270Q	2.72				
320-41568-16 DL2	MW-LIN02-01-01 DL2	68001Q	2.72				
320-41568-17	ER-05	8832353	2.72				
CCV 320-239081/21		7765271	2.72				

13PFOA = 13C2-PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII EPA 537 (MOD)

Surrogates/Extraction Internal Standards (IS)

List any field samples, field QC samples, or laboratory QC samples where surrogates/extraction internal standards are not within 50% ± of their true value.
Note: Extraction Internal Standards and surrogates are the same thing. For purposes of data validation and applying validation reason codes, they will be treated as surrogates. Injection internal standards will be treated as internal standards and the use of internal standard reason codes will be used.

Deviations:

Sample #	Surrogate - % Rec	Affected PFAS Compounds
MW-LIN04-01-01DL2	PFBS 41%	

Actions:

If any injection IS is <25%, qualify detects as J; non-detects as R

If any Injection IS is > upper control limit; qualify detects as J, no action for non-detects

If any surrogate is ≥ 25%, but < the lower control limit, then qualify detects as J, non-detects as UJ

Surrogate - Target PFAS Compounds Associations:

13C3-PFBS - PFBS
13C3-PFHxS - PFHxS
13C4-PFHpA - PFHpA
13C8-PFOA - PFOA
13C9-PFNA - PFNA
13C8-PFOS - PFOS

Remarks: _____

VI. Blanks

A method blank was reported for each aqueous analytical batch and one method blank was reported for each soil extraction batch? (Y/N)
Review associated laboratory and project blank samples. List documented contamination below:

Laboratory Method Blanks:

Date:	Sample ID #	Compound	Conc.

Associated Project Blanks (e.g., equipment rinsates, field reagent blanks, source blanks, etc.)

Date	Sample ID #	Compound	Conc.

Remarks:

VI. Blanks (continued)

Calculate the action level based on 5X the highest blank concentration

Sample weights, volumes, and dilution factors must be taken into account when applying the 5X criteria.

0.0104 ng/mL * 10 mL/0.250 L

Deviations:

Compound	Maximum Conc. Detected, (ppb)	Action Level (ppb)	Samples Affected
PFHxS	2.2 ng/L	11.0 ng/L	MW Data, ER-03 (SDG 41403)
PFOS	25 ng/L	125 ng/L	
PFHxS	0.0104 ng/mL	0.104 ug/kg or 2.08 ng/L	CCB, all samples
PFOS	0.97 ng/L	4.85 ng/L	MW Data (ER-05)
PHxS	0.54 ng/L	2.7 ng/L	

Actions:

1. If compound results exceed the action levels, the data are not qualified
2. If compound results are below the required reporting level, report results as non-detect (U) at the LOD
3. If the compound is detected above the reporting level, but below the action level, qualify as not-detected (U)
4. If contamination exists in method blanks < 1/2 LOQ, samples must be re-extracted and reanalyzed.
   Unlesss the MB results are < 1/10 the amount in associated samples or < 10 the action level, which ever is greater

Remarks:

VII. Initial & Contining Calibration

Date of initial calibration: _____

%RSD of RFs < 20% or $r^2 \geq 0.99$ for each analyte?
Analytes within 70-130% of their true value in each ICAL standard?
ICV within ± 30% of true value?

Date(s) of continuing calibration: _____

CCV analyzed at beginning and end of analytical sequence and after every 10 field samples?
CCV within ± 30% of true value?

Instrument sensitivity check (ISC) performed at the LOQ prior to analysis and every 12 hours?
ICS within ± 30% of true value?

Deviations:

Compound	Date	r value	%Drift	Samples Affected

Actions:

1. If initial calibration curve criteria are not met, qualify positive results as estimated (J) and non-detects as estimated (UJ), using professional judgement (i.e. if only the low standard is out, and the higher stards are in, then only qualify those results near the low standard).
2. Only evaluate the ICV if it brackets field samples. If the ICV does bracket field samples, then CCV actions apply
3. If a CCV is above the upper control limit, qualify detects as estimated (J). Nondects require no action.
4. If a CCV is below the lower control limit but > 40% recovery, qualify results as estimated (J/UJ).
5. If a CCV is ≤ 40% recovery, qualify detects as estimated (J) and nondetects as rejected (R)
6. If CCVs were not analyzed at the proper frequency, use professional judgement.
7. If ISC is > UCL, estimate (J) detects, no action for non-detects; If ISC is < LCL, estimate data (J/UJ), if ISC is < 30% reject (R) non-detects

Remarks: All calibration results met control limits

IX. Matrix Spike/Matrix Spike Duplicate Information

General MS/MSD Criteria:
percent recovery (%R) in-house limits
relative percent difference (RPD) 30% RPD

Project Sample(s) Spiked: MW-LIN05-01-01 MW-LIN05-01-01DL

Deviations:

Compound	%R	%R Limits	RPD	RPD Limits	Samples Affected
PFHpA	131	80-113			MW-LIN05-01-01DL
PFOA	120/137	80-107			
PFHpA	74	80-113			MW-LIN05-01-01

Actions:

1. If the spike recovery is above the upper control limit (UCL), qualify all positive values in the unspiked sample as estimated (J) and non-detects as estimated (UJ).
2. If the spike recovery is below the lower control limit (LCL), qualifty positive values as estimated (J). And non-detects as estimated (UJ).
3. If the spike recovery is <10%, qualify non-detect values as unusable (R)
4. If the RPD does not meet criteria, qualify positive values in the unspiked sample as estimated (J)
5. Use professional judgement to qualify additional samples in the analytical group based on MS/MSD results
6. Use professional judgement for qualification of data for unspiked compounds

*** If this SDG requires full validation; recalculate at least one % recovery and one % RPD from the raw data. Attach all calculations at the end of the validation checklist.**

Remarks:

X. Laboratory Control Sample Information

General LCS Criteria:
Percent recovery (%R) = in-house limits
RPD if LCSD performed = 30% RPD

Laboratory LCS Identifications: LCS 320-237313 LCS 320-237345

Deviations:

Compound	Date	%R	Samples Affected/Qualifiers Applied

Actions:

*** If this SDG requires full validation; recalculate at least one % recovery and one % RPD (if LCSD was performed) from the raw data. Attach all calculations at the end of the validation checklist.**

Action should be based on both the number of compounds outside the criterion and the magnitude of the exceedance.

1. If the LCS recovery is below limits but > one- half the lower limit, qualify valves as estimated (J/UJ).
2. If the LCS recovery is < one-half the lower limit, qualify detect (J) and non-detects (R)
3. If the LCS recovery is greater than the upper limit, qualify positive valves for that analyte as estimated (J).

5. Use professional judgement for qualification of data for compounds with no LCS information

Remarks: All LCS %R results met control limits

Client Sample ID: LIN04-SB1-01

Date Collected: 07/18/18 11:35
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-1

Matrix: Solid
Percent Solids: 77.1

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.72		0.39	0.10	ug/Kg	☼	07/27/18 10:32	08/06/18 03:51	1
Perfluorooctanoic acid (PFOA)	0.76	M =	0.39	0.13	ug/Kg	☼	07/27/18 10:32	08/06/18 03:51	1
Perfluorononanoic acid (PFNA)	0.66		0.39	0.10	ug/Kg	☼	07/27/18 10:32	08/06/18 03:51	1
Perfluorobutanesulfonic acid (PFBS)	0.33	J	0.52	0.076	ug/Kg	☼	07/27/18 10:32	08/06/18 03:51	1
Perfluorohexanesulfonic acid (PFHxS)	5.3		0.39	0.080	ug/Kg	☼	07/27/18 10:32	08/06/18 03:51	1
Perfluorooctanesulfonic acid (PFOS)	47	E *	1.3	0.31	ug/Kg	☼	07/27/18 10:32	08/06/18 03:51	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*60*		*50 - 150*	*07/27/18 10:32*	*08/06/18 03:51*	*1*
13C4-PFHpA	*79*		*50 - 150*	*07/27/18 10:32*	*08/06/18 03:51*	*1*
13C4 PFOA	*74*		*50 - 150*	*07/27/18 10:32*	*08/06/18 03:51*	*1*
13C5 PFNA	*67*		*50 - 150*	*07/27/18 10:32*	*08/06/18 03:51*	*1*
18O2 PFHxS	*72*		*50 - 150*	*07/27/18 10:32*	*08/06/18 03:51*	*1*
13C4 PFOS	*63*		*50 - 150*	*07/27/18 10:32*	*08/06/18 03:51*	*1*

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.77	J D *	1.9	0.50	ug/Kg	☼	07/27/18 10:32	08/07/18 16:42	5
Perfluorooctanoic acid (PFOA)	0.82	J D *	1.9	0.65	ug/Kg	☼	07/27/18 10:32	08/07/18 16:42	5
Perfluorononanoic acid (PFNA)	0.72	J D *	1.9	0.52	ug/Kg	☼	07/27/18 10:32	08/07/18 16:42	5
Perfluorobutanesulfonic acid (PFBS)	1.2	U *	2.6	0.38	ug/Kg	☼	07/27/18 10:32	08/07/18 16:42	5
Perfluorohexanesulfonic acid (PFHxS)	5.7	D *	1.9	0.40	ug/Kg	☼	07/27/18 10:32	08/07/18 16:42	5
Perfluorooctanesulfonic acid (PFOS)	52	D J K01	6.5	1.6	ug/Kg	☼	07/27/18 10:32	08/07/18 16:42	5

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*66*		*50 - 150*	*07/27/18 10:32*	*08/07/18 16:42*	*5*
13C4-PFHpA	*70*		*50 - 150*	*07/27/18 10:32*	*08/07/18 16:42*	*5*
13C4 PFOA	*73*		*50 - 150*	*07/27/18 10:32*	*08/07/18 16:42*	*5*
13C5 PFNA	*75*		*50 - 150*	*07/27/18 10:32*	*08/07/18 16:42*	*5*
18O2 PFHxS	*66*		*50 - 150*	*07/27/18 10:32*	*08/07/18 16:42*	*5*
13C4 PFOS	*64*		*50 - 150*	*07/27/18 10:32*	*08/07/18 16:42*	*5*

Client Sample ID: LIN04-SB1-02

Date Collected: 07/18/18 11:40
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-2

Matrix: Solid
Percent Solids: 78.0

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	1.5		0.38	0.099	ug/Kg	☼	07/27/18 10:32	08/06/18 03:59	1
Perfluorooctanoic acid (PFOA)	5.9		0.38	0.13	ug/Kg	☼	07/27/18 10:32	08/06/18 03:59	1
Perfluorononanoic acid (PFNA)	0.25	U	0.38	0.10	ug/Kg	☼	07/27/18 10:32	08/06/18 03:59	1
Perfluorobutanesulfonic acid (PFBS)	3.7		0.51	0.075	ug/Kg	☼	07/27/18 10:32	08/06/18 03:59	1
Perfluorohexanesulfonic acid (PFHxS)	98	E *	0.38	0.078	ug/Kg	☼	07/27/18 10:32	08/06/18 03:59	1
Perfluorooctanesulfonic acid (PFOS)	0.63	U	1.3	0.30	ug/Kg	☼	07/27/18 10:32	08/06/18 03:59	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*67*		*50 - 150*	*07/27/18 10:32*	*08/06/18 03:59*	*1*

Client Sample ID: LIN04-SB1-02

Date Collected: 07/18/18 11:40
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-2

Matrix: Solid
Percent Solids: 78.0

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4-PFHpA	62		50 - 150	07/27/18 10:32	08/06/18 03:59	1
13C4 PFOA	82		50 - 150	07/27/18 10:32	08/06/18 03:59	1
13C5 PFNA	86		50 - 150	07/27/18 10:32	08/06/18 03:59	1
18O2 PFHxS	63		50 - 150	07/27/18 10:32	08/06/18 03:59	1
13C4 PFOS	73		50 - 150	07/27/18 10:32	08/06/18 03:59	1

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	5.1	U *	7.6	2.0	ug/Kg	☼	07/27/18 10:32	08/07/18 16:50	20
Perfluorooctanoic acid (PFOA)	**6.2**	**J D M ***	7.6	2.5	ug/Kg	☼	07/27/18 10:32	08/07/18 16:50	20
Perfluorononanoic acid (PFNA)	5.1	U *	7.6	2.0	ug/Kg	☼	07/27/18 10:32	08/07/18 16:50	20
Perfluorobutanesulfonic acid (PFBS)	**3.6**	**J D ***	10	1.5	ug/Kg	☼	07/27/18 10:32	08/07/18 16:50	20
Perfluorohexanesulfonic acid (PFHxS)	**160**	**D J K01**	7.6	1.6	ug/Kg	☼	07/27/18 10:32	08/07/18 16:50	20
Perfluorooctanesulfonic acid (PFOS)	13	U *	25	6.1	ug/Kg	☼	07/27/18 10:32	08/07/18 16:50	20

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-PFBS	71		50 - 150	07/27/18 10:32	08/07/18 16:50	20
13C4-PFHpA	84		50 - 150	07/27/18 10:32	08/07/18 16:50	20
13C4 PFOA	80		50 - 150	07/27/18 10:32	08/07/18 16:50	20
13C5 PFNA	80		50 - 150	07/27/18 10:32	08/07/18 16:50	20
18O2 PFHxS	72		50 - 150	07/27/18 10:32	08/07/18 16:50	20
13C4 PFOS	67		50 - 150	07/27/18 10:32	08/07/18 16:50	20

Client Sample ID: LIN04-SB2-01

Date Collected: 07/18/18 12:10
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-3

Matrix: Solid
Percent Solids: 82.1

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	**0.72**		0.36	0.094	ug/Kg	☼	07/27/18 10:32	08/06/18 04:06	1
Perfluorooctanoic acid (PFOA)	**0.61**		0.36	0.12	ug/Kg	☼	07/27/18 10:32	08/06/18 04:06	1
Perfluorononanoic acid (PFNA)	**0.79**		0.36	0.098	ug/Kg	☼	07/27/18 10:32	08/06/18 04:06	1
Perfluorobutanesulfonic acid (PFBS)	0.22	U	0.48	0.071	ug/Kg	☼	07/27/18 10:32	08/06/18 04:06	1
Perfluorohexanesulfonic acid (PFHxS)	**0.95**		0.36	0.075	ug/Kg	☼	07/27/18 10:32	08/06/18 04:06	1
Perfluorooctanesulfonic acid (PFOS)	**9.0**	**M =**	1.2	0.29	ug/Kg	☼	07/27/18 10:32	08/06/18 04:06	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-PFBS	62		50 - 150	07/27/18 10:32	08/06/18 04:06	1
13C4-PFHpA	77		50 - 150	07/27/18 10:32	08/06/18 04:06	1
13C4 PFOA	75		50 - 150	07/27/18 10:32	08/06/18 04:06	1
13C5 PFNA	75		50 - 150	07/27/18 10:32	08/06/18 04:06	1
18O2 PFHxS	70		50 - 150	07/27/18 10:32	08/06/18 04:06	1
13C4 PFOS	64		50 - 150	07/27/18 10:32	08/06/18 04:06	1

Client Sample ID: LIN04-SB2-02

Lab Sample ID: 320-41403-4

Date Collected: 07/18/18 12:20
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 82.2

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	**0.17**	**J**	0.36	0.094	ug/Kg	☼	07/27/18 10:32	08/06/18 04:14	1
Perfluorooctanoic acid (PFOA)	0.24	U	0.36	0.12	ug/Kg	☼	07/27/18 10:32	08/06/18 04:14	1
Perfluorononanoic acid (PFNA)	0.24	U	0.36	0.097	ug/Kg	☼	07/27/18 10:32	08/06/18 04:14	1
Perfluorobutanesulfonic acid (PFBS)	**0.11**	**J**	0.48	0.071	ug/Kg	☼	07/27/18 10:32	08/06/18 04:14	1
Perfluorohexanesulfonic acid (PFHxS)	**0.88**		0.36	0.074	ug/Kg	☼	07/27/18 10:32	08/06/18 04:14	1
Perfluorooctanesulfonic acid (PFOS)	0.60	U	1.2	0.29	ug/Kg	☼	07/27/18 10:32	08/06/18 04:14	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*67*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:14*	*1*
13C4-PFHpA	*86*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:14*	*1*
13C4 PFOA	*81*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:14*	*1*
13C5 PFNA	*83*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:14*	*1*
18O2 PFHxS	*77*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:14*	*1*
13C4 PFOS	*68*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:14*	*1*

Client Sample ID: LIN03-SB1-01

Lab Sample ID: 320-41403-5

Date Collected: 07/18/18 13:20
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 80.4

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.24	U	0.37	0.095	ug/Kg	☼	07/27/18 10:32	08/06/18 04:22	1
Perfluorooctanoic acid (PFOA)	0.24	U	0.37	0.12	ug/Kg	☼	07/27/18 10:32	08/06/18 04:22	1
Perfluorononanoic acid (PFNA)	0.24	U M U	0.37	0.099	ug/Kg	☼	07/27/18 10:32	08/06/18 04:22	1
Perfluorobutanesulfonic acid (PFBS)	0.22	U	0.49	0.072	ug/Kg	☼	07/27/18 10:32	08/06/18 04:22	1
Perfluorohexanesulfonic acid (PFHxS)	**0.10**	**J U F06**	0.37	0.076	ug/Kg	☼	07/27/18 10:32	08/06/18 04:22	1
Perfluorooctanesulfonic acid (PFOS)	**0.91**	**J**	1.2	0.29	ug/Kg	☼	07/27/18 10:32	08/06/18 04:22	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*63*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:22*	*1*
13C4-PFHpA	*82*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:22*	*1*
13C4 PFOA	*77*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:22*	*1*
13C5 PFNA	*80*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:22*	*1*
18O2 PFHxS	*72*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:22*	*1*
13C4 PFOS	*69*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:22*	*1*

Client Sample ID: LIN03-SB1-02

Lab Sample ID: 320-41403-6

Date Collected: 07/18/18 13:30
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 80.3

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.25	U	0.37	0.097	ug/Kg	☼	07/27/18 10:32	08/06/18 04:38	1
Perfluorooctanoic acid (PFOA)	0.25	U	0.37	0.12	ug/Kg	☼	07/27/18 10:32	08/06/18 04:38	1
Perfluorononanoic acid (PFNA)	0.25	U	0.37	0.10	ug/Kg	☼	07/27/18 10:32	08/06/18 04:38	1
Perfluorobutanesulfonic acid (PFBS)	**0.12**	**J**	0.50	0.073	ug/Kg	☼	07/27/18 10:32	08/06/18 04:38	1
Perfluorohexanesulfonic acid (PFHxS)	**0.64**		0.37	0.077	ug/Kg	☼	07/27/18 10:32	08/06/18 04:38	1

Client Sample ID: LIN03-SB1-02

Lab Sample ID: 320-41403-6

Date Collected: 07/18/18 13:30
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 80.3

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	0.62	U M U	1.2	0.30	ug/Kg	☼	07/27/18 10:32	08/06/18 04:38	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*66*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:38*	*1*
13C4-PFHpA	*87*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:38*	*1*
13C4 PFOA	*82*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:38*	*1*
13C5 PFNA	*84*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:38*	*1*
18O2 PFHxS	*77*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:38*	*1*
13C4 PFOS	*70*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:38*	*1*

Client Sample ID: LIN03-SB3-01

Lab Sample ID: 320-41403-7

Date Collected: 07/18/18 14:10
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 73.2

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.17	J	0.41	0.11	ug/Kg	☼	07/27/18 10:32	08/06/18 04:46	1
Perfluorooctanoic acid (PFOA)	0.38	J M J	0.41	0.14	ug/Kg	☼	07/27/18 10:32	08/06/18 04:46	1
Perfluorononanoic acid (PFNA)	0.27	U	0.41	0.11	ug/Kg	☼	07/27/18 10:32	08/06/18 04:46	1
Perfluorobutanesulfonic acid (PFBS)	0.91		0.55	0.081	ug/Kg	☼	07/27/18 10:32	08/06/18 04:46	1
Perfluorohexanesulfonic acid (PFHxS)	2.7		0.41	0.085	ug/Kg	☼	07/27/18 10:32	08/06/18 04:46	1
Perfluorooctanesulfonic acid (PFOS)	4.8		1.4	0.33	ug/Kg	☼	07/27/18 10:32	08/06/18 04:46	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*66*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:46*	*1*
13C4-PFHpA	*83*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:46*	*1*
13C4 PFOA	*79*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:46*	*1*
13C5 PFNA	*81*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:46*	*1*
18O2 PFHxS	*75*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:46*	*1*
13C4 PFOS	*69*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:46*	*1*

Client Sample ID: LIN03-SB3-01D

Lab Sample ID: 320-41403-8

Date Collected: 07/18/18 14:10
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 80.0

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.11	J	0.37	0.096	ug/Kg	☼	07/27/18 10:32	08/06/18 04:53	1
Perfluorooctanoic acid (PFOA)	0.18	J	0.37	0.12	ug/Kg	☼	07/27/18 10:32	08/06/18 04:53	1
Perfluorononanoic acid (PFNA)	0.25	U	0.37	0.10	ug/Kg	☼	07/27/18 10:32	08/06/18 04:53	1
Perfluorobutanesulfonic acid (PFBS)	0.81		0.49	0.073	ug/Kg	☼	07/27/18 10:32	08/06/18 04:53	1
Perfluorohexanesulfonic acid (PFHxS)	1.7		0.37	0.076	ug/Kg	☼	07/27/18 10:32	08/06/18 04:53	1
Perfluorooctanesulfonic acid (PFOS)	0.40	J	1.2	0.30	ug/Kg	☼	07/27/18 10:32	08/06/18 04:53	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*64*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:53*	*1*
13C4-PFHpA	*80*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:53*	*1*
13C4 PFOA	*79*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:53*	*1*

Client Sample ID: LIN03-SB3-01D

Lab Sample ID: 320-41403-8
Date Collected: 07/18/18 14:10
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 80.0

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C5 PFNA	81		50 - 150	07/27/18 10:32	08/06/18 04:53	1
18O2 PFHxS	72		50 - 150	07/27/18 10:32	08/06/18 04:53	1
13C4 PFOS	66		50 - 150	07/27/18 10:32	08/06/18 04:53	1

Client Sample ID: LIN03-SB3-02

Lab Sample ID: 320-41403-9
Date Collected: 07/18/18 14:20
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 84.5

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.24	U	0.36	0.092	ug/Kg	☼	07/27/18 10:32	08/06/18 05:01	1
Perfluorooctanoic acid (PFOA)	0.24	U	0.36	0.12	ug/Kg	☼	07/27/18 10:32	08/06/18 05:01	1
Perfluorononanoic acid (PFNA)	0.24	U	0.36	0.096	ug/Kg	☼	07/27/18 10:32	08/06/18 05:01	1
Perfluorobutanesulfonic acid (PFBS)	**0.20**	**J**	0.47	0.070	ug/Kg	☼	07/27/18 10:32	08/06/18 05:01	1
Perfluorohexanesulfonic acid (PFHxS)	**0.92**		0.36	0.073	ug/Kg	☼	07/27/18 10:32	08/06/18 05:01	1
Perfluorooctanesulfonic acid (PFOS)	0.59	U M U	1.2	0.28	ug/Kg	☼	07/27/18 10:32	08/06/18 05:01	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-PFBS	68		50 - 150	07/27/18 10:32	08/06/18 05:01	1
13C4-PFHpA	89		50 - 150	07/27/18 10:32	08/06/18 05:01	1
13C4 PFOA	87		50 - 150	07/27/18 10:32	08/06/18 05:01	1
13C5 PFNA	91		50 - 150	07/27/18 10:32	08/06/18 05:01	1
18O2 PFHxS	80		50 - 150	07/27/18 10:32	08/06/18 05:01	1
13C4 PFOS	75		50 - 150	07/27/18 10:32	08/06/18 05:01	1

Client Sample ID: LIN03-SB2-01

Lab Sample ID: 320-41403-10
Date Collected: 07/18/18 14:35
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 82.6

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	**0.31**	**J**	0.36	0.094	ug/Kg	☼	07/27/18 10:32	08/06/18 05:09	1
Perfluorooctanoic acid (PFOA)	**1.3**		0.36	0.12	ug/Kg	☼	07/27/18 10:32	08/06/18 05:09	1
Perfluorononanoic acid (PFNA)	0.24	U	0.36	0.098	ug/Kg	☼	07/27/18 10:32	08/06/18 05:09	1
Perfluorobutanesulfonic acid (PFBS)	**0.63**		0.48	0.071	ug/Kg	☼	07/27/18 10:32	08/06/18 05:09	1
Perfluorohexanesulfonic acid (PFHxS)	**5.4**		0.36	0.075	ug/Kg	☼	07/27/18 10:32	08/06/18 05:09	1
Perfluorooctanesulfonic acid (PFOS)	**120**	**E ***	1.2	0.29	ug/Kg	☼	07/27/18 10:32	08/06/18 05:09	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-PFBS	71		50 - 150	07/27/18 10:32	08/06/18 05:09	1
13C4-PFHpA	91		50 - 150	07/27/18 10:32	08/06/18 05:09	1
13C4 PFOA	83		50 - 150	07/27/18 10:32	08/06/18 05:09	1
13C5 PFNA	64		50 - 150	07/27/18 10:32	08/06/18 05:09	1
18O2 PFHxS	82		50 - 150	07/27/18 10:32	08/06/18 05:09	1
13C4 PFOS	67		50 - 150	07/27/18 10:32	08/06/18 05:09	1

Client Sample ID: LIN03-SB2-01

Date Collected: 07/18/18 14:35
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-10

Matrix: Solid
Percent Solids: 82.6

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	2.4	U *	3.6	0.94	ug/Kg	☼	07/27/18 10:32	08/07/18 17:06	10
Perfluorooctanoic acid (PFOA)	2.4	U M *	3.6	1.2	ug/Kg	☼	07/27/18 10:32	08/07/18 17:06	10
Perfluorononanoic acid (PFNA)	2.4	U *	3.6	0.98	ug/Kg	☼	07/27/18 10:32	08/07/18 17:06	10
Perfluorobutanesulfonic acid (PFBS)	2.2	U *	4.8	0.71	ug/Kg	☼	07/27/18 10:32	08/07/18 17:06	10
Perfluorohexanesulfonic acid (PFHxS)	**5.9**	D *	3.6	0.75	ug/Kg	☼	07/27/18 10:32	08/07/18 17:06	10
Perfluorooctanesulfonic acid (PFOS)	**160**	D J K01	12	2.9	ug/Kg	☼	07/27/18 10:32	08/07/18 17:06	10

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*85*		*50 - 150*	*07/27/18 10:32*	*08/07/18 17:06*	*10*
13C4-PFHpA	*79*		*50 - 150*	*07/27/18 10:32*	*08/07/18 17:06*	*10*
13C4 PFOA	*80*		*50 - 150*	*07/27/18 10:32*	*08/07/18 17:06*	*10*
13C5 PFNA	*78*		*50 - 150*	*07/27/18 10:32*	*08/07/18 17:06*	*10*
18O2 PFHxS	*73*		*50 - 150*	*07/27/18 10:32*	*08/07/18 17:06*	*10*
13C4 PFOS	*67*		*50 - 150*	*07/27/18 10:32*	*08/07/18 17:06*	*10*

Client Sample ID: LIN03-SB2-02

Date Collected: 07/18/18 14:40
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-11

Matrix: Solid
Percent Solids: 77.1

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.25	U	0.38	0.099	ug/Kg	☼	07/27/18 10:32	08/06/18 05:17	1
Perfluorooctanoic acid (PFOA)	0.25	U	0.38	0.13	ug/Kg	☼	07/27/18 10:32	08/06/18 05:17	1
Perfluorononanoic acid (PFNA)	0.25	U	0.38	0.10	ug/Kg	☼	07/27/18 10:32	08/06/18 05:17	1
Perfluorobutanesulfonic acid (PFBS)	0.23	U	0.51	0.075	ug/Kg	☼	07/27/18 10:32	08/06/18 05:17	1
Perfluorohexanesulfonic acid (PFHxS)	**0.41**		0.38	0.079	ug/Kg	☼	07/27/18 10:32	08/06/18 05:17	1
Perfluorooctanesulfonic acid (PFOS)	**1.1**	J	1.3	0.31	ug/Kg	☼	07/27/18 10:32	08/06/18 05:17	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*66*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:17*	*1*
13C4-PFHpA	*77*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:17*	*1*
13C4 PFOA	*76*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:17*	*1*
13C5 PFNA	*78*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:17*	*1*
18O2 PFHxS	*74*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:17*	*1*
13C4 PFOS	*69*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:17*	*1*

Client Sample ID: LIN02-SB1-01

Date Collected: 07/18/18 15:05
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-12

Matrix: Solid
Percent Solids: 78.3

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	**0.65**		0.38	0.099	ug/Kg	☼	07/27/18 10:32	08/06/18 05:25	1
Perfluorooctanoic acid (PFOA)	**2.4**		0.38	0.13	ug/Kg	☼	07/27/18 10:32	08/06/18 05:25	1
Perfluorononanoic acid (PFNA)	**0.46**		0.38	0.10	ug/Kg	☼	07/27/18 10:32	08/06/18 05:25	1
Perfluorobutanesulfonic acid (PFBS)	0.23	U	0.51	0.075	ug/Kg	☼	07/27/18 10:32	08/06/18 05:25	1
Perfluorohexanesulfonic acid (PFHxS)	**1.3**		0.38	0.078	ug/Kg	☼	07/27/18 10:32	08/06/18 05:25	1

Client Sample ID: LIN02-SB1-01

Lab Sample ID: 320-41403-12
Date Collected: 07/18/18 15:05
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 78.3

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	14		1.3	0.30	ug/Kg	☼	07/27/18 10:32	08/06/18 05:25	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*65*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:25*	*1*
13C4-PFHpA	*85*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:25*	*1*
13C4 PFOA	*81*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:25*	*1*
13C5 PFNA	*80*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:25*	*1*
18O2 PFHxS	*73*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:25*	*1*
13C4 PFOS	*69*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:25*	*1*

Client Sample ID: LIN02-SB1-02

Lab Sample ID: 320-41403-13
Date Collected: 07/18/18 15:15
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 78.9

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.25	U	0.37	0.097	ug/Kg	☼	07/27/18 10:32	08/06/18 05:32	1
Perfluorooctanoic acid (PFOA)	0.25	U	0.37	0.12	ug/Kg	☼	07/27/18 10:32	08/06/18 05:32	1
Perfluorononanoic acid (PFNA)	0.25	U	0.37	0.10	ug/Kg	☼	07/27/18 10:32	08/06/18 05:32	1
Perfluorobutanesulfonic acid (PFBS)	0.22	U M U	0.50	0.074	ug/Kg	☼	07/27/18 10:32	08/06/18 05:32	1
Perfluorohexanesulfonic acid (PFHxS)	0.30	J	0.37	0.077	ug/Kg	☼	07/27/18 10:32	08/06/18 05:32	1
Perfluorooctanesulfonic acid (PFOS)	0.62	U	1.2	0.30	ug/Kg	☼	07/27/18 10:32	08/06/18 05:32	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*69*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:32*	*1*
13C4-PFHpA	*90*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:32*	*1*
13C4 PFOA	*86*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:32*	*1*
13C5 PFNA	*91*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:32*	*1*
18O2 PFHxS	*78*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:32*	*1*
13C4 PFOS	*75*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:32*	*1*

Client Sample ID: LIN01-SB2-01

Lab Sample ID: 320-41403-14
Date Collected: 07/18/18 15:40
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 78.7

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.23	J	0.38	0.098	ug/Kg	☼	07/27/18 10:32	08/06/18 06:04	1
Perfluorooctanoic acid (PFOA)	0.72		0.38	0.13	ug/Kg	☼	07/27/18 10:32	08/06/18 06:04	1
Perfluorononanoic acid (PFNA)	0.14	J M J	0.38	0.10	ug/Kg	☼	07/27/18 10:32	08/06/18 06:04	1
Perfluorobutanesulfonic acid (PFBS)	0.23	U	0.50	0.074	ug/Kg	☼	07/27/18 10:32	08/06/18 06:04	1
Perfluorohexanesulfonic acid (PFHxS)	0.47		0.38	0.078	ug/Kg	☼	07/27/18 10:32	08/06/18 06:04	1
Perfluorooctanesulfonic acid (PFOS)	5.7		1.3	0.30	ug/Kg	☼	07/27/18 10:32	08/06/18 06:04	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*61*		*50 - 150*	*07/27/18 10:32*	*08/06/18 06:04*	*1*
13C4-PFHpA	*82*		*50 - 150*	*07/27/18 10:32*	*08/06/18 06:04*	*1*
13C4 PFOA	*78*		*50 - 150*	*07/27/18 10:32*	*08/06/18 06:04*	*1*
13C5 PFNA	*78*		*50 - 150*	*07/27/18 10:32*	*08/06/18 06:04*	*1*

Client Sample ID: LIN01-SB2-01

Date Collected: 07/18/18 15:40
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-14

Matrix: Solid
Percent Solids: 78.7

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*72*		*50 - 150*	*07/27/18 10:32*	*08/06/18 06:04*	*1*
13C4 PFOS	*66*		*50 - 150*	*07/27/18 10:32*	*08/06/18 06:04*	*1*

Client Sample ID: LIN01-SB2-02

Date Collected: 07/18/18 15:55
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-15

Matrix: Solid
Percent Solids: 82.1

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.24	U	0.36	0.093	ug/Kg	☼	07/27/18 10:32	08/06/18 06:12	1
Perfluorooctanoic acid (PFOA)	0.24	U	0.36	0.12	ug/Kg	☼	07/27/18 10:32	08/06/18 06:12	1
Perfluorononanoic acid (PFNA)	0.24	U	0.36	0.097	ug/Kg	☼	07/27/18 10:32	08/06/18 06:12	1
Perfluorobutanesulfonic acid (PFBS)	0.22	U	0.48	0.071	ug/Kg	☼	07/27/18 10:32	08/06/18 06:12	1
Perfluorohexanesulfonic acid (PFHxS)	0.24	U	0.36	0.074	ug/Kg	☼	07/27/18 10:32	08/06/18 06:12	1
Perfluorooctanesulfonic acid (PFOS)	0.60	U	1.2	0.29	ug/Kg	☼	07/27/18 10:32	08/06/18 06:12	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*69*		*50 - 150*	*07/27/18 10:32*	*08/06/18 06:12*	*1*
13C4-PFHpA	*89*		*50 - 150*	*07/27/18 10:32*	*08/06/18 06:12*	*1*
13C4 PFOA	*87*		*50 - 150*	*07/27/18 10:32*	*08/06/18 06:12*	*1*
13C5 PFNA	*90*		*50 - 150*	*07/27/18 10:32*	*08/06/18 06:12*	*1*
18O2 PFHxS	*78*		*50 - 150*	*07/27/18 10:32*	*08/06/18 06:12*	*1*
13C4 PFOS	*75*		*50 - 150*	*07/27/18 10:32*	*08/06/18 06:12*	*1*

Client Sample ID: LIN01-SB1-01

Date Collected: 07/18/18 16:20
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-16

Matrix: Solid
Percent Solids: 82.2

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	**0.14**	**J**	0.36	0.095	ug/Kg	☼	07/27/18 10:32	08/06/18 06:19	1
Perfluorooctanoic acid (PFOA)	**0.25**	**J**	0.36	0.12	ug/Kg	☼	07/27/18 10:32	08/06/18 06:19	1
Perfluorononanoic acid (PFNA)	**0.17**	**J**	0.36	0.098	ug/Kg	☼	07/27/18 10:32	08/06/18 06:19	1
Perfluorobutanesulfonic acid (PFBS)	0.22	U	0.49	0.072	ug/Kg	☼	07/27/18 10:32	08/06/18 06:19	1
Perfluorohexanesulfonic acid (PFHxS)	**0.59**		0.36	0.075	ug/Kg	☼	07/27/18 10:32	08/06/18 06:19	1
Perfluorooctanesulfonic acid (PFOS)	**10**		1.2	0.29	ug/Kg	☼	07/27/18 10:32	08/06/18 06:19	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*57*		*50 - 150*	*07/27/18 10:32*	*08/06/18 06:19*	*1*
13C4-PFHpA	*74*		*50 - 150*	*07/27/18 10:32*	*08/06/18 06:19*	*1*
13C4 PFOA	*73*		*50 - 150*	*07/27/18 10:32*	*08/06/18 06:19*	*1*
13C5 PFNA	*72*		*50 - 150*	*07/27/18 10:32*	*08/06/18 06:19*	*1*
18O2 PFHxS	*65*		*50 - 150*	*07/27/18 10:32*	*08/06/18 06:19*	*1*
13C4 PFOS	*63*		*50 - 150*	*07/27/18 10:32*	*08/06/18 06:19*	*1*

Client Sample ID: LIN01-SB1-02

Date Collected: 07/18/18 16:25
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-17

Matrix: Solid
Percent Solids: 75.2

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.10	J	0.39	0.10	ug/Kg	☼	07/27/18 10:33	08/06/18 06:27	1
Perfluorooctanoic acid (PFOA)	0.58		0.39	0.13	ug/Kg	☼	07/27/18 10:33	08/06/18 06:27	1
Perfluorononanoic acid (PFNA)	1.3	J G02	0.39	0.11	ug/Kg	☼	07/27/18 10:33	08/06/18 06:27	1
Perfluorobutanesulfonic acid (PFBS)	0.24	U	0.52	0.077	ug/Kg	☼	07/27/18 10:33	08/06/18 06:27	1
Perfluorohexanesulfonic acid (PFHxS)	2.5		0.39	0.081	ug/Kg	☼	07/27/18 10:33	08/06/18 06:27	1
Perfluorooctanesulfonic acid (PFOS)	220	E *	1.3	0.31	ug/Kg	☼	07/27/18 10:33	08/06/18 06:27	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*70*		*50 - 150*	*07/27/18 10:33*	*08/06/18 06:27*	*1*
13C4-PFHpA	*89*		*50 - 150*	*07/27/18 10:33*	*08/06/18 06:27*	*1*
13C4 PFOA	*83*		*50 - 150*	*07/27/18 10:33*	*08/06/18 06:27*	*1*
13C5 PFNA	*47*	*Q*	*50 - 150*	*07/27/18 10:33*	*08/06/18 06:27*	*1*
18O2 PFHxS	*77*		*50 - 150*	*07/27/18 10:33*	*08/06/18 06:27*	*1*
13C4 PFOS	*54*		*50 - 150*	*07/27/18 10:33*	*08/06/18 06:27*	*1*

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	5.2	U *	7.9	2.0	ug/Kg	☼	07/27/18 10:33	08/07/18 17:21	20
Perfluorooctanoic acid (PFOA)	5.2	U *	7.9	2.6	ug/Kg	☼	07/27/18 10:33	08/07/18 17:21	20
Perfluorononanoic acid (PFNA)	5.2	U M *	7.9	2.1	ug/Kg	☼	07/27/18 10:33	08/07/18 17:21	20
Perfluorobutanesulfonic acid (PFBS)	4.7	U *	10	1.5	ug/Kg	☼	07/27/18 10:33	08/07/18 17:21	20
Perfluorohexanesulfonic acid (PFHxS)	2.8	J D *	7.9	1.6	ug/Kg	☼	07/27/18 10:33	08/07/18 17:21	20
Perfluorooctanesulfonic acid (PFOS)	320	D J K01	26	6.3	ug/Kg	☼	07/27/18 10:33	08/07/18 17:21	20

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*70*	*M*	*50 - 150*	*07/27/18 10:33*	*08/07/18 17:21*	*20*
13C4-PFHpA	*83*		*50 - 150*	*07/27/18 10:33*	*08/07/18 17:21*	*20*
13C4 PFOA	*84*		*50 - 150*	*07/27/18 10:33*	*08/07/18 17:21*	*20*
13C5 PFNA	*77*		*50 - 150*	*07/27/18 10:33*	*08/07/18 17:21*	*20*
18O2 PFHxS	*73*		*50 - 150*	*07/27/18 10:33*	*08/07/18 17:21*	*20*
13C4 PFOS	*73*		*50 - 150*	*07/27/18 10:33*	*08/07/18 17:21*	*20*

Client Sample ID: LIN01-SB1-02D

Date Collected: 07/18/18 16:25
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-18

Matrix: Solid
Percent Solids: 71.5

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.28	U	0.42	0.11	ug/Kg	☼	07/27/18 10:33	08/06/18 06:35	1
Perfluorooctanoic acid (PFOA)	0.53	M =	0.42	0.14	ug/Kg	☼	07/27/18 10:33	08/06/18 06:35	1
Perfluorononanoic acid (PFNA)	1.0	J G02	0.42	0.11	ug/Kg	☼	07/27/18 10:33	08/06/18 06:35	1
Perfluorobutanesulfonic acid (PFBS)	0.25	U	0.56	0.082	ug/Kg	☼	07/27/18 10:33	08/06/18 06:35	1
Perfluorohexanesulfonic acid (PFHxS)	2.3		0.42	0.086	ug/Kg	☼	07/27/18 10:33	08/06/18 06:35	1
Perfluorooctanesulfonic acid (PFOS)	220	E *	1.4	0.33	ug/Kg	☼	07/27/18 10:33	08/06/18 06:35	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*66*		*50 - 150*	*07/27/18 10:33*	*08/06/18 06:35*	*1*
13C4-PFHpA	*83*		*50 - 150*	*07/27/18 10:33*	*08/06/18 06:35*	*1*

Client Sample ID: LIN01-SB1-02D

Date Collected: 07/18/18 16:25
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-18

Matrix: Solid
Percent Solids: 71.5

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOA	*78*		*50 - 150*	*07/27/18 10:33*	*08/06/18 06:35*	*1*
13C5 PFNA	*47*	*Q*	*50 - 150*	*07/27/18 10:33*	*08/06/18 06:35*	*1*
18O2 PFHxS	*74*		*50 - 150*	*07/27/18 10:33*	*08/06/18 06:35*	*1*
13C4 PFOS	*52*		*50 - 150*	*07/27/18 10:33*	*08/06/18 06:35*	*1*

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	5.6	U *	8.4	2.2	ug/Kg	☼	07/27/18 10:33	08/07/18 17:29	20
Perfluorooctanoic acid (PFOA)	5.6	U M *	8.4	2.8	ug/Kg	☼	07/27/18 10:33	08/07/18 17:29	20
Perfluorononanoic acid (PFNA)	5.6	U *	8.4	2.3	ug/Kg	☼	07/27/18 10:33	08/07/18 17:29	20
Perfluorobutanesulfonic acid (PFBS)	5.0	U *	11	1.6	ug/Kg	☼	07/27/18 10:33	08/07/18 17:29	20
Perfluorohexanesulfonic acid (PFHxS)	**2.3**	**J D ***	8.4	1.7	ug/Kg	☼	07/27/18 10:33	08/07/18 17:29	20
Perfluorooctanesulfonic acid (PFOS)	**330**	**D J K01**	28	6.7	ug/Kg	☼	07/27/18 10:33	08/07/18 17:29	20

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*96*		*50 - 150*	*07/27/18 10:33*	*08/07/18 17:29*	*20*
13C4-PFHpA	*77*		*50 - 150*	*07/27/18 10:33*	*08/07/18 17:29*	*20*
13C4 PFOA	*80*		*50 - 150*	*07/27/18 10:33*	*08/07/18 17:29*	*20*
13C5 PFNA	*76*		*50 - 150*	*07/27/18 10:33*	*08/07/18 17:29*	*20*
18O2 PFHxS	*72*		*50 - 150*	*07/27/18 10:33*	*08/07/18 17:29*	*20*
13C4 PFOS	*69*		*50 - 150*	*07/27/18 10:33*	*08/07/18 17:29*	*20*

Client Sample ID: LIN05-SB2-01

Date Collected: 07/18/18 17:00
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-19

Matrix: Solid
Percent Solids: 76.3

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	**0.20**	**J**	0.39	0.10	ug/Kg	☼	07/27/18 10:33	08/06/18 06:43	1
Perfluorooctanoic acid (PFOA)	**0.45**		0.39	0.13	ug/Kg	☼	07/27/18 10:33	08/06/18 06:43	1
Perfluorononanoic acid (PFNA)	**0.52**		0.39	0.11	ug/Kg	☼	07/27/18 10:33	08/06/18 06:43	1
Perfluorobutanesulfonic acid (PFBS)	**0.46**	**J**	0.52	0.077	ug/Kg	☼	07/27/18 10:33	08/06/18 06:43	1
Perfluorohexanesulfonic acid (PFHxS)	**2.1**		0.39	0.080	ug/Kg	☼	07/27/18 10:33	08/06/18 06:43	1
Perfluorooctanesulfonic acid (PFOS)	**9.2**		1.3	0.31	ug/Kg	☼	07/27/18 10:33	08/06/18 06:43	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*62*		*50 - 150*	*07/27/18 10:33*	*08/06/18 06:43*	*1*
13C4-PFHpA	*73*		*50 - 150*	*07/27/18 10:33*	*08/06/18 06:43*	*1*
13C4 PFOA	*72*		*50 - 150*	*07/27/18 10:33*	*08/06/18 06:43*	*1*
13C5 PFNA	*71*		*50 - 150*	*07/27/18 10:33*	*08/06/18 06:43*	*1*
18O2 PFHxS	*68*		*50 - 150*	*07/27/18 10:33*	*08/06/18 06:43*	*1*
13C4 PFOS	*63*		*50 - 150*	*07/27/18 10:33*	*08/06/18 06:43*	*1*

Client Sample ID: LIN05-SB2-02

Date Collected: 07/18/18 17:25
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-20
Matrix: Solid
Percent Solids: 75.2

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.26	U	0.39	0.10	ug/Kg	☼	07/31/18 10:42	08/06/18 08:01	1
Perfluorooctanoic acid (PFOA)	0.26	U	0.39	0.13	ug/Kg	☼	07/31/18 10:42	08/06/18 08:01	1
Perfluorononanoic acid (PFNA)	0.26	U	0.39	0.11	ug/Kg	☼	07/31/18 10:42	08/06/18 08:01	1
Perfluorobutanesulfonic acid (PFBS)	0.24	U	0.52	0.077	ug/Kg	☼	07/31/18 10:42	08/06/18 08:01	1
Perfluorohexanesulfonic acid (PFHxS)	0.087	J U F06	0.39	0.081	ug/Kg	☼	07/31/18 10:42	08/06/18 08:01	1
Perfluorooctanesulfonic acid (PFOS)	0.66	U	1.3	0.31	ug/Kg	☼	07/31/18 10:42	08/06/18 08:01	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*63*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:01*	*1*
13C4-PFHpA	*83*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:01*	*1*
13C4 PFOA	*75*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:01*	*1*
13C5 PFNA	*84*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:01*	*1*
18O2 PFHxS	*75*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:01*	*1*
13C4 PFOS	*70*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:01*	*1*

Client Sample ID: ER-01

Date Collected: 07/18/18 16:05
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-21
Matrix: Water

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	1.3	U	1.7	0.53	ng/L		08/01/18 08:32	08/03/18 21:23	1
Perfluorooctanoic acid (PFOA)	1.3	U Q U	1.7	0.47	ng/L		08/01/18 08:32	08/03/18 21:23	1
Perfluorononanoic acid (PFNA)	1.3	U	1.7	0.45	ng/L		08/01/18 08:32	08/03/18 21:23	1
Perfluorobutanesulfonic acid (PFBS)	0.87	U M Q U	1.7	0.40	ng/L		08/01/18 08:32	08/03/18 21:23	1
Perfluorohexanesulfonic acid (PFHxS)	0.33	J M U F06	1.7	0.33	ng/L		08/01/18 08:32	08/03/18 21:23	1
Perfluorooctanesulfonic acid (PFOS)	1.1	J Q J P01	3.5	0.95	ng/L		08/01/18 08:32	08/03/18 21:23	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*81*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:23*	*1*
13C4-PFHpA	*92*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:23*	*1*
13C4 PFOA	*95*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:23*	*1*
13C5 PFNA	*93*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:23*	*1*
18O2 PFHxS	*84*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:23*	*1*
13C4 PFOS	*89*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:23*	*1*

Client Sample ID: FB-01

Date Collected: 07/19/18 09:25
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-22
Matrix: Water

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	2.8		1.9	0.58	ng/L		08/01/18 08:32	08/03/18 21:31	1
Perfluorooctanoic acid (PFOA)	2.1	M Q J P01	1.9	0.51	ng/L		08/01/18 08:32	08/03/18 21:31	1
Perfluorononanoic acid (PFNA)	0.78	J	1.9	0.49	ng/L		08/01/18 08:32	08/03/18 21:31	1
Perfluorobutanesulfonic acid (PFBS)	1.1	J Q J P01	1.9	0.43	ng/L		08/01/18 08:32	08/03/18 21:31	1
Perfluorohexanesulfonic acid (PFHxS)	4.3		1.9	0.36	ng/L		08/01/18 08:32	08/03/18 21:31	1

Client Sample ID: FB-01

Lab Sample ID: 320-41403-22

Date Collected: 07/19/18 09:25
Date Received: 07/24/18 09:00

Matrix: Water

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	16	Q J P01	3.8	1.0	ng/L		08/01/18 08:32	08/03/18 21:31	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*73*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:31*	*1*
13C4-PFHpA	*87*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:31*	*1*
13C4 PFOA	*86*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:31*	*1*
13C5 PFNA	*91*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:31*	*1*
18O2 PFHxS	*79*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:31*	*1*
13C4 PFOS	*76*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:31*	*1*

Client Sample ID: LIN09-SB2-01

Lab Sample ID: 320-41403-24

Date Collected: 07/19/18 12:20
Date Received: 07/24/18 09:00

Matrix: Solid
Percent Solids: 74.1

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.55	M =	0.40	0.10	ug/Kg	☼	07/31/18 10:42	08/06/18 08:09	1
Perfluorooctanoic acid (PFOA)	0.72		0.40	0.13	ug/Kg	☼	07/31/18 10:42	08/06/18 08:09	1
Perfluorononanoic acid (PFNA)	0.54		0.40	0.11	ug/Kg	☼	07/31/18 10:42	08/06/18 08:09	1
Perfluorobutanesulfonic acid (PFBS)	0.21	J	0.53	0.078	ug/Kg	☼	07/31/18 10:42	08/06/18 08:09	1
Perfluorohexanesulfonic acid (PFHxS)	2.3		0.40	0.082	ug/Kg	☼	07/31/18 10:42	08/06/18 08:09	1
Perfluorooctanesulfonic acid (PFOS)	8.6		1.3	0.32	ug/Kg	☼	07/31/18 10:42	08/06/18 08:09	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*60*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:09*	*1*
13C4-PFHpA	*81*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:09*	*1*
13C4 PFOA	*73*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:09*	*1*
13C5 PFNA	*77*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:09*	*1*
18O2 PFHxS	*70*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:09*	*1*
13C4 PFOS	*65*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:09*	*1*

Client Sample ID: LIN09-SB2-02

Lab Sample ID: 320-41403-25

Date Collected: 07/19/18 12:25
Date Received: 07/24/18 09:00

Matrix: Solid
Percent Solids: 74.7

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.27	U	0.40	0.10	ug/Kg	☼	07/31/18 10:42	08/06/18 08:16	1
Perfluorooctanoic acid (PFOA)	0.27	U	0.40	0.13	ug/Kg	☼	07/31/18 10:42	08/06/18 08:16	1
Perfluorononanoic acid (PFNA)	0.27	U	0.40	0.11	ug/Kg	☼	07/31/18 10:42	08/06/18 08:16	1
Perfluorobutanesulfonic acid (PFBS)	0.24	U	0.53	0.079	ug/Kg	☼	07/31/18 10:42	08/06/18 08:16	1
Perfluorohexanesulfonic acid (PFHxS)	0.12	J	0.40	0.083	ug/Kg	☼	07/31/18 10:42	08/06/18 08:16	1
Perfluorooctanesulfonic acid (PFOS)	0.67	U M U	1.3	0.32	ug/Kg	☼	07/31/18 10:42	08/06/18 08:16	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*69*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:16*	*1*
13C4-PFHpA	*85*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:16*	*1*
13C4 PFOA	*78*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:16*	*1*

Client Sample ID: LIN09-SB2-02

Date Collected: 07/19/18 12:25
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-25
Matrix: Solid
Percent Solids: 74.7

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C5 PFNA	80		50 - 150	07/31/18 10:42	08/06/18 08:16	1
18O2 PFHxS	75		50 - 150	07/31/18 10:42	08/06/18 08:16	1
13C4 PFOS	72		50 - 150	07/31/18 10:42	08/06/18 08:16	1

Client Sample ID: LIN09-SB1-01

Date Collected: 07/19/18 12:40
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-26
Matrix: Solid
Percent Solids: 77.9

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.64		0.38	0.099	ug/Kg	☼	07/31/18 10:42	08/06/18 08:24	1
Perfluorooctanoic acid (PFOA)	0.61		0.38	0.13	ug/Kg	☼	07/31/18 10:42	08/06/18 08:24	1
Perfluorononanoic acid (PFNA)	0.20	J	0.38	0.10	ug/Kg	☼	07/31/18 10:42	08/06/18 08:24	1
Perfluorobutanesulfonic acid (PFBS)	0.16	J	0.51	0.075	ug/Kg	☼	07/31/18 10:42	08/06/18 08:24	1
Perfluorohexanesulfonic acid (PFHxS)	1.6		0.38	0.079	ug/Kg	☼	07/31/18 10:42	08/06/18 08:24	1
Perfluorooctanesulfonic acid (PFOS)	6.3		1.3	0.31	ug/Kg	☼	07/31/18 10:42	08/06/18 08:24	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-PFBS	58		50 - 150	07/31/18 10:42	08/06/18 08:24	1
13C4-PFHpA	79		50 - 150	07/31/18 10:42	08/06/18 08:24	1
13C4 PFOA	75		50 - 150	07/31/18 10:42	08/06/18 08:24	1
13C5 PFNA	85		50 - 150	07/31/18 10:42	08/06/18 08:24	1
18O2 PFHxS	63		50 - 150	07/31/18 10:42	08/06/18 08:24	1
13C4 PFOS	66		50 - 150	07/31/18 10:42	08/06/18 08:24	1

Client Sample ID: LIN09-SB1-02

Date Collected: 07/19/18 12:45
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-27
Matrix: Solid
Percent Solids: 75.2

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.15	J	0.39	0.10	ug/Kg	☼	07/31/18 10:42	08/06/18 08:32	1
Perfluorooctanoic acid (PFOA)	0.18	J M J	0.39	0.13	ug/Kg	☼	07/31/18 10:42	08/06/18 08:32	1
Perfluorononanoic acid (PFNA)	0.26	U	0.39	0.11	ug/Kg	☼	07/31/18 10:42	08/06/18 08:32	1
Perfluorobutanesulfonic acid (PFBS)	0.54		0.52	0.077	ug/Kg	☼	07/31/18 10:42	08/06/18 08:32	1
Perfluorohexanesulfonic acid (PFHxS)	1.9		0.39	0.081	ug/Kg	☼	07/31/18 10:42	08/06/18 08:32	1
Perfluorooctanesulfonic acid (PFOS)	1.6		1.3	0.31	ug/Kg	☼	07/31/18 10:42	08/06/18 08:32	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-PFBS	61		50 - 150	07/31/18 10:42	08/06/18 08:32	1
13C4-PFHpA	86		50 - 150	07/31/18 10:42	08/06/18 08:32	1
13C4 PFOA	79		50 - 150	07/31/18 10:42	08/06/18 08:32	1
13C5 PFNA	84		50 - 150	07/31/18 10:42	08/06/18 08:32	1
18O2 PFHxS	71		50 - 150	07/31/18 10:42	08/06/18 08:32	1
13C4 PFOS	71		50 - 150	07/31/18 10:42	08/06/18 08:32	1

Client Sample ID: LIN05-SB3-01

Date Collected: 07/19/18 13:00
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-28

Matrix: Solid
Percent Solids: 75.2

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.46		0.40	0.10	ug/Kg	☼	07/31/18 10:42	08/06/18 08:40	1
Perfluorooctanoic acid (PFOA)	2.7		0.40	0.13	ug/Kg	☼	07/31/18 10:42	08/06/18 08:40	1
Perfluorononanoic acid (PFNA)	0.71		0.40	0.11	ug/Kg	☼	07/31/18 10:42	08/06/18 08:40	1
Perfluorobutanesulfonic acid (PFBS)	0.24	J	0.53	0.078	ug/Kg	☼	07/31/18 10:42	08/06/18 08:40	1
Perfluorohexanesulfonic acid (PFHxS)	4.7		0.40	0.082	ug/Kg	☼	07/31/18 10:42	08/06/18 08:40	1
Perfluorooctanesulfonic acid (PFOS)	18		1.3	0.32	ug/Kg	☼	07/31/18 10:42	08/06/18 08:40	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*55*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:40*	*1*
13C4-PFHpA	*78*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:40*	*1*
13C4 PFOA	*73*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:40*	*1*
13C5 PFNA	*73*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:40*	*1*
18O2 PFHxS	*65*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:40*	*1*
13C4 PFOS	*61*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:40*	*1*

Client Sample ID: LIN05-SB3-01D

Date Collected: 07/19/18 13:00
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-29

Matrix: Solid
Percent Solids: 79.6

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.53		0.37	0.096	ug/Kg	☼	07/31/18 10:42	08/06/18 08:48	1
Perfluorooctanoic acid (PFOA)	2.6		0.37	0.12	ug/Kg	☼	07/31/18 10:42	08/06/18 08:48	1
Perfluorononanoic acid (PFNA)	0.50		0.37	0.10	ug/Kg	☼	07/31/18 10:42	08/06/18 08:48	1
Perfluorobutanesulfonic acid (PFBS)	0.31	J	0.49	0.073	ug/Kg	☼	07/31/18 10:42	08/06/18 08:48	1
Perfluorohexanesulfonic acid (PFHxS)	5.4		0.37	0.076	ug/Kg	☼	07/31/18 10:42	08/06/18 08:48	1
Perfluorooctanesulfonic acid (PFOS)	17		1.2	0.30	ug/Kg	☼	07/31/18 10:42	08/06/18 08:48	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*55*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:48*	*1*
13C4-PFHpA	*75*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:48*	*1*
13C4 PFOA	*68*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:48*	*1*
13C5 PFNA	*72*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:48*	*1*
18O2 PFHxS	*62*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:48*	*1*
13C4 PFOS	*62*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:48*	*1*

Client Sample ID: LIN05-SB3-02

Date Collected: 07/19/18 13:05
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-30

Matrix: Solid
Percent Solids: 79.0

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.25	U	0.37	0.097	ug/Kg	☼	07/31/18 10:42	08/06/18 08:56	1
Perfluorooctanoic acid (PFOA)	0.25	U M U	0.37	0.12	ug/Kg	☼	07/31/18 10:42	08/06/18 08:56	1
Perfluorononanoic acid (PFNA)	0.25	U	0.37	0.10	ug/Kg	☼	07/31/18 10:42	08/06/18 08:56	1
Perfluorobutanesulfonic acid (PFBS)	0.31	J	0.50	0.074	ug/Kg	☼	07/31/18 10:42	08/06/18 08:56	1

Client Sample ID: LIN05-SB3-02

Date Collected: 07/19/18 13:05
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-30

Matrix: Solid
Percent Solids: 79.0

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanesulfonic acid (PFHxS)	0.99		0.37	0.077	ug/Kg	☼	07/31/18 10:42	08/06/18 08:56	1
Perfluorooctanesulfonic acid (PFOS)	0.76	J	1.2	0.30	ug/Kg	☼	07/31/18 10:42	08/06/18 08:56	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*62*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:56*	*1*
13C4-PFHpA	*81*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:56*	*1*
13C4 PFOA	*75*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:56*	*1*
13C5 PFNA	*82*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:56*	*1*
18O2 PFHxS	*68*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:56*	*1*
13C4 PFOS	*71*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:56*	*1*

Client Sample ID: ER-02

Date Collected: 07/19/18 13:15
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-31

Matrix: Water

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	1.3	U	1.8	0.53	ng/L		08/01/18 08:32	08/03/18 21:38	1
Perfluorooctanoic acid (PFOA)	1.3	U Q U	1.8	0.47	ng/L		08/01/18 08:32	08/03/18 21:38	1
Perfluorononanoic acid (PFNA)	1.3	U	1.8	0.46	ng/L		08/01/18 08:32	08/03/18 21:38	1
Perfluorobutanesulfonic acid (PFBS)	0.88	U Q U	1.8	0.40	ng/L		08/01/18 08:32	08/03/18 21:38	1
Perfluorohexanesulfonic acid (PFHxS)	0.88	U	1.8	0.33	ng/L		08/01/18 08:32	08/03/18 21:38	1
Perfluorooctanesulfonic acid (PFOS)	2.6	U M Q U	3.5	0.96	ng/L		08/01/18 08:32	08/03/18 21:38	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*81*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:38*	*1*
13C4-PFHpA	*82*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:38*	*1*
13C4 PFOA	*95*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:38*	*1*
13C5 PFNA	*85*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:38*	*1*
18O2 PFHxS	*79*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:38*	*1*
13C4 PFOS	*77*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:38*	*1*

Client Sample ID: ER-03

Date Collected: 07/19/18 15:35
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-32

Matrix: Water

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	2.1	U	2.7	0.83	ng/L		08/01/18 08:32	08/03/18 21:46	1
Perfluorooctanoic acid (PFOA)	2.1	U Q U	2.7	0.74	ng/L		08/01/18 08:32	08/03/18 21:46	1
Perfluorononanoic acid (PFNA)	2.1	U	2.7	0.71	ng/L		08/01/18 08:32	08/03/18 21:46	1
Perfluorobutanesulfonic acid (PFBS)	1.4	U Q U	2.7	0.63	ng/L		08/01/18 08:32	08/03/18 21:46	1
Perfluorohexanesulfonic acid (PFHxS)	2.2	J M J	2.7	0.52	ng/L		08/01/18 08:32	08/03/18 21:46	1
Perfluorooctanesulfonic acid (PFOS)	25	Q J G02 P01	5.5	1.5	ng/L		08/01/18 08:32	08/03/18 21:46	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*50*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:46*	*1*
13C4-PFHpA	*55*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:46*	*1*
13C4 PFOA	*59*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:46*	*1*

Client Sample ID: ER-03

Date Collected: 07/19/18 15:35
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-32

Matrix: Water

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C5 PFNA	58		50 - 150	08/01/18 08:32	08/03/18 21:46	1
18O2 PFHxS	51		50 - 150	08/01/18 08:32	08/03/18 21:46	1
13C4 PFOS	47	Q	50 - 150	08/01/18 08:32	08/03/18 21:46	1

Client Sample ID: LIN05-SB1-01

Date Collected: 07/19/18 13:20
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-33

Matrix: Solid
Percent Solids: 82.8

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.59		0.36	0.093	ug/Kg	☼	07/31/18 10:42	08/06/18 09:11	1
Perfluorooctanoic acid (PFOA)	1.6		0.36	0.12	ug/Kg	☼	07/31/18 10:42	08/06/18 09:11	1
Perfluorononanoic acid (PFNA)	2.2	J G02	0.36	0.097	ug/Kg	☼	07/31/18 10:42	08/06/18 09:11	1
Perfluorobutanesulfonic acid (PFBS)	1.3		0.48	0.070	ug/Kg	☼	07/31/18 10:42	08/06/18 09:11	1
Perfluorohexanesulfonic acid (PFHxS)	21		0.36	0.074	ug/Kg	☼	07/31/18 10:42	08/06/18 09:11	1
Perfluorooctanesulfonic acid (PFOS)	480	E *	1.2	0.29	ug/Kg	☼	07/31/18 10:42	08/06/18 09:11	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-PFBS	52		50 - 150	07/31/18 10:42	08/06/18 09:11	1
13C4-PFHpA	77		50 - 150	07/31/18 10:42	08/06/18 09:11	1
13C4 PFOA	75		50 - 150	07/31/18 10:42	08/06/18 09:11	1
13C5 PFNA	40	Q	50 - 150	07/31/18 10:42	08/06/18 09:11	1
18O2 PFHxS	60		50 - 150	07/31/18 10:42	08/06/18 09:11	1
13C4 PFOS	31	Q	50 - 150	07/31/18 10:42	08/06/18 09:11	1

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	24	U *	36	9.3	ug/Kg	☼	07/31/18 10:42	08/07/18 20:53	100
Perfluorooctanoic acid (PFOA)	24	U *	36	12	ug/Kg	☼	07/31/18 10:42	08/07/18 20:53	100
Perfluorononanoic acid (PFNA)	24	U *	36	9.7	ug/Kg	☼	07/31/18 10:42	08/07/18 20:53	100
Perfluorobutanesulfonic acid (PFBS)	21	U *	48	7.0	ug/Kg	☼	07/31/18 10:42	08/07/18 20:53	100
Perfluorohexanesulfonic acid (PFHxS)	20	J D *	36	7.4	ug/Kg	☼	07/31/18 10:42	08/07/18 20:53	100
Perfluorooctanesulfonic acid (PFOS)	770	D J K01	120	29	ug/Kg	☼	07/31/18 10:42	08/07/18 20:53	100

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-PFBS	148	M	50 - 150	07/31/18 10:42	08/07/18 20:53	100
13C4-PFHpA	80		50 - 150	07/31/18 10:42	08/07/18 20:53	100
13C4 PFOA	82		50 - 150	07/31/18 10:42	08/07/18 20:53	100
13C5 PFNA	74		50 - 150	07/31/18 10:42	08/07/18 20:53	100
18O2 PFHxS	77		50 - 150	07/31/18 10:42	08/07/18 20:53	100
13C4 PFOS	74		50 - 150	07/31/18 10:42	08/07/18 20:53	100

Client Sample ID: LIN05-SB1-02

Date Collected: 07/19/18 13:25
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-34

Matrix: Solid
Percent Solids: 77.2

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.13	J	0.38	0.099	ug/Kg	☼	07/31/18 10:42	08/06/18 09:19	1
Perfluorooctanoic acid (PFOA)	0.47		0.38	0.13	ug/Kg	☼	07/31/18 10:42	08/06/18 09:19	1
Perfluorononanoic acid (PFNA)	0.25	U M U	0.38	0.10	ug/Kg	☼	07/31/18 10:42	08/06/18 09:19	1
Perfluorobutanesulfonic acid (PFBS)	0.27	J	0.51	0.075	ug/Kg	☼	07/31/18 10:42	08/06/18 09:19	1
Perfluorohexanesulfonic acid (PFHxS)	2.3		0.38	0.079	ug/Kg	☼	07/31/18 10:42	08/06/18 09:19	1
Perfluorooctanesulfonic acid (PFOS)	1.6		1.3	0.30	ug/Kg	☼	07/31/18 10:42	08/06/18 09:19	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*62*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:19*	*1*
13C4-PFHpA	*89*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:19*	*1*
13C4 PFOA	*82*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:19*	*1*
13C5 PFNA	*88*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:19*	*1*
18O2 PFHxS	*72*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:19*	*1*
13C4 PFOS	*70*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:19*	*1*

Client Sample ID: LIN08-SB2-01

Date Collected: 07/20/18 10:05
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-35

Matrix: Solid
Percent Solids: 80.7

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.24	U	0.37	0.095	ug/Kg	☼	07/31/18 10:42	08/06/18 09:27	1
Perfluorooctanoic acid (PFOA)	0.24	U M U	0.37	0.12	ug/Kg	☼	07/31/18 10:42	08/06/18 09:27	1
Perfluorononanoic acid (PFNA)	0.24	U	0.37	0.099	ug/Kg	☼	07/31/18 10:42	08/06/18 09:27	1
Perfluorobutanesulfonic acid (PFBS)	0.22	U	0.49	0.072	ug/Kg	☼	07/31/18 10:42	08/06/18 09:27	1
Perfluorohexanesulfonic acid (PFHxS)	0.16	J	0.37	0.076	ug/Kg	☼	07/31/18 10:42	08/06/18 09:27	1
Perfluorooctanesulfonic acid (PFOS)	1.3		1.2	0.29	ug/Kg	☼	07/31/18 10:42	08/06/18 09:27	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*66*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:27*	*1*
13C4-PFHpA	*83*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:27*	*1*
13C4 PFOA	*76*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:27*	*1*
13C5 PFNA	*84*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:27*	*1*
18O2 PFHxS	*75*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:27*	*1*
13C4 PFOS	*73*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:27*	*1*

Client Sample ID: LIN08-SB2-02

Date Collected: 07/20/18 10:10
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-36

Matrix: Solid
Percent Solids: 72.5

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.28	U	0.41	0.11	ug/Kg	☼	07/31/18 10:42	08/06/18 09:35	1
Perfluorooctanoic acid (PFOA)	0.69		0.41	0.14	ug/Kg	☼	07/31/18 10:42	08/06/18 09:35	1
Perfluorononanoic acid (PFNA)	0.28	U	0.41	0.11	ug/Kg	☼	07/31/18 10:42	08/06/18 09:35	1
Perfluorobutanesulfonic acid (PFBS)	0.25	U	0.55	0.081	ug/Kg	☼	07/31/18 10:42	08/06/18 09:35	1
Perfluorohexanesulfonic acid (PFHxS)	0.74		0.41	0.086	ug/Kg	☼	07/31/18 10:42	08/06/18 09:35	1

Client Sample ID: LIN08-SB2-02

Lab Sample ID: 320-41403-36
Date Collected: 07/20/18 10:10
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 72.5

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	3.3	J1 J H01 H04	1.4	0.33	ug/Kg	☼	07/31/18 10:42	08/06/18 09:35	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*62*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:35*	*1*
13C4-PFHpA	*83*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:35*	*1*
13C4 PFOA	*81*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:35*	*1*
13C5 PFNA	*83*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:35*	*1*
18O2 PFHxS	*72*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:35*	*1*
13C4 PFOS	*71*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:35*	*1*

Client Sample ID: LIN07-SB1-01

Lab Sample ID: 320-41403-37
Date Collected: 07/20/18 10:20
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 76.2

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.38	J	0.39	0.10	ug/Kg	☼	07/31/18 10:42	08/06/18 13:23	1
Perfluorooctanoic acid (PFOA)	0.41		0.39	0.13	ug/Kg	☼	07/31/18 10:42	08/06/18 13:23	1
Perfluorononanoic acid (PFNA)	0.14	J	0.39	0.10	ug/Kg	☼	07/31/18 10:42	08/06/18 13:23	1
Perfluorobutanesulfonic acid (PFBS)	0.23	U	0.52	0.076	ug/Kg	☼	07/31/18 10:42	08/06/18 13:23	1
Perfluorohexanesulfonic acid (PFHxS)	1.7		0.39	0.080	ug/Kg	☼	07/31/18 10:42	08/06/18 13:23	1
Perfluorooctanesulfonic acid (PFOS)	4.3		1.3	0.31	ug/Kg	☼	07/31/18 10:42	08/06/18 13:23	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*71*		*50 - 150*	*07/31/18 10:42*	*08/06/18 13:23*	*1*
13C4-PFHpA	*74*		*50 - 150*	*07/31/18 10:42*	*08/06/18 13:23*	*1*
13C4 PFOA	*78*		*50 - 150*	*07/31/18 10:42*	*08/06/18 13:23*	*1*
13C5 PFNA	*78*		*50 - 150*	*07/31/18 10:42*	*08/06/18 13:23*	*1*
18O2 PFHxS	*72*		*50 - 150*	*07/31/18 10:42*	*08/06/18 13:23*	*1*
13C4 PFOS	*70*		*50 - 150*	*07/31/18 10:42*	*08/06/18 13:23*	*1*

Client Sample ID: LIN07-SB1-02

Lab Sample ID: 320-41403-38
Date Collected: 07/20/18 10:25
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 77.8

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.18	J	0.39	0.10	ug/Kg	☼	07/31/18 10:42	08/06/18 13:30	1
Perfluorooctanoic acid (PFOA)	0.26	U M U	0.39	0.13	ug/Kg	☼	07/31/18 10:42	08/06/18 13:30	1
Perfluorononanoic acid (PFNA)	0.26	U	0.39	0.10	ug/Kg	☼	07/31/18 10:42	08/06/18 13:30	1
Perfluorobutanesulfonic acid (PFBS)	0.17	J	0.51	0.076	ug/Kg	☼	07/31/18 10:42	08/06/18 13:30	1
Perfluorohexanesulfonic acid (PFHxS)	5.9		0.39	0.080	ug/Kg	☼	07/31/18 10:42	08/06/18 13:30	1
Perfluorooctanesulfonic acid (PFOS)	0.64	U M U	1.3	0.31	ug/Kg	☼	07/31/18 10:42	08/06/18 13:30	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*65*		*50 - 150*	*07/31/18 10:42*	*08/06/18 13:30*	*1*
13C4-PFHpA	*72*		*50 - 150*	*07/31/18 10:42*	*08/06/18 13:30*	*1*
13C4 PFOA	*74*		*50 - 150*	*07/31/18 10:42*	*08/06/18 13:30*	*1*

Client Sample ID: LIN07-SB1-02

Date Collected: 07/20/18 10:25
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-38

Matrix: Solid
Percent Solids: 77.8

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C5 PFNA	74		50 - 150	07/31/18 10:42	08/06/18 13:30	1
18O2 PFHxS	70		50 - 150	07/31/18 10:42	08/06/18 13:30	1
13C4 PFOS	68		50 - 150	07/31/18 10:42	08/06/18 13:30	1

Client Sample ID: LIN07-SB1-02D

Date Collected: 07/20/18 10:25
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-39

Matrix: Solid
Percent Solids: 78.2

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.16	J	0.38	0.098	ug/Kg	☼	07/31/18 10:42	08/06/18 13:38	1
Perfluorooctanoic acid (PFOA)	0.18	J M J	0.38	0.13	ug/Kg	☼	07/31/18 10:42	08/06/18 13:38	1
Perfluorononanoic acid (PFNA)	0.25	U	0.38	0.10	ug/Kg	☼	07/31/18 10:42	08/06/18 13:38	1
Perfluorobutanesulfonic acid (PFBS)	0.13	J	0.50	0.074	ug/Kg	☼	07/31/18 10:42	08/06/18 13:38	1
Perfluorohexanesulfonic acid (PFHxS)	5.0		0.38	0.078	ug/Kg	☼	07/31/18 10:42	08/06/18 13:38	1
Perfluorooctanesulfonic acid (PFOS)	2.6		1.3	0.30	ug/Kg	☼	07/31/18 10:42	08/06/18 13:38	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-PFBS	87		50 - 150	07/31/18 10:42	08/06/18 13:38	1
13C4-PFHpA	95		50 - 150	07/31/18 10:42	08/06/18 13:38	1
13C4 PFOA	95		50 - 150	07/31/18 10:42	08/06/18 13:38	1
13C5 PFNA	97		50 - 150	07/31/18 10:42	08/06/18 13:38	1
18O2 PFHxS	90		50 - 150	07/31/18 10:42	08/06/18 13:38	1
13C4 PFOS	91		50 - 150	07/31/18 10:42	08/06/18 13:38	1

Client Sample ID: LIN07-SB2-01

Date Collected: 07/20/18 10:40
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-40

Matrix: Solid
Percent Solids: 75.2

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.36	J	0.39	0.10	ug/Kg	☼	07/31/18 10:42	08/06/18 13:46	1
Perfluorooctanoic acid (PFOA)	0.46	M =	0.39	0.13	ug/Kg	☼	07/31/18 10:42	08/06/18 13:46	1
Perfluorononanoic acid (PFNA)	0.19	J	0.39	0.11	ug/Kg	☼	07/31/18 10:42	08/06/18 13:46	1
Perfluorobutanesulfonic acid (PFBS)	0.24	U	0.52	0.077	ug/Kg	☼	07/31/18 10:42	08/06/18 13:46	1
Perfluorohexanesulfonic acid (PFHxS)	1.6		0.39	0.081	ug/Kg	☼	07/31/18 10:42	08/06/18 13:46	1
Perfluorooctanesulfonic acid (PFOS)	9.6		1.3	0.31	ug/Kg	☼	07/31/18 10:42	08/06/18 13:46	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-PFBS	51		50 - 150	07/31/18 10:42	08/06/18 13:46	1
13C4-PFHpA	58		50 - 150	07/31/18 10:42	08/06/18 13:46	1
13C4 PFOA	59		50 - 150	07/31/18 10:42	08/06/18 13:46	1
13C5 PFNA	60		50 - 150	07/31/18 10:42	08/06/18 13:46	1
18O2 PFHxS	53		50 - 150	07/31/18 10:42	08/06/18 13:46	1
13C4 PFOS	56		50 - 150	07/31/18 10:42	08/06/18 13:46	1

Client Sample ID: LIN07-SB2-02

Date Collected: 07/20/18 11:00
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-41

Matrix: Solid
Percent Solids: 65.2

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.30	U M U	0.45	0.12	ug/Kg	☼	07/31/18 10:42	08/06/18 14:02	1
Perfluorooctanoic acid (PFOA)	0.30	U M U	0.45	0.15	ug/Kg	☼	07/31/18 10:42	08/06/18 14:02	1
Perfluorononanoic acid (PFNA)	0.30	U M U	0.45	0.12	ug/Kg	☼	07/31/18 10:42	08/06/18 14:02	1
Perfluorobutanesulfonic acid (PFBS)	1.8		0.60	0.089	ug/Kg	☼	07/31/18 10:42	08/06/18 14:02	1
Perfluorohexanesulfonic acid (PFHxS)	0.56	M =	0.45	0.094	ug/Kg	☼	07/31/18 10:42	08/06/18 14:02	1
Perfluorooctanesulfonic acid (PFOS)	0.76	U	1.5	0.36	ug/Kg	☼	07/31/18 10:42	08/06/18 14:02	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*71*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:02*	*1*
13C4-PFHpA	*75*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:02*	*1*
13C4 PFOA	*80*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:02*	*1*
13C5 PFNA	*78*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:02*	*1*
18O2 PFHxS	*76*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:02*	*1*
13C4 PFOS	*76*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:02*	*1*

Client Sample ID: LIN02-SB2-01

Date Collected: 07/20/18 11:25
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-42

Matrix: Solid
Percent Solids: 73.2

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.55		0.40	0.10	ug/Kg	☼	07/31/18 10:42	08/06/18 14:10	1
Perfluorooctanoic acid (PFOA)	0.46	M =	0.40	0.13	ug/Kg	☼	07/31/18 10:42	08/06/18 14:10	1
Perfluorononanoic acid (PFNA)	0.27	U	0.40	0.11	ug/Kg	☼	07/31/18 10:42	08/06/18 14:10	1
Perfluorobutanesulfonic acid (PFBS)	0.24	U	0.54	0.079	ug/Kg	☼	07/31/18 10:42	08/06/18 14:10	1
Perfluorohexanesulfonic acid (PFHxS)	0.47		0.40	0.083	ug/Kg	☼	07/31/18 10:42	08/06/18 14:10	1
Perfluorooctanesulfonic acid (PFOS)	1.9		1.3	0.32	ug/Kg	☼	07/31/18 10:42	08/06/18 14:10	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*73*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:10*	*1*
13C4-PFHpA	*73*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:10*	*1*
13C4 PFOA	*74*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:10*	*1*
13C5 PFNA	*77*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:10*	*1*
18O2 PFHxS	*77*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:10*	*1*
13C4 PFOS	*74*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:10*	*1*

Client Sample ID: LIN02-SB2-02

Date Collected: 07/20/18 11:30
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-43

Matrix: Solid
Percent Solids: 74.5

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.26	U	0.40	0.10	ug/Kg	☼	07/31/18 10:42	08/06/18 14:17	1
Perfluorooctanoic acid (PFOA)	0.26	U M U	0.40	0.13	ug/Kg	☼	07/31/18 10:42	08/06/18 14:17	1
Perfluorononanoic acid (PFNA)	0.26	U	0.40	0.11	ug/Kg	☼	07/31/18 10:42	08/06/18 14:17	1
Perfluorobutanesulfonic acid (PFBS)	0.17	J	0.53	0.078	ug/Kg	☼	07/31/18 10:42	08/06/18 14:17	1
Perfluorohexanesulfonic acid (PFHxS)	0.13	J M J	0.40	0.082	ug/Kg	☼	07/31/18 10:42	08/06/18 14:17	1

Client Sample ID: LIN02-SB2-02

Lab Sample ID: 320-41403-43
Date Collected: 07/20/18 11:30
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 74.5

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	0.66	U	1.3	0.32	ug/Kg	☼	07/31/18 10:42	08/06/18 14:17	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*75*	*M*	*50 - 150*	*07/31/18 10:42*	*08/06/18 14:17*	*1*
13C4-PFHpA	*80*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:17*	*1*
13C4 PFOA	*79*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:17*	*1*
13C5 PFNA	*77*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:17*	*1*
18O2 PFHxS	*77*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:17*	*1*
13C4 PFOS	*76*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:17*	*1*

Client Sample ID: ER-04

Lab Sample ID: 320-41403-44
Date Collected: 07/20/18 11:35
Matrix: Water
Date Received: 07/24/18 09:00

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	1.6	U	2.1	0.65	ng/L		08/01/18 08:32	08/03/18 21:53	1
Perfluorooctanoic acid (PFOA)	1.6	U Q U	2.1	0.57	ng/L		08/01/18 08:32	08/03/18 21:53	1
Perfluorononanoic acid (PFNA)	1.6	U	2.1	0.55	ng/L		08/01/18 08:32	08/03/18 21:53	1
Perfluorobutanesulfonic acid (PFBS)	1.1	U M Q U	2.1	0.49	ng/L		08/01/18 08:32	08/03/18 21:53	1
Perfluorohexanesulfonic acid (PFHxS)	1.1	U M U	2.1	0.40	ng/L		08/01/18 08:32	08/03/18 21:53	1
Perfluorooctanesulfonic acid (PFOS)	3.2	U M Q U	4.3	1.2	ng/L		08/01/18 08:32	08/03/18 21:53	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*60*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:53*	*1*
13C4-PFHpA	*67*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:53*	*1*
13C4 PFOA	*71*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:53*	*1*
13C5 PFNA	*66*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:53*	*1*
18O2 PFHxS	*62*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:53*	*1*
13C4 PFOS	*63*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:53*	*1*

Client Sample ID: LIN08-SB1-01

Lab Sample ID: 320-41403-45
Date Collected: 07/20/18 11:45
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 74.7

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.20	J M J	0.40	0.10	ug/Kg	☼	07/31/18 10:42	08/06/18 14:25	1
Perfluorooctanoic acid (PFOA)	0.69		0.40	0.13	ug/Kg	☼	07/31/18 10:42	08/06/18 14:25	1
Perfluorononanoic acid (PFNA)	0.20	J	0.40	0.11	ug/Kg	☼	07/31/18 10:42	08/06/18 14:25	1
Perfluorobutanesulfonic acid (PFBS)	0.15	J	0.53	0.078	ug/Kg	☼	07/31/18 10:42	08/06/18 14:25	1
Perfluorohexanesulfonic acid (PFHxS)	0.75		0.40	0.082	ug/Kg	☼	07/31/18 10:42	08/06/18 14:25	1
Perfluorooctanesulfonic acid (PFOS)	14		1.3	0.32	ug/Kg	☼	07/31/18 10:42	08/06/18 14:25	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*68*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:25*	*1*
13C4-PFHpA	*74*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:25*	*1*
13C4 PFOA	*74*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:25*	*1*
13C5 PFNA	*77*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:25*	*1*
18O2 PFHxS	*72*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:25*	*1*

Client Sample ID: LIN08-SB1-01

Date Collected: 07/20/18 11:45
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-45
Matrix: Solid
Percent Solids: 74.7

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	72		50 - 150	07/31/18 10:42	08/06/18 14:25	1

Client Sample ID: LIN08-SB1-02

Date Collected: 07/20/18 11:50
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-46
Matrix: Solid
Percent Solids: 80.3

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.25	U	0.37	0.097	ug/Kg	☼	07/31/18 11:42	08/04/18 16:54	1
Perfluorooctanoic acid (PFOA)	0.25	U M U	0.37	0.12	ug/Kg	☼	07/31/18 11:42	08/04/18 16:54	1
Perfluorononanoic acid (PFNA)	0.25	U	0.37	0.10	ug/Kg	☼	07/31/18 11:42	08/04/18 16:54	1
Perfluorobutanesulfonic acid (PFBS)	0.22	U	0.50	0.073	ug/Kg	☼	07/31/18 11:42	08/04/18 16:54	1
Perfluorohexanesulfonic acid (PFHxS)	0.16	J U F06	0.37	0.077	ug/Kg	☼	07/31/18 11:42	08/04/18 16:54	1
Perfluorooctanesulfonic acid (PFOS)	0.62	U M U	1.2	0.30	ug/Kg	☼	07/31/18 11:42	08/04/18 16:54	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-PFBS	65		50 - 150	07/31/18 11:42	08/04/18 16:54	1
13C4-PFHpA	80		50 - 150	07/31/18 11:42	08/04/18 16:54	1
13C4 PFOA	78		50 - 150	07/31/18 11:42	08/04/18 16:54	1
13C5 PFNA	78		50 - 150	07/31/18 11:42	08/04/18 16:54	1
18O2 PFHxS	73		50 - 150	07/31/18 11:42	08/04/18 16:54	1
13C4 PFOS	71		50 - 150	07/31/18 11:42	08/04/18 16:54	1

Client Sample ID: Field Reagent Blank

Date Collected: 07/19/18 09:40
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-47
Matrix: Water

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	1.3	U	1.7	0.53	ng/L		08/01/18 08:32	08/03/18 22:01	1
Perfluorooctanoic acid (PFOA)	1.3	U Q U	1.7	0.47	ng/L		08/01/18 08:32	08/03/18 22:01	1
Perfluorononanoic acid (PFNA)	1.3	U	1.7	0.45	ng/L		08/01/18 08:32	08/03/18 22:01	1
Perfluorobutanesulfonic acid (PFBS)	0.87	U M Q U	1.7	0.40	ng/L		08/01/18 08:32	08/03/18 22:01	1
Perfluorohexanesulfonic acid (PFHxS)	0.87	U M U	1.7	0.33	ng/L		08/01/18 08:32	08/03/18 22:01	1
Perfluorooctanesulfonic acid (PFOS)	2.6	U M Q U	3.5	0.96	ng/L		08/01/18 08:32	08/03/18 22:01	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-PFBS	83		50 - 150	08/01/18 08:32	08/03/18 22:01	1
13C4-PFHpA	83		50 - 150	08/01/18 08:32	08/03/18 22:01	1
13C4 PFOA	90		50 - 150	08/01/18 08:32	08/03/18 22:01	1
13C5 PFNA	96		50 - 150	08/01/18 08:32	08/03/18 22:01	1
18O2 PFHxS	83		50 - 150	08/01/18 08:32	08/03/18 22:01	1
13C4 PFOS	84		50 - 150	08/01/18 08:32	08/03/18 22:01	1

Client Sample ID: MW-LIN08-01-01

Date Collected: 07/25/18 07:50
Date Received: 07/27/18 09:10

Lab Sample ID: 320-41568-1
Matrix: Water

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	270		1.8	0.54	ng/L		08/01/18 11:07	08/03/18 23:38	1
Perfluorooctanoic acid (PFOA)	380	E *	1.8	0.48	ng/L		08/01/18 11:07	08/03/18 23:38	1
Perfluorononanoic acid (PFNA)	3.2	M =	1.8	0.46	ng/L		08/01/18 11:07	08/03/18 23:38	1
Perfluorobutanesulfonic acid (PFBS)	750	E *	1.8	0.41	ng/L		08/01/18 11:07	08/03/18 23:38	1
Perfluorohexanesulfonic acid (PFHxS)	2600	E *	1.8	0.34	ng/L		08/01/18 11:07	08/03/18 23:38	1
Perfluorooctanesulfonic acid (PFOS)	780	E *	3.5	0.98	ng/L		08/01/18 11:07	08/03/18 23:38	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*88*		*50 - 150*	*08/01/18 11:07*	*08/03/18 23:38*	*1*
13C4-PFHpA	*61*		*50 - 150*	*08/01/18 11:07*	*08/03/18 23:38*	*1*
13C4 PFOA	*91*		*50 - 150*	*08/01/18 11:07*	*08/03/18 23:38*	*1*
13C5 PFNA	*101*		*50 - 150*	*08/01/18 11:07*	*08/03/18 23:38*	*1*
18O2 PFHxS	*64*		*50 - 150*	*08/01/18 11:07*	*08/03/18 23:38*	*1*
13C4 PFOS	*86*		*50 - 150*	*08/01/18 11:07*	*08/03/18 23:38*	*1*

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	280	D *	35	11	ng/L		08/01/18 11:07	08/09/18 05:55	20
Perfluorooctanoic acid (PFOA)	410	D J K01	35	9.6	ng/L		08/01/18 11:07	08/09/18 05:55	20
Perfluorononanoic acid (PFNA)	27	U M *	35	9.2	ng/L		08/01/18 11:07	08/09/18 05:55	20
Perfluorobutanesulfonic acid (PFBS)	1100	D J K01	35	8.2	ng/L		08/01/18 11:07	08/09/18 05:55	20
Perfluorohexanesulfonic acid (PFHxS)	3800	D J K01	35	6.7	ng/L		08/01/18 11:07	08/09/18 05:55	20
Perfluorooctanesulfonic acid (PFOS)	880	D J K01	71	20	ng/L		08/01/18 11:07	08/09/18 05:55	20

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*69*		*50 - 150*	*08/01/18 11:07*	*08/09/18 05:55*	*20*
13C4-PFHpA	*74*		*50 - 150*	*08/01/18 11:07*	*08/09/18 05:55*	*20*
13C4 PFOA	*90*		*50 - 150*	*08/01/18 11:07*	*08/09/18 05:55*	*20*
13C5 PFNA	*94*		*50 - 150*	*08/01/18 11:07*	*08/09/18 05:55*	*20*
18O2 PFHxS	*68*		*50 - 150*	*08/01/18 11:07*	*08/09/18 05:55*	*20*
13C4 PFOS	*67*		*50 - 150*	*08/01/18 11:07*	*08/09/18 05:55*	*20*

Client Sample ID: LIN13-SW1-01

Date Collected: 07/25/18 08:05
Date Received: 07/27/18 09:10

Lab Sample ID: 320-41568-2
Matrix: Water

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	940	D J K01	16	5.0	ng/L		08/01/18 11:07	08/09/18 06:10	10
Perfluorooctanoic acid (PFOA)	1800	D J K01	16	4.4	ng/L		08/01/18 11:07	08/09/18 06:10	10
Perfluorononanoic acid (PFNA)	31	D M J K01	16	4.3	ng/L		08/01/18 11:07	08/09/18 06:10	10
Perfluorobutanesulfonic acid (PFBS)	2200	D J K01	16	3.8	ng/L		08/01/18 11:07	08/09/18 06:10	10
Perfluorohexanesulfonic acid (PFHxS)	10000	D E *	16	3.1	ng/L		08/01/18 11:07	08/09/18 06:10	10
Perfluorooctanesulfonic acid (PFOS)	20000	D E *	33	9.1	ng/L		08/01/18 11:07	08/09/18 06:10	10

Client Sample ID: LIN13-SW1-01

Date Collected: 07/25/18 08:05
Date Received: 07/27/18 09:10

Lab Sample ID: 320-41568-2

Matrix: Water

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-PFBS	106		50 - 150	08/01/18 11:07	08/09/18 06:10	10
13C4-PFHpA	69		50 - 150	08/01/18 11:07	08/09/18 06:10	10
13C4 PFOA	87		50 - 150	08/01/18 11:07	08/09/18 06:10	10
13C5 PFNA	73		50 - 150	08/01/18 11:07	08/09/18 06:10	10
18O2 PFHxS	76		50 - 150	08/01/18 11:07	08/09/18 06:10	10
13C4 PFOS	65		50 - 150	08/01/18 11:07	08/09/18 06:10	10

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	820	D *	160	50	ng/L		08/01/18 11:07	08/09/18 06:03	100
Perfluorooctanoic acid (PFOA)	2100	D *	160	44	ng/L		08/01/18 11:07	08/09/18 06:03	100
Perfluorononanoic acid (PFNA)	120	U M *	160	43	ng/L		08/01/18 11:07	08/09/18 06:03	100
Perfluorobutanesulfonic acid (PFBS)	3700	D *	160	38	ng/L		08/01/18 11:07	08/09/18 06:03	100
Perfluorohexanesulfonic acid (PFHxS)	17000	D J K01	160	31	ng/L		08/01/18 11:07	08/09/18 06:03	100
Perfluorooctanesulfonic acid (PFOS)	33000	D E J N03 K01	330	91	ng/L		08/01/18 11:07	08/09/18 06:03	100

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-PFBS	72	M	50 - 150	08/01/18 11:07	08/09/18 06:03	100
13C4-PFHpA	87		50 - 150	08/01/18 11:07	08/09/18 06:03	100
13C4 PFOA	86		50 - 150	08/01/18 11:07	08/09/18 06:03	100
13C5 PFNA	84		50 - 150	08/01/18 11:07	08/09/18 06:03	100
18O2 PFHxS	71		50 - 150	08/01/18 11:07	08/09/18 06:03	100
13C4 PFOS	64		50 - 150	08/01/18 11:07	08/09/18 06:03	100

Client Sample ID: LIN13-SD1-01

Date Collected: 07/25/18 08:10
Date Received: 07/27/18 09:10

Lab Sample ID: 320-41568-3

Matrix: Solid
Percent Solids: 65.1

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	1.3		0.46	0.12	ug/Kg	☼	08/01/18 10:13	08/05/18 12:34	1
Perfluorooctanoic acid (PFOA)	5.0		0.46	0.15	ug/Kg	☼	08/01/18 10:13	08/05/18 12:34	1
Perfluorononanoic acid (PFNA)	0.39	J	0.46	0.12	ug/Kg	☼	08/01/18 10:13	08/05/18 12:34	1
Perfluorobutanesulfonic acid (PFBS)	3.4		0.61	0.090	ug/Kg	☼	08/01/18 10:13	08/05/18 12:34	1
Perfluorohexanesulfonic acid (PFHxS)	35	E *	0.46	0.095	ug/Kg	☼	08/01/18 10:13	08/05/18 12:34	1
Perfluorooctanesulfonic acid (PFOS)	520	E M *	1.5	0.37	ug/Kg	☼	08/01/18 10:13	08/05/18 12:34	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-PFBS	93		50 - 150	08/01/18 10:13	08/05/18 12:34	1
13C4-PFHpA	99		50 - 150	08/01/18 10:13	08/05/18 12:34	1
13C4 PFOA	82		50 - 150	08/01/18 10:13	08/05/18 12:34	1
13C5 PFNA	55		50 - 150	08/01/18 10:13	08/05/18 12:34	1
18O2 PFHxS	96		50 - 150	08/01/18 10:13	08/05/18 12:34	1
13C4 PFOS	61		50 - 150	08/01/18 10:13	08/05/18 12:34	1

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	15	U *	23	6.0	ug/Kg	☼	08/01/18 10:13	08/07/18 18:00	50

Client Sample ID: LIN13-SD1-01

Date Collected: 07/25/18 08:10
Date Received: 07/27/18 09:10

Lab Sample ID: 320-41568-3

Matrix: Solid
Percent Solids: 65.1

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 - DL (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	15	U M *	23	7.6	ug/Kg	☼	08/01/18 10:13	08/07/18 18:00	50
Perfluorononanoic acid (PFNA)	15	U *	23	6.2	ug/Kg	☼	08/01/18 10:13	08/07/18 18:00	50
Perfluorobutanesulfonic acid (PFBS)	14	U *	31	4.5	ug/Kg	☼	08/01/18 10:13	08/07/18 18:00	50
Perfluorohexanesulfonic acid (PFHxS)	37	D J K01	23	4.7	ug/Kg	☼	08/01/18 10:13	08/07/18 18:00	50
Perfluorooctanesulfonic acid (PFOS)	850	D J K01	76	18	ug/Kg	☼	08/01/18 10:13	08/07/18 18:00	50

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*100*	*M*	*50 - 150*	*08/01/18 10:13*	*08/07/18 18:00*	*50*
13C4-PFHpA	*83*		*50 - 150*	*08/01/18 10:13*	*08/07/18 18:00*	*50*
13C4 PFOA	*79*		*50 - 150*	*08/01/18 10:13*	*08/07/18 18:00*	*50*
13C5 PFNA	*81*		*50 - 150*	*08/01/18 10:13*	*08/07/18 18:00*	*50*
18O2 PFHxS	*76*		*50 - 150*	*08/01/18 10:13*	*08/07/18 18:00*	*50*
13C4 PFOS	*72*		*50 - 150*	*08/01/18 10:13*	*08/07/18 18:00*	*50*

Client Sample ID: MW-LIN07-01-01

Date Collected: 07/25/18 09:20
Date Received: 07/27/18 09:10

Lab Sample ID: 320-41568-4

Matrix: Water

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	80		1.8	0.56	ng/L		08/01/18 11:07	08/09/18 06:33	1
Perfluorooctanoic acid (PFOA)	140		1.8	0.49	ng/L		08/01/18 11:07	08/09/18 06:33	1
Perfluorononanoic acid (PFNA)	6.0	M =	1.8	0.47	ng/L		08/01/18 11:07	08/09/18 06:33	1
Perfluorobutanesulfonic acid (PFBS)	260		1.8	0.42	ng/L		08/01/18 11:07	08/09/18 06:33	1
Perfluorohexanesulfonic acid (PFHxS)	900	E *	1.8	0.35	ng/L		08/01/18 11:07	08/09/18 06:33	1
Perfluorooctanesulfonic acid (PFOS)	620	E *	3.7	1.0	ng/L		08/01/18 11:07	08/09/18 06:33	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*63*		*50 - 150*	*08/01/18 11:07*	*08/09/18 06:33*	*1*
13C4-PFHpA	*69*		*50 - 150*	*08/01/18 11:07*	*08/09/18 06:33*	*1*
13C4 PFOA	*83*		*50 - 150*	*08/01/18 11:07*	*08/09/18 06:33*	*1*
13C5 PFNA	*84*		*50 - 150*	*08/01/18 11:07*	*08/09/18 06:33*	*1*
18O2 PFHxS	*67*		*50 - 150*	*08/01/18 11:07*	*08/09/18 06:33*	*1*
13C4 PFOS	*65*		*50 - 150*	*08/01/18 11:07*	*08/09/18 06:33*	*1*

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	84	D *	18	5.6	ng/L		08/01/18 11:07	08/09/18 06:25	10
Perfluorooctanoic acid (PFOA)	150	D *	18	4.9	ng/L		08/01/18 11:07	08/09/18 06:25	10
Perfluorononanoic acid (PFNA)	5.6	J D M *	18	4.7	ng/L		08/01/18 11:07	08/09/18 06:25	10
Perfluorobutanesulfonic acid (PFBS)	260	D *	18	4.2	ng/L		08/01/18 11:07	08/09/18 06:25	10
Perfluorohexanesulfonic acid (PFHxS)	1200	D J K01	18	3.5	ng/L		08/01/18 11:07	08/09/18 06:25	10
Perfluorooctanesulfonic acid (PFOS)	640	D J K01	37	10	ng/L		08/01/18 11:07	08/09/18 06:25	10

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*70*		*50 - 150*	*08/01/18 11:07*	*08/09/18 06:25*	*10*

Client Sample ID: MW-LIN07-01-01

Lab Sample ID: 320-41568-4

Date Collected: 07/25/18 09:20
Matrix: Water
Date Received: 07/27/18 09:10

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 - DL (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4-PFHpA	77		50 - 150	08/01/18 11:07	08/09/18 06:25	10
13C4 PFOA	82		50 - 150	08/01/18 11:07	08/09/18 06:25	10
13C5 PFNA	86		50 - 150	08/01/18 11:07	08/09/18 06:25	10
18O2 PFHxS	67		50 - 150	08/01/18 11:07	08/09/18 06:25	10
13C4 PFOS	65		50 - 150	08/01/18 11:07	08/09/18 06:25	10

Client Sample ID: LIN14-SW1-01

Lab Sample ID: 320-41568-5

Date Collected: 07/25/18 09:25
Matrix: Water
Date Received: 07/27/18 09:10

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	60		1.8	0.54	ng/L		08/01/18 11:07	08/04/18 00:01	1
Perfluorooctanoic acid (PFOA)	90		1.8	0.48	ng/L		08/01/18 11:07	08/04/18 00:01	1
Perfluorononanoic acid (PFNA)	4.0		1.8	0.46	ng/L		08/01/18 11:07	08/04/18 00:01	1
Perfluorobutanesulfonic acid (PFBS)	180		1.8	0.41	ng/L		08/01/18 11:07	08/04/18 00:01	1
Perfluorohexanesulfonic acid (PFHxS)	800	E *	1.8	0.34	ng/L		08/01/18 11:07	08/04/18 00:01	1
Perfluorooctanesulfonic acid (PFOS)	950	E *	3.5	0.98	ng/L		08/01/18 11:07	08/04/18 00:01	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-PFBS	72		50 - 150	08/01/18 11:07	08/04/18 00:01	1
13C4-PFHpA	74		50 - 150	08/01/18 11:07	08/04/18 00:01	1
13C4 PFOA	78		50 - 150	08/01/18 11:07	08/04/18 00:01	1
13C5 PFNA	75		50 - 150	08/01/18 11:07	08/04/18 00:01	1
18O2 PFHxS	68		50 - 150	08/01/18 11:07	08/04/18 00:01	1
13C4 PFOS	65		50 - 150	08/01/18 11:07	08/04/18 00:01	1

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	64	D *	18	5.4	ng/L		08/01/18 11:07	08/09/18 06:40	10
Perfluorooctanoic acid (PFOA)	85	D *	18	4.8	ng/L		08/01/18 11:07	08/09/18 06:40	10
Perfluorononanoic acid (PFNA)	13	U M *	18	4.6	ng/L		08/01/18 11:07	08/09/18 06:40	10
Perfluorobutanesulfonic acid (PFBS)	190	D *	18	4.1	ng/L		08/01/18 11:07	08/09/18 06:40	10
Perfluorohexanesulfonic acid (PFHxS)	940	D J K01	18	3.4	ng/L		08/01/18 11:07	08/09/18 06:40	10
Perfluorooctanesulfonic acid (PFOS)	990	D J K01	35	9.8	ng/L		08/01/18 11:07	08/09/18 06:40	10

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-PFBS	58		50 - 150	08/01/18 11:07	08/09/18 06:40	10
13C4-PFHpA	69		50 - 150	08/01/18 11:07	08/09/18 06:40	10
13C4 PFOA	82		50 - 150	08/01/18 11:07	08/09/18 06:40	10
13C5 PFNA	79		50 - 150	08/01/18 11:07	08/09/18 06:40	10
18O2 PFHxS	60		50 - 150	08/01/18 11:07	08/09/18 06:40	10
13C4 PFOS	61		50 - 150	08/01/18 11:07	08/09/18 06:40	10

Client Sample ID: LIN14-SD1-01

Date Collected: 07/25/18 09:30
Date Received: 07/27/18 09:10

Lab Sample ID: 320-41568-6

Matrix: Solid
Percent Solids: 61.4

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.20	J M J	0.49	0.13	ug/Kg	☼	08/01/18 10:13	08/05/18 12:42	1
Perfluorooctanoic acid (PFOA)	0.46	J M J	0.49	0.16	ug/Kg	☼	08/01/18 10:13	08/05/18 12:42	1
Perfluorononanoic acid (PFNA)	0.22	J J	0.49	0.13	ug/Kg	☼	08/01/18 10:13	08/05/18 12:42	1
Perfluorobutanesulfonic acid (PFBS)	0.21	J M J	0.65	0.095	ug/Kg	☼	08/01/18 10:13	08/05/18 12:42	1
Perfluorohexanesulfonic acid (PFHxS)	2.6		0.49	0.10	ug/Kg	☼	08/01/18 10:13	08/05/18 12:42	1
Perfluorooctanesulfonic acid (PFOS)	22	M =	1.6	0.39	ug/Kg	☼	08/01/18 10:13	08/05/18 12:42	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*104*		*50 - 150*	*08/01/18 10:13*	*08/05/18 12:42*	*1*
13C4-PFHpA	*115*		*50 - 150*	*08/01/18 10:13*	*08/05/18 12:42*	*1*
13C4 PFOA	*83*		*50 - 150*	*08/01/18 10:13*	*08/05/18 12:42*	*1*
13C5 PFNA	*107*		*50 - 150*	*08/01/18 10:13*	*08/05/18 12:42*	*1*
18O2 PFHxS	*114*		*50 - 150*	*08/01/18 10:13*	*08/05/18 12:42*	*1*
13C4 PFOS	*106*		*50 - 150*	*08/01/18 10:13*	*08/05/18 12:42*	*1*

Client Sample ID: MW-LIN03-01-01

Date Collected: 07/25/18 10:35
Date Received: 07/27/18 09:10

Lab Sample ID: 320-41568-7

Matrix: Water

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	140		1.7	0.52	ng/L		08/01/18 11:07	08/04/18 00:08	1
Perfluorooctanoic acid (PFOA)	180		1.7	0.46	ng/L		08/01/18 11:07	08/04/18 00:08	1
Perfluorononanoic acid (PFNA)	8.7		1.7	0.44	ng/L		08/01/18 11:07	08/04/18 00:08	1
Perfluorobutanesulfonic acid (PFBS)	230		1.7	0.39	ng/L		08/01/18 11:07	08/04/18 00:08	1
Perfluorohexanesulfonic acid (PFHxS)	1400	E *	1.7	0.32	ng/L		08/01/18 11:07	08/04/18 00:08	1
Perfluorooctanesulfonic acid (PFOS)	2800	E *	3.4	0.94	ng/L		08/01/18 11:07	08/04/18 00:08	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*97*		*50 - 150*	*08/01/18 11:07*	*08/04/18 00:08*	*1*
13C4-PFHpA	*77*		*50 - 150*	*08/01/18 11:07*	*08/04/18 00:08*	*1*
13C4 PFOA	*87*		*50 - 150*	*08/01/18 11:07*	*08/04/18 00:08*	*1*
13C5 PFNA	*72*		*50 - 150*	*08/01/18 11:07*	*08/04/18 00:08*	*1*
18O2 PFHxS	*80*		*50 - 150*	*08/01/18 11:07*	*08/04/18 00:08*	*1*
13C4 PFOS	*72*		*50 - 150*	*08/01/18 11:07*	*08/04/18 00:08*	*1*

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	150	D *	34	10	ng/L		08/01/18 11:07	08/09/18 06:48	20
Perfluorooctanoic acid (PFOA)	190	D *	34	9.2	ng/L		08/01/18 11:07	08/09/18 06:48	20
Perfluorononanoic acid (PFNA)	26	U M *	34	8.9	ng/L		08/01/18 11:07	08/09/18 06:48	20
Perfluorobutanesulfonic acid (PFBS)	240	D *	34	7.8	ng/L		08/01/18 11:07	08/09/18 06:48	20
Perfluorohexanesulfonic acid (PFHxS)	2100	D J K01	34	6.5	ng/L		08/01/18 11:07	08/09/18 06:48	20
Perfluorooctanesulfonic acid (PFOS)	4200	D J K01	68	19	ng/L		08/01/18 11:07	08/09/18 06:48	20

Client Sample ID: MW-LIN03-01-01

Date Collected: 07/25/18 10:35
Date Received: 07/27/18 09:10

Lab Sample ID: 320-41568-7
Matrix: Water

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-PFBS	62		50 - 150	08/01/18 11:07	08/09/18 06:48	20
13C4-PFHpA	69		50 - 150	08/01/18 11:07	08/09/18 06:48	20
13C4 PFOA	80		50 - 150	08/01/18 11:07	08/09/18 06:48	20
13C5 PFNA	80		50 - 150	08/01/18 11:07	08/09/18 06:48	20
18O2 PFHxS	58		50 - 150	08/01/18 11:07	08/09/18 06:48	20
13C4 PFOS	56		50 - 150	08/01/18 11:07	08/09/18 06:48	20

Client Sample ID: MW-LIN03-01-01D

Date Collected: 07/25/18 10:35
Date Received: 07/27/18 09:10

Lab Sample ID: 320-41568-8
Matrix: Water

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	150		1.8	0.54	ng/L		08/01/18 11:07	08/04/18 00:16	1
Perfluorooctanoic acid (PFOA)	190		1.8	0.47	ng/L		08/01/18 11:07	08/04/18 00:16	1
Perfluorononanoic acid (PFNA)	9.3		1.8	0.46	ng/L		08/01/18 11:07	08/04/18 00:16	1
Perfluorobutanesulfonic acid (PFBS)	240		1.8	0.40	ng/L		08/01/18 11:07	08/04/18 00:16	1
Perfluorohexanesulfonic acid (PFHxS)	1500	E *	1.8	0.33	ng/L		08/01/18 11:07	08/04/18 00:16	1
Perfluorooctanesulfonic acid (PFOS)	2800	E *	3.5	0.97	ng/L		08/01/18 11:07	08/04/18 00:16	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-PFBS	99		50 - 150	08/01/18 11:07	08/04/18 00:16	1
13C4-PFHpA	80		50 - 150	08/01/18 11:07	08/04/18 00:16	1
13C4 PFOA	88		50 - 150	08/01/18 11:07	08/04/18 00:16	1
13C5 PFNA	75		50 - 150	08/01/18 11:07	08/04/18 00:16	1
18O2 PFHxS	85		50 - 150	08/01/18 11:07	08/04/18 00:16	1
13C4 PFOS	74		50 - 150	08/01/18 11:07	08/04/18 00:16	1

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	140	D *	35	11	ng/L		08/01/18 11:07	08/09/18 06:55	20
Perfluorooctanoic acid (PFOA)	190	D *	35	9.5	ng/L		08/01/18 11:07	08/09/18 06:55	20
Perfluorononanoic acid (PFNA)	26	U *	35	9.1	ng/L		08/01/18 11:07	08/09/18 06:55	20
Perfluorobutanesulfonic acid (PFBS)	280	D *	35	8.1	ng/L		08/01/18 11:07	08/09/18 06:55	20
Perfluorohexanesulfonic acid (PFHxS)	2000	D J K01	35	6.7	ng/L		08/01/18 11:07	08/09/18 06:55	20
Perfluorooctanesulfonic acid (PFOS)	3800	D J K01	70	19	ng/L		08/01/18 11:07	08/09/18 06:55	20

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-PFBS	62		50 - 150	08/01/18 11:07	08/09/18 06:55	20
13C4-PFHpA	83		50 - 150	08/01/18 11:07	08/09/18 06:55	20
13C4 PFOA	91		50 - 150	08/01/18 11:07	08/09/18 06:55	20
13C5 PFNA	95		50 - 150	08/01/18 11:07	08/09/18 06:55	20
18O2 PFHxS	71		50 - 150	08/01/18 11:07	08/09/18 06:55	20
13C4 PFOS	70		50 - 150	08/01/18 11:07	08/09/18 06:55	20

Client Sample ID: MW-LIN01-01-01

Lab Sample ID: 320-41568-9

Date Collected: 07/25/18 11:20
Matrix: Water
Date Received: 07/27/18 09:10

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	12		1.7	0.52	ng/L		08/01/18 11:07	08/04/18 00:23	1
Perfluorooctanoic acid (PFOA)	36		1.7	0.46	ng/L		08/01/18 11:07	08/04/18 00:23	1
Perfluorononanoic acid (PFNA)	1.0	J	1.7	0.44	ng/L		08/01/18 11:07	08/04/18 00:23	1
Perfluorobutanesulfonic acid (PFBS)	14		1.7	0.39	ng/L		08/01/18 11:07	08/04/18 00:23	1
Perfluorohexanesulfonic acid (PFHxS)	87		1.7	0.32	ng/L		08/01/18 11:07	08/04/18 00:23	1
Perfluorooctanesulfonic acid (PFOS)	44	U F03	3.4	0.93	ng/L		08/01/18 11:07	08/04/18 00:23	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*63*		*50 - 150*	*08/01/18 11:07*	*08/04/18 00:23*	*1*
13C4-PFHpA	*68*		*50 - 150*	*08/01/18 11:07*	*08/04/18 00:23*	*1*
13C4 PFOA	*72*		*50 - 150*	*08/01/18 11:07*	*08/04/18 00:23*	*1*
13C5 PFNA	*75*		*50 - 150*	*08/01/18 11:07*	*08/04/18 00:23*	*1*
18O2 PFHxS	*67*		*50 - 150*	*08/01/18 11:07*	*08/04/18 00:23*	*1*
13C4 PFOS	*65*		*50 - 150*	*08/01/18 11:07*	*08/04/18 00:23*	*1*

Client Sample ID: LIN11-SW1-01

Lab Sample ID: 320-41568-10

Date Collected: 07/25/18 12:05
Matrix: Water
Date Received: 07/27/18 09:10

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	11		1.9	0.59	ng/L		08/01/18 11:07	08/04/18 00:38	1
Perfluorooctanoic acid (PFOA)	10	M =	1.9	0.52	ng/L		08/01/18 11:07	08/04/18 00:38	1
Perfluorononanoic acid (PFNA)	1.8	J M J	1.9	0.50	ng/L		08/01/18 11:07	08/04/18 00:38	1
Perfluorobutanesulfonic acid (PFBS)	8.0	M =	1.9	0.44	ng/L		08/01/18 11:07	08/04/18 00:38	1
Perfluorohexanesulfonic acid (PFHxS)	44		1.9	0.37	ng/L		08/01/18 11:07	08/04/18 00:38	1
Perfluorooctanesulfonic acid (PFOS)	120		3.9	1.1	ng/L		08/01/18 11:07	08/04/18 00:38	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*64*		*50 - 150*	*08/01/18 11:07*	*08/04/18 00:38*	*1*
13C4-PFHpA	*72*		*50 - 150*	*08/01/18 11:07*	*08/04/18 00:38*	*1*
13C4 PFOA	*77*		*50 - 150*	*08/01/18 11:07*	*08/04/18 00:38*	*1*
13C5 PFNA	*81*		*50 - 150*	*08/01/18 11:07*	*08/04/18 00:38*	*1*
18O2 PFHxS	*70*		*50 - 150*	*08/01/18 11:07*	*08/04/18 00:38*	*1*
13C4 PFOS	*73*		*50 - 150*	*08/01/18 11:07*	*08/04/18 00:38*	*1*

Client Sample ID: LIN11-SD1-01

Lab Sample ID: 320-41568-11

Date Collected: 07/25/18 12:10
Matrix: Solid
Date Received: 07/27/18 09:10
Percent Solids: 70.5

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.28	U M U	0.42	0.11	ug/Kg	☼	08/01/18 10:13	08/05/18 12:50	1
Perfluorooctanoic acid (PFOA)	0.59		0.42	0.14	ug/Kg	☼	08/01/18 10:13	08/05/18 12:50	1
Perfluorononanoic acid (PFNA)	0.28	U M U	0.42	0.11	ug/Kg	☼	08/01/18 10:13	08/05/18 12:50	1
Perfluorobutanesulfonic acid (PFBS)	0.14	J M J	0.56	0.082	ug/Kg	☼	08/01/18 10:13	08/05/18 12:50	1

Client Sample ID: LIN11-SD1-01

Date Collected: 07/25/18 12:10
Date Received: 07/27/18 09:10

Lab Sample ID: 320-41568-11

Matrix: Solid
Percent Solids: 70.5

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanesulfonic acid (PFHxS)	1.4		0.42	0.086	ug/Kg	☼	08/01/18 10:13	08/05/18 12:50	1
Perfluorooctanesulfonic acid (PFOS)	11	M =	1.4	0.33	ug/Kg	☼	08/01/18 10:13	08/05/18 12:50	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*88*		*50 - 150*	*08/01/18 10:13*	*08/05/18 12:50*	*1*
13C4-PFHpA	*101*		*50 - 150*	*08/01/18 10:13*	*08/05/18 12:50*	*1*
13C4 PFOA	*84*		*50 - 150*	*08/01/18 10:13*	*08/05/18 12:50*	*1*
13C5 PFNA	*98*		*50 - 150*	*08/01/18 10:13*	*08/05/18 12:50*	*1*
18O2 PFHxS	*97*		*50 - 150*	*08/01/18 10:13*	*08/05/18 12:50*	*1*
13C4 PFOS	*91*		*50 - 150*	*08/01/18 10:13*	*08/05/18 12:50*	*1*

Client Sample ID: TU015-MW005-PRL02-01

Date Collected: 07/25/18 13:10
Date Received: 07/27/18 09:10

Lab Sample ID: 320-41568-12

Matrix: Water

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	160		1.7	0.53	ng/L		08/01/18 11:07	08/04/18 00:46	1
Perfluorooctanoic acid (PFOA)	230		1.7	0.47	ng/L		08/01/18 11:07	08/04/18 00:46	1
Perfluorononanoic acid (PFNA)	5.3	M =	1.7	0.45	ng/L		08/01/18 11:07	08/04/18 00:46	1
Perfluorobutanesulfonic acid (PFBS)	350	E *	1.7	0.40	ng/L		08/01/18 11:07	08/04/18 00:46	1
Perfluorohexanesulfonic acid (PFHxS)	1600	E *	1.7	0.33	ng/L		08/01/18 11:07	08/04/18 00:46	1
Perfluorooctanesulfonic acid (PFOS)	1800	E *	3.5	0.95	ng/L		08/01/18 11:07	08/04/18 00:46	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*91*		*50 - 150*	*08/01/18 11:07*	*08/04/18 00:46*	*1*
13C4-PFHpA	*75*		*50 - 150*	*08/01/18 11:07*	*08/04/18 00:46*	*1*
13C4 PFOA	*85*		*50 - 150*	*08/01/18 11:07*	*08/04/18 00:46*	*1*
13C5 PFNA	*83*		*50 - 150*	*08/01/18 11:07*	*08/04/18 00:46*	*1*
18O2 PFHxS	*83*		*50 - 150*	*08/01/18 11:07*	*08/04/18 00:46*	*1*
13C4 PFOS	*83*		*50 - 150*	*08/01/18 11:07*	*08/04/18 00:46*	*1*

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	140	D *	35	11	ng/L		08/01/18 11:07	08/09/18 07:18	20
Perfluorooctanoic acid (PFOA)	220	D *	35	9.3	ng/L		08/01/18 11:07	08/09/18 07:18	20
Perfluorononanoic acid (PFNA)	26	U M *	35	9.0	ng/L		08/01/18 11:07	08/09/18 07:18	20
Perfluorobutanesulfonic acid (PFBS)	340	D J K01	35	8.0	ng/L		08/01/18 11:07	08/09/18 07:18	20
Perfluorohexanesulfonic acid (PFHxS)	2200	D J K01	35	6.6	ng/L		08/01/18 11:07	08/09/18 07:18	20
Perfluorooctanesulfonic acid (PFOS)	2400	D J K01	69	19	ng/L		08/01/18 11:07	08/09/18 07:18	20

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*78*	*M*	*50 - 150*	*08/01/18 11:07*	*08/09/18 07:18*	*20*
13C4-PFHpA	*87*		*50 - 150*	*08/01/18 11:07*	*08/09/18 07:18*	*20*
13C4 PFOA	*92*		*50 - 150*	*08/01/18 11:07*	*08/09/18 07:18*	*20*
13C5 PFNA	*88*		*50 - 150*	*08/01/18 11:07*	*08/09/18 07:18*	*20*

Client Sample ID: TU015-MW005-PRL02-01

Lab Sample ID: 320-41568-12

Date Collected: 07/25/18 13:10
Matrix: Water
Date Received: 07/27/18 09:10

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 - DL (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	72		50 - 150	08/01/18 11:07	08/09/18 07:18	20
13C4 PFOS	65		50 - 150	08/01/18 11:07	08/09/18 07:18	20

Client Sample ID: MW-LIN05-01-01

Lab Sample ID: 320-41568-13

Date Collected: 07/25/18 13:55
Matrix: Water
Date Received: 07/27/18 09:10

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	110	J1 J H02	1.8	0.55	ng/L		08/01/18 11:07	08/04/18 00:53	1
Perfluorooctanoic acid (PFOA)	130		1.8	0.49	ng/L		08/01/18 11:07	08/04/18 00:53	1
Perfluorononanoic acid (PFNA)	6.4		1.8	0.47	ng/L		08/01/18 11:07	08/04/18 00:53	1
Perfluorobutanesulfonic acid (PFBS)	190	J1 =	1.8	0.42	ng/L		08/01/18 11:07	08/04/18 00:53	1
Perfluorohexanesulfonic acid (PFHxS)	1100	E J1 *	1.8	0.34	ng/L		08/01/18 11:07	08/04/18 00:53	1
Perfluorooctanesulfonic acid (PFOS)	1200	J1 E *	3.6	1.0	ng/L		08/01/18 11:07	08/04/18 00:53	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-PFBS	79		50 - 150	08/01/18 11:07	08/04/18 00:53	1
13C4-PFHpA	73		50 - 150	08/01/18 11:07	08/04/18 00:53	1
13C4 PFOA	87		50 - 150	08/01/18 11:07	08/04/18 00:53	1
13C5 PFNA	82		50 - 150	08/01/18 11:07	08/04/18 00:53	1
18O2 PFHxS	76		50 - 150	08/01/18 11:07	08/04/18 00:53	1
13C4 PFOS	79		50 - 150	08/01/18 11:07	08/04/18 00:53	1

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	110	D J1 *	18	5.5	ng/L		08/01/18 11:07	08/09/18 07:25	10
Perfluorooctanoic acid (PFOA)	120	D J1 *	18	4.9	ng/L		08/01/18 11:07	08/09/18 07:25	10
Perfluorononanoic acid (PFNA)	6.0	J D M *	18	4.7	ng/L		08/01/18 11:07	08/09/18 07:25	10
Perfluorobutanesulfonic acid (PFBS)	190	D J1 *	18	4.2	ng/L		08/01/18 11:07	08/09/18 07:25	10
Perfluorohexanesulfonic acid (PFHxS)	1500	D J1 J K01	18	3.4	ng/L		08/01/18 11:07	08/09/18 07:25	10
Perfluorooctanesulfonic acid (PFOS)	1500	D J1 J K01	36	10	ng/L		08/01/18 11:07	08/09/18 07:25	10

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-PFBS	67		50 - 150	08/01/18 11:07	08/09/18 07:25	10
13C4-PFHpA	80		50 - 150	08/01/18 11:07	08/09/18 07:25	10
13C4 PFOA	88		50 - 150	08/01/18 11:07	08/09/18 07:25	10
13C5 PFNA	91		50 - 150	08/01/18 11:07	08/09/18 07:25	10
18O2 PFHxS	65		50 - 150	08/01/18 11:07	08/09/18 07:25	10
13C4 PFOS	66		50 - 150	08/01/18 11:07	08/09/18 07:25	10

Client Sample ID: MW-LIN09-01-01

Lab Sample ID: 320-41568-14

Date Collected: 07/25/18 14:45

Matrix: Water

Date Received: 07/27/18 09:10

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	210		1.6	0.50	ng/L		08/01/18 11:07	08/04/18 01:16	1
Perfluorooctanoic acid (PFOA)	40		1.6	0.44	ng/L		08/01/18 11:07	08/04/18 01:16	1
Perfluorononanoic acid (PFNA)	0.61	J	1.6	0.43	ng/L		08/01/18 11:07	08/04/18 01:16	1
Perfluorobutanesulfonic acid (PFBS)	730	E *	1.6	0.38	ng/L		08/01/18 11:07	08/04/18 01:16	1
Perfluorohexanesulfonic acid (PFHxS)	580	M E *	1.6	0.31	ng/L		08/01/18 11:07	08/04/18 01:16	1
Perfluorooctanesulfonic acid (PFOS)	13	U F03	3.3	0.90	ng/L		08/01/18 11:07	08/04/18 01:16	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*74*		*50 - 150*	*08/01/18 11:07*	*08/04/18 01:16*	*1*
13C4-PFHpA	*76*		*50 - 150*	*08/01/18 11:07*	*08/04/18 01:16*	*1*
13C4 PFOA	*81*		*50 - 150*	*08/01/18 11:07*	*08/04/18 01:16*	*1*
13C5 PFNA	*96*		*50 - 150*	*08/01/18 11:07*	*08/04/18 01:16*	*1*
18O2 PFHxS	*77*		*50 - 150*	*08/01/18 11:07*	*08/04/18 01:16*	*1*
13C4 PFOS	*84*		*50 - 150*	*08/01/18 11:07*	*08/04/18 01:16*	*1*

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	220	D *	16	5.0	ng/L		08/01/18 11:07	08/09/18 07:48	10
Perfluorooctanoic acid (PFOA)	34	D M *	16	4.4	ng/L		08/01/18 11:07	08/09/18 07:48	10
Perfluorononanoic acid (PFNA)	12	U *	16	4.3	ng/L		08/01/18 11:07	08/09/18 07:48	10
Perfluorobutanesulfonic acid (PFBS)	980	D J K01	16	3.8	ng/L		08/01/18 11:07	08/09/18 07:48	10
Perfluorohexanesulfonic acid (PFHxS)	680	D M J K01	16	3.1	ng/L		08/01/18 11:07	08/09/18 07:48	10
Perfluorooctanesulfonic acid (PFOS)	13	J D M *	33	9.0	ng/L		08/01/18 11:07	08/09/18 07:48	10

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*67*		*50 - 150*	*08/01/18 11:07*	*08/09/18 07:48*	*10*
13C4-PFHpA	*74*		*50 - 150*	*08/01/18 11:07*	*08/09/18 07:48*	*10*
13C4 PFOA	*81*		*50 - 150*	*08/01/18 11:07*	*08/09/18 07:48*	*10*
13C5 PFNA	*85*		*50 - 150*	*08/01/18 11:07*	*08/09/18 07:48*	*10*
18O2 PFHxS	*63*		*50 - 150*	*08/01/18 11:07*	*08/09/18 07:48*	*10*
13C4 PFOS	*63*		*50 - 150*	*08/01/18 11:07*	*08/09/18 07:48*	*10*

Client Sample ID: MW-LIN04-01-01

Lab Sample ID: 320-41568-15

Date Collected: 07/25/18 16:05

Matrix: Water

Date Received: 07/27/18 09:10

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	570	E *	1.7	0.52	ng/L		08/01/18 11:07	08/04/18 01:23	1
Perfluorooctanoic acid (PFOA)	1000	E *	1.7	0.46	ng/L		08/01/18 11:07	08/04/18 01:23	1
Perfluorononanoic acid (PFNA)	73	=	1.7	0.44	ng/L		08/01/18 11:07	08/04/18 01:23	1
Perfluorobutanesulfonic acid (PFBS)	1000	E *	1.7	0.39	ng/L		08/01/18 11:07	08/04/18 01:23	1
Perfluorohexanesulfonic acid (PFHxS)	5300	E *	1.7	0.32	ng/L		08/01/18 11:07	08/04/18 01:23	1
Perfluorooctanesulfonic acid (PFOS)	8000	E *	3.4	0.94	ng/L		08/01/18 11:07	08/04/18 01:23	1

Client Sample ID: MW-LIN04-01-01

Date Collected: 07/25/18 16:05
Date Received: 07/27/18 09:10

Lab Sample ID: 320-41568-15

Matrix: Water

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*148*		*50 - 150*	*08/01/18 11:07*	*08/04/18 01:23*	*1*
13C4-PFHpA	*71*		*50 - 150*	*08/01/18 11:07*	*08/04/18 01:23*	*1*
13C4 PFOA	*85*		*50 - 150*	*08/01/18 11:07*	*08/04/18 01:23*	*1*
13C5 PFNA	*77*		*50 - 150*	*08/01/18 11:07*	*08/04/18 01:23*	*1*
18O2 PFHxS	*75*		*50 - 150*	*08/01/18 11:07*	*08/04/18 01:23*	*1*
13C4 PFOS	*72*		*50 - 150*	*08/01/18 11:07*	*08/04/18 01:23*	*1*

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	590	D J K01	34	10	ng/L		08/01/18 11:07	08/13/18 20:33	20
Perfluorooctanoic acid (PFOA)	1300	D J K01	34	9.2	ng/L		08/01/18 11:07	08/13/18 20:33	20
Perfluorononanoic acid (PFNA)	74	D *	34	8.9	ng/L		08/01/18 11:07	08/13/18 20:33	20
Perfluorobutanesulfonic acid (PFBS)	1500	D J K01	34	7.9	ng/L		08/01/18 11:07	08/13/18 20:33	20
Perfluorohexanesulfonic acid (PFHxS)	10000	E D *	34	6.5	ng/L		08/01/18 11:07	08/13/18 20:33	20
Perfluorooctanesulfonic acid (PFOS)	13000	E D *	68	19	ng/L		08/01/18 11:07	08/13/18 20:33	20

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*102*	*M*	*50 - 150*	*08/01/18 11:07*	*08/13/18 20:33*	*20*
13C4-PFHpA	*78*		*50 - 150*	*08/01/18 11:07*	*08/13/18 20:33*	*20*
13C4 PFOA	*82*		*50 - 150*	*08/01/18 11:07*	*08/13/18 20:33*	*20*
13C5 PFNA	*79*		*50 - 150*	*08/01/18 11:07*	*08/13/18 20:33*	*20*
18O2 PFHxS	*73*		*50 - 150*	*08/01/18 11:07*	*08/13/18 20:33*	*20*
13C4 PFOS	*66*		*50 - 150*	*08/01/18 11:07*	*08/13/18 20:33*	*20*

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 - DL2

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	570	D *	170	52	ng/L		08/01/18 11:07	08/09/18 07:55	100
Perfluorooctanoic acid (PFOA)	1200	D *	170	46	ng/L		08/01/18 11:07	08/09/18 07:55	100
Perfluorononanoic acid (PFNA)	61	J D *	170	44	ng/L		08/01/18 11:07	08/09/18 07:55	100
Perfluorobutanesulfonic acid (PFBS)	3300	D *	170	39	ng/L		08/01/18 11:07	08/09/18 07:55	100
Perfluorohexanesulfonic acid (PFHxS)	13000	D J K01	170	32	ng/L		08/01/18 11:07	08/09/18 07:55	100
Perfluorooctanesulfonic acid (PFOS)	13000	D J K01	340	94	ng/L		08/01/18 11:07	08/09/18 07:55	100

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*41*	*M Q*	*50 - 150*	*08/01/18 11:07*	*08/09/18 07:55*	*100*
13C4-PFHpA	*79*		*50 - 150*	*08/01/18 11:07*	*08/09/18 07:55*	*100*
13C4 PFOA	*85*		*50 - 150*	*08/01/18 11:07*	*08/09/18 07:55*	*100*
13C5 PFNA	*88*		*50 - 150*	*08/01/18 11:07*	*08/09/18 07:55*	*100*
18O2 PFHxS	*63*		*50 - 150*	*08/01/18 11:07*	*08/09/18 07:55*	*100*
13C4 PFOS	*69*		*50 - 150*	*08/01/18 11:07*	*08/09/18 07:55*	*100*

Client Sample ID: MW-LIN02-01-01

Date Collected: 07/25/18 17:15
Date Received: 07/27/18 09:10

Lab Sample ID: 320-41568-16

Matrix: Water

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	700	E *	1.7	0.51	ng/L		08/01/18 11:07	08/04/18 01:31	1

Client Sample ID: MW-LIN02-01-01

Date Collected: 07/25/18 17:15
Date Received: 07/27/18 09:10

Lab Sample ID: 320-41568-16

Matrix: Water

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	1200	E *	1.7	0.45	ng/L		08/01/18 11:07	08/04/18 01:31	1
Perfluorononanoic acid (PFNA)	91		1.7	0.44	ng/L		08/01/18 11:07	08/04/18 01:31	1
Perfluorobutanesulfonic acid (PFBS)	1100	E *	1.7	0.39	ng/L		08/01/18 11:07	08/04/18 01:31	1
Perfluorohexanesulfonic acid (PFHxS)	6300	E *	1.7	0.32	ng/L		08/01/18 11:07	08/04/18 01:31	1
Perfluorooctanesulfonic acid (PFOS)	7600	E *	3.4	0.92	ng/L		08/01/18 11:07	08/04/18 01:31	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*132*		*50 - 150*	*08/01/18 11:07*	*08/04/18 01:31*	*1*
13C4-PFHpA	*59*		*50 - 150*	*08/01/18 11:07*	*08/04/18 01:31*	*1*
13C4 PFOA	*87*		*50 - 150*	*08/01/18 11:07*	*08/04/18 01:31*	*1*
13C5 PFNA	*72*		*50 - 150*	*08/01/18 11:07*	*08/04/18 01:31*	*1*
18O2 PFHxS	*61*		*50 - 150*	*08/01/18 11:07*	*08/04/18 01:31*	*1*
13C4 PFOS	*67*		*50 - 150*	*08/01/18 11:07*	*08/04/18 01:31*	*1*

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	760	D J K01	34	10	ng/L		08/01/18 11:07	08/13/18 20:41	20
Perfluorooctanoic acid (PFOA)	1700	D J K01	34	9.1	ng/L		08/01/18 11:07	08/13/18 20:41	20
Perfluorononanoic acid (PFNA)	86	D *	34	8.7	ng/L		08/01/18 11:07	08/13/18 20:41	20
Perfluorobutanesulfonic acid (PFBS)	2100	D J K01	34	7.7	ng/L		08/01/18 11:07	08/13/18 20:41	20
Perfluorohexanesulfonic acid (PFHxS)	12000	E D *	34	6.4	ng/L		08/01/18 11:07	08/13/18 20:41	20
Perfluorooctanesulfonic acid (PFOS)	12000	E D *	67	18	ng/L		08/01/18 11:07	08/13/18 20:41	20

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*93*	*M*	*50 - 150*	*08/01/18 11:07*	*08/13/18 20:41*	*20*
13C4-PFHpA	*74*		*50 - 150*	*08/01/18 11:07*	*08/13/18 20:41*	*20*
13C4 PFOA	*82*		*50 - 150*	*08/01/18 11:07*	*08/13/18 20:41*	*20*
13C5 PFNA	*84*		*50 - 150*	*08/01/18 11:07*	*08/13/18 20:41*	*20*
18O2 PFHxS	*76*		*50 - 150*	*08/01/18 11:07*	*08/13/18 20:41*	*20*
13C4 PFOS	*69*		*50 - 150*	*08/01/18 11:07*	*08/13/18 20:41*	*20*

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 - DL2

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	790	D *	170	51	ng/L		08/01/18 11:07	08/09/18 08:03	100
Perfluorooctanoic acid (PFOA)	1600	D *	170	45	ng/L		08/01/18 11:07	08/09/18 08:03	100
Perfluorononanoic acid (PFNA)	87	J D *	170	44	ng/L		08/01/18 11:07	08/09/18 08:03	100
Perfluorobutanesulfonic acid (PFBS)	2800	D *	170	39	ng/L		08/01/18 11:07	08/09/18 08:03	100
Perfluorohexanesulfonic acid (PFHxS)	15000	D J K01	170	32	ng/L		08/01/18 11:07	08/09/18 08:03	100
Perfluorooctanesulfonic acid (PFOS)	13000	D J K01	340	92	ng/L		08/01/18 11:07	08/09/18 08:03	100

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*72*	*M*	*50 - 150*	*08/01/18 11:07*	*08/09/18 08:03*	*100*
13C4-PFHpA	*80*		*50 - 150*	*08/01/18 11:07*	*08/09/18 08:03*	*100*
13C4 PFOA	*90*		*50 - 150*	*08/01/18 11:07*	*08/09/18 08:03*	*100*
13C5 PFNA	*100*		*50 - 150*	*08/01/18 11:07*	*08/09/18 08:03*	*100*

Client Sample ID: MW-LIN02-01-01

Date Collected: 07/25/18 17:15
Date Received: 07/27/18 09:10

Lab Sample ID: 320-41568-16

Matrix: Water

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 - DL2 (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*80*		*50 - 150*	*08/01/18 11:07*	*08/09/18 08:03*	*100*
13C4 PFOS	*70*		*50 - 150*	*08/01/18 11:07*	*08/09/18 08:03*	*100*

Client Sample ID: ER-05

Date Collected: 07/24/18 18:15
Date Received: 07/27/18 09:10

Lab Sample ID: 320-41568-17

Matrix: Water

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	1.3	U	1.7	0.53	ng/L		08/01/18 11:07	08/09/18 08:10	1
Perfluorooctanoic acid (PFOA)	1.3	U M U	1.7	0.47	ng/L		08/01/18 11:07	08/09/18 08:10	1
Perfluorononanoic acid (PFNA)	1.3	U	1.7	0.45	ng/L		08/01/18 11:07	08/09/18 08:10	1
Perfluorobutanesulfonic acid (PFBS)	0.87	U	1.7	0.40	ng/L		08/01/18 11:07	08/09/18 08:10	1
Perfluorohexanesulfonic acid (PFHxS)	**0.54**	**J M**	1.7	0.33	ng/L		08/01/18 11:07	08/09/18 08:10	1
Perfluorooctanesulfonic acid (PFOS)	**0.97**	**J M J**	3.5	0.96	ng/L		08/01/18 11:07	08/09/18 08:10	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*70*		*50 - 150*	*08/01/18 11:07*	*08/09/18 08:10*	*1*
13C4-PFHpA	*77*		*50 - 150*	*08/01/18 11:07*	*08/09/18 08:10*	*1*
13C4 PFOA	*87*		*50 - 150*	*08/01/18 11:07*	*08/09/18 08:10*	*1*
13C5 PFNA	*87*		*50 - 150*	*08/01/18 11:07*	*08/09/18 08:10*	*1*
18O2 PFHxS	*74*		*50 - 150*	*08/01/18 11:07*	*08/09/18 08:10*	*1*
13C4 PFOS	*74*		*50 - 150*	*08/01/18 11:07*	*08/09/18 08:10*	*1*

Client Sample ID: IDW-Water-01

Date Collected: 07/25/18 17:35
Date Received: 07/27/18 09:10

Lab Sample ID: 320-41568-18

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0040	U	0.010	0.0016	mg/L			08/14/18 12:08	1
2-Butanone (MEK)	0.040	U	0.10	0.018	mg/L			08/14/18 12:08	1
Carbon tetrachloride	0.0040	U	0.010	0.0019	mg/L			08/14/18 12:08	1
Chlorobenzene	0.0040	U	0.010	0.0017	mg/L			08/14/18 12:08	1
Chloroform	0.0040	U	0.010	0.0016	mg/L			08/14/18 12:08	1
1,2-Dichloroethane	0.0040	U	0.010	0.0013	mg/L			08/14/18 12:08	1
1,1-Dichloroethene	0.0080	U	0.010	0.0023	mg/L			08/14/18 12:08	1
Tetrachloroethene	0.0040	U	0.010	0.0020	mg/L			08/14/18 12:08	1
Trichloroethene	0.0040	U	0.010	0.0016	mg/L			08/14/18 12:08	1
Vinyl chloride	0.0020	U	0.010	0.0010	mg/L			08/14/18 12:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*106*		*78 - 120*		*08/14/18 12:08*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*64 - 129*		*08/14/18 12:08*	*1*
4-Bromofluorobenzene (Surr)	*100*		*78 - 121*		*08/14/18 12:08*	*1*
Dibromofluoromethane (Surr)	*102*		*79 - 119*		*08/14/18 12:08*	*1*

APPENDIX E

LABORATORY ANALYTICAL DATA REPORTS

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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 320-41403-1

Job Description: Phase III, ANG - Lincoln ANG

For:
Leidos, Inc.
11251 Roger Bacon Drive
Reston, VA 20190

Attention: Selvam Arunachalam



Approved for release.
David R Alltucker
Project Manager I
8/14/2018 3:24 PM

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08/14/2018

Table of Contents

Cover Title Page 1

Data Summaries 4

- Definitions 4
- Case Narrative 5
- Detection Summary 7
- Client Sample Results 15
- Default Detection Limits 37
- Isotope Dilution Summary 38
- QC Sample Results 40
- QC Association 46
- Chronicle 51
- Certification Summary 66
- Method Summary 67
- Sample Summary 68
- Manual Integration Summary 69
- Reagent Traceability 88
  - COAs 147

Organic Sample Data 541

- LCMS 541
  - Method PFC DOD 541
    - Method PFC DOD QC Summary 542
    - Method PFC DOD Sample Data 568
    - Standards Data 893
      - Method PFC DOD ICAL Data 893
      - Method PFC DOD CCAL Data 1233
    - Raw QC Data 1581

Table of Contents

Method PFC DOD Blank Data 1581

Method PFC DOD LCS/LCSD Data 1690

Method PFC DOD MS/MSD Data 1746

Method PFC DOD Run Logs 1790

Method PFC DOD Prep Data 1803

Inorganic Sample Data 1813

General Chemistry Data 1813

Gen Chem Cover Page 1814

Gen Chem MDL 1815

Gen Chem Analysis Run Log 1817

Gen Chem Prep Data 1822

Shipping and Receiving Documents 1828

Client Chain of Custody 1829

Sample Receipt Checklist 1833

Qualifiers

LCMS

Qualifier	Qualifier Description
J	Estimated: The analyte was positively identified; the quantitation is an estimation
E	Result exceeded calibration range.
M	Manual integrated compound.
U	Undetected at the Limit of Detection.
D	The reported value is from a dilution.
Q	One or more quality control criteria failed.
J1	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job Narrative
320-41403-1

Receipt
The samples were received on 7/24/2018 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.9° C.

LCMS
Method(s) EPA 537 (Mod), EPA 537(Mod): The first level standard from the initial calibration curve is used to evaluate the tune criteria. The instrument mass windows are set at +/- 0.5amu; therefore, detection of the analyte serves as verification that the assigned mass is within +/- 0.5amu of the true value, which meets the DoD/DOE QSM tune criterion.

Method(s) EPA 537 (Mod): The laboratory control sample (LCS) for preparation batch 320-237294 and analytical batch 320-237990 recovered outside acceptance limits for Perfluorobutanesulfonic acid (PFBS), Perfluorooctanoic acid (PFOA), and Perfluorooctanesulfonic acid (PFOS). There was insufficient sample to perform a re-extraction; therefore, the data have been reported. The LCS was re-injected with concurring results.

Method(s) EPA 537 (Mod): The matrix spike duplicate (MSD) recoveries and precision for Perfluorooctanesulfonic acid (PFOS) forpreparation batch 320-237139 and analytical batch 320-238095 were outside control limits. Sample matrix interference are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) EPA 537 (Mod): The laboratory control sample (LCS) for preparation batch 320-237294 and analytical batch 320-237990 recovered outside control limits for the following analytes: Perfluorobutanesulfonic acid (PFBS), Perfluorooctanoic acid (PFOA) and Perfluorooctanesulfonic acid (PFOS). These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The associated laboratory control sample duplicate (LCSD) was within control limits.

Method(s) EPA 537 (Mod): The concentration of Perfluorooctanesulfonic acid (PFOS) associated with the following samples exceeded the instrument calibration range: LIN04-SB1-01 (320-41403-1), LIN03-SB2-01 (320-41403-10), LIN01-SB1-02 (320-41403-17) and LIN01-SB1-02D (320-41403-18). This analyte has been qualified; however, the peaks did not saturate the instrument detector. The samples were diluted within calibration range, and both sets of data were reported.

Method(s) EPA 537 (Mod): The concentration of Perfluorohexanesulfonic acid (PFHxS) associated with the following samples exceeded the instrument calibration range: LIN04-SB1-02 (320-41403-2). This analyte has been qualified; however, the peaks did not saturate the instrument detector. The samples were diluted within calibration range, and both sets of data were reported.

Method(s) EPA 537 (Mod): The following samples were diluted due to the nature of the sample matrix which caused low Isotope Dilution Analyte recovery for 13C5 PFNA: LIN01-SB1-02 (320-41403-17) and LIN01-SB1-02D (320-41403-18). Additionally, these samples were diluted to bring the concentration of Perfluorooctanesulfonic acid (PFOS) within instrument calibration range. Elevated reporting limits (RLs) are provided.

Method(s) EPA 537 (Mod): The concentration of Perfluorooctanesulfonic acid (PFOS) associated with the following samples exceeded the instrument calibration range: LIN05-SB1-01 (320-41403-33). This analyte has been qualified; however, the peaks did not saturate the instrument detector. The samples were diluted within calibration range, and both sets of data were reported.

Method(s) EPA 537 (Mod): The Isotope Dilution Analyte (IDA) recovery associated with the following samples is below the method recommended limit for 13C5 PFNA: LIN01-SB1-02 (320-41403-17) and LIN01-SB1-02D (320-41403-18). Sample matrix interference is suspected because the samples were diluted to bring the concentration of target analytes within instrument calibration range and the IDA recovery associated with the diluted samples was within method recommended limits. Therefore, both sets of data have been reported. Generally, data quality is not considered affected if the IDA signal-to-noise ratio is greater than 10:1, which is achieved for all IDA in the samples.

Method(s) EPA 537 (Mod): Isotope Dilution Analyte (IDA) recoveries are below the method recommended limit for Perfluorooctanesulfonic acid (PFOS) and Perfluorononanoic acid (PFNA) in the following samples: LIN05-SB1-01 (320-41403-33). This sample was re-analyzed at dilution with IDA recoveries within control limits. Both sets of data are reported. Generally, data quality is not considered affected if the IDA signal-to-noise ratio is greater than 10:1, which is achieved for all IDA in the sample.

Method(s) EPA 537 (Mod): The Isotope Dilution Analyte (IDA) recovery for 13C4 PFOS for associated with the following sample is below the method recommended limit: ER-03 (320-41403-32). The sample was re-injected with concurring results. Generally, data quality is not considered affected if the IDA signal-to-noise ratio is greater than 10:1, which is achieved for all IDA in the sample. All detection limits are below the reporting limit. There was insufficient sample to perform a re-extraction; therefore, the data has been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
Method(s) Moisture: The sample duplicate (DUP) precision for analytical batch 320-236217 was outside control limits. Sample non-homogeneity is suspected. Sample matrix included pebbles. Data is being reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
Method(s) 3535: The following samples: ER-03 (320-41403-32) and ER-04 (320-41403-44) in preparation batch 320-237294 were observed to contain sediment prior to extraction.

Method(s) 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 320-237294.

Method(s) 3535: Due to the nature of the sample matrix, the entire sample could not be eluted through the SPE column, due to the sample clogging the SPE column. The initial volumes used for the following samples deviated from the standard procedure: ER-03 (320-41403-32) and ER-04 (320-41403-44). The reporting limits (RLs) have been adjusted proportionately.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Leidos, Inc.
Project/Site: Phase III, ANG - Lincoln ANG

TestAmerica Job ID: 320-41403-1

Client Sample ID: LIN04-SB1-01 — Lab Sample ID: 320-41403-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.72		0.39	0.10	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanoic acid (PFOA)	0.76	M	0.39	0.13	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorononanoic acid (PFNA)	0.66		0.39	0.10	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.33	J	0.52	0.076	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	5.3		0.39	0.080	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	47	E	1.3	0.31	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluoroheptanoic acid (PFHpA) - DL	0.77	J D	1.9	0.50	ug/Kg	5	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanoic acid (PFOA) - DL	0.82	J D	1.9	0.65	ug/Kg	5	☼	EPA 537 (Mod)	Total/NA
Perfluorononanoic acid (PFNA) - DL	0.72	J D	1.9	0.52	ug/Kg	5	☼	EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS) - DL	5.7	D	1.9	0.40	ug/Kg	5	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid (PFOS) - DL	52	D	6.5	1.6	ug/Kg	5	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: LIN04-SB1-02 — Lab Sample ID: 320-41403-2

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	1.5		0.38	0.099	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanoic acid (PFOA)	5.9		0.38	0.13	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	3.7		0.51	0.075	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	98	E	0.38	0.078	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanoic acid (PFOA) - DL	6.2	J D M	7.6	2.5	ug/Kg	20	☼	EPA 537 (Mod)	Total/NA
Perfluorobutanesulfonic acid (PFBS) - DL	3.6	J D	10	1.5	ug/Kg	20	☼	EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS) - DL	160	D	7.6	1.6	ug/Kg	20	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: LIN04-SB2-01 — Lab Sample ID: 320-41403-3

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.72		0.36	0.094	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanoic acid (PFOA)	0.61		0.36	0.12	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorononanoic acid (PFNA)	0.79		0.36	0.098	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.95		0.36	0.075	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	9.0	M	1.2	0.29	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: LIN04-SB2-02 — Lab Sample ID: 320-41403-4

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.17	J	0.36	0.094	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.11	J	0.48	0.071	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.88		0.36	0.074	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: LIN03-SB1-01 — Lab Sample ID: 320-41403-5

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanesulfonic acid (PFHxS)	0.10	J	0.37	0.076	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.91	J	1.2	0.29	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: LIN03-SB1-02 — Lab Sample ID: 320-41403-6

This Detection Summary does not include radiochemical test results.

Client Sample ID: LIN03-SB1-02 (Continued) — Lab Sample ID: 320-41403-6

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanesulfonic acid (PFBS)	0.12	J	0.50	0.073	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.64		0.37	0.077	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: LIN03-SB3-01 — Lab Sample ID: 320-41403-7

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.17	J	0.41	0.11	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanoic acid (PFOA)	0.38	J M	0.41	0.14	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.91		0.55	0.081	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.7		0.41	0.085	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	4.8		1.4	0.33	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: LIN03-SB3-01D — Lab Sample ID: 320-41403-8

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.11	J	0.37	0.096	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanoic acid (PFOA)	0.18	J	0.37	0.12	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.81		0.49	0.073	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.7		0.37	0.076	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.40	J	1.2	0.30	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: LIN03-SB3-02 — Lab Sample ID: 320-41403-9

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanesulfonic acid (PFBS)	0.20	J	0.47	0.070	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.92		0.36	0.073	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: LIN03-SB2-01 — Lab Sample ID: 320-41403-10

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.31	J	0.36	0.094	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanoic acid (PFOA)	1.3		0.36	0.12	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.63		0.48	0.071	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	5.4		0.36	0.075	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	120	E	1.2	0.29	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS) - DL	5.9	D	3.6	0.75	ug/Kg	10	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid (PFOS) - DL	160	D	12	2.9	ug/Kg	10	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: LIN03-SB2-02 — Lab Sample ID: 320-41403-11

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanesulfonic acid (PFHxS)	0.41		0.38	0.079	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.1	J	1.3	0.31	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: LIN02-SB1-01 — Lab Sample ID: 320-41403-12

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.65		0.38	0.099	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanoic acid (PFOA)	2.4		0.38	0.13	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: LIN02-SB1-01 (Continued) — Lab Sample ID: 320-41403-12

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluorononanoic acid (PFNA)	0.46		0.38	0.10	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.3		0.38	0.078	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	14		1.3	0.30	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: LIN02-SB1-02 — Lab Sample ID: 320-41403-13

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanesulfonic acid (PFHxS)	0.30	J	0.37	0.077	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: LIN01-SB2-01 — Lab Sample ID: 320-41403-14

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.23	J	0.38	0.098	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanoic acid (PFOA)	0.72		0.38	0.13	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorononanoic acid (PFNA)	0.14	J M	0.38	0.10	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.47		0.38	0.078	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	5.7		1.3	0.30	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: LIN01-SB2-02 — Lab Sample ID: 320-41403-15

No Detections.

Client Sample ID: LIN01-SB1-01 — Lab Sample ID: 320-41403-16

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.14	J	0.36	0.095	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanoic acid (PFOA)	0.25	J	0.36	0.12	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorononanoic acid (PFNA)	0.17	J	0.36	0.098	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.59		0.36	0.075	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	10		1.2	0.29	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: LIN01-SB1-02 — Lab Sample ID: 320-41403-17

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.10	J	0.39	0.10	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanoic acid (PFOA)	0.58		0.39	0.13	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorononanoic acid (PFNA)	1.3		0.39	0.11	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.5		0.39	0.081	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	220	E	1.3	0.31	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS) - DL	2.8	J D	7.9	1.6	ug/Kg	20	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid (PFOS) - DL	320	D	26	6.3	ug/Kg	20	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: LIN01-SB1-02D — Lab Sample ID: 320-41403-18

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	0.53	M	0.42	0.14	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorononanoic acid (PFNA)	1.0		0.42	0.11	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.3		0.42	0.086	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	220	E	1.4	0.33	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: LIN01-SB1-02D (Continued)

Lab Sample ID: 320-41403-18

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanesulfonic acid (PFHxS) - DL	2.3	J D	8.4	1.7	ug/Kg	20	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid (PFOS) - DL	330	D	28	6.7	ug/Kg	20	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: LIN05-SB2-01

Lab Sample ID: 320-41403-19

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.20	J	0.39	0.10	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanoic acid (PFOA)	0.45		0.39	0.13	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorononanoic acid (PFNA)	0.52		0.39	0.11	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.46	J	0.52	0.077	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.1		0.39	0.080	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	9.2		1.3	0.31	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: LIN05-SB2-02

Lab Sample ID: 320-41403-20

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanesulfonic acid (PFHxS)	0.087	J	0.39	0.081	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: ER-01

Lab Sample ID: 320-41403-21

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanesulfonic acid (PFHxS)	0.33	J M	1.7	0.33	ng/L	1		EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.1	J Q	3.5	0.95	ng/L	1		EPA 537 (Mod)	Total/NA

Client Sample ID: FB-01

Lab Sample ID: 320-41403-22

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	2.8		1.9	0.58	ng/L	1		EPA 537 (Mod)	Total/NA
Perfluorooctanoic acid (PFOA)	2.1	M Q	1.9	0.51	ng/L	1		EPA 537 (Mod)	Total/NA
Perfluorononanoic acid (PFNA)	0.78	J	1.9	0.49	ng/L	1		EPA 537 (Mod)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.1	J Q	1.9	0.43	ng/L	1		EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	4.3		1.9	0.36	ng/L	1		EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	16	Q	3.8	1.0	ng/L	1		EPA 537 (Mod)	Total/NA

Client Sample ID: LIN09-SB2-01

Lab Sample ID: 320-41403-24

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.55	M	0.40	0.10	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanoic acid (PFOA)	0.72		0.40	0.13	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorononanoic acid (PFNA)	0.54		0.40	0.11	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.21	J	0.53	0.078	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.3		0.40	0.082	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	8.6		1.3	0.32	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: LIN09-SB2-02

Lab Sample ID: 320-41403-25

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanesulfonic acid (PFHxS)	0.12	J	0.40	0.083	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Leidos, Inc.
Project/Site: Phase III, ANG - Lincoln ANG

TestAmerica Job ID: 320-41403-1

Client Sample ID: LIN09-SB1-01 — Lab Sample ID: 320-41403-26

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.64		0.38	0.099	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanoic acid (PFOA)	0.61		0.38	0.13	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorononanoic acid (PFNA)	0.20	J	0.38	0.10	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.16	J	0.51	0.075	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.6		0.38	0.079	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	6.3		1.3	0.31	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: LIN09-SB1-02 — Lab Sample ID: 320-41403-27

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.15	J	0.39	0.10	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanoic acid (PFOA)	0.18	J M	0.39	0.13	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.54		0.52	0.077	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.9		0.39	0.081	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.6		1.3	0.31	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: LIN05-SB3-01 — Lab Sample ID: 320-41403-28

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.46		0.40	0.10	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanoic acid (PFOA)	2.7		0.40	0.13	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorononanoic acid (PFNA)	0.71		0.40	0.11	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.24	J	0.53	0.078	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	4.7		0.40	0.082	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	18		1.3	0.32	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: LIN05-SB3-01D — Lab Sample ID: 320-41403-29

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.53		0.37	0.096	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanoic acid (PFOA)	2.6		0.37	0.12	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorononanoic acid (PFNA)	0.50		0.37	0.10	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.31	J	0.49	0.073	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	5.4		0.37	0.076	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	17		1.2	0.30	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: LIN05-SB3-02 — Lab Sample ID: 320-41403-30

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanesulfonic acid (PFBS)	0.31	J	0.50	0.074	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.99		0.37	0.077	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.76	J	1.2	0.30	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: ER-02 — Lab Sample ID: 320-41403-31

No Detections.

Client Sample ID: ER-03 — Lab Sample ID: 320-41403-32

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanesulfonic acid (PFHxS)	2.2	J M	2.7	0.52	ng/L	1		EPA 537 (Mod)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: ER-03 (Continued)

Lab Sample ID: 320-41403-32

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanesulfonic acid (PFOS)	25	Q	5.5	1.5	ng/L	1		EPA 537 (Mod)	Total/NA

Client Sample ID: LIN05-SB1-01

Lab Sample ID: 320-41403-33

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.59		0.36	0.093	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanoic acid (PFOA)	1.6		0.36	0.12	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorononanoic acid (PFNA)	2.2		0.36	0.097	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.3		0.48	0.070	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	21		0.36	0.074	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	480	E	1.2	0.29	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS) - DL	20	J D	36	7.4	ug/Kg	100	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid (PFOS) - DL	770	D	120	29	ug/Kg	100	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: LIN05-SB1-02

Lab Sample ID: 320-41403-34

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.13	J	0.38	0.099	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanoic acid (PFOA)	0.47		0.38	0.13	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.27	J	0.51	0.075	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.3		0.38	0.079	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.6		1.3	0.30	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: LIN08-SB2-01

Lab Sample ID: 320-41403-35

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanesulfonic acid (PFHxS)	0.16	J	0.37	0.076	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.3		1.2	0.29	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: LIN08-SB2-02

Lab Sample ID: 320-41403-36

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	0.69		0.41	0.14	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.74		0.41	0.086	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	3.3	J1	1.4	0.33	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: LIN07-SB1-01

Lab Sample ID: 320-41403-37

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.38	J	0.39	0.10	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanoic acid (PFOA)	0.41		0.39	0.13	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorononanoic acid (PFNA)	0.14	J	0.39	0.10	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.7		0.39	0.080	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	4.3		1.3	0.31	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: LIN07-SB1-02

Lab Sample ID: 320-41403-38

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.18	J	0.39	0.10	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: LIN07-SB1-02 (Continued) — Lab Sample ID: 320-41403-38

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanesulfonic acid (PFBS)	0.17	J	0.51	0.076	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	5.9		0.39	0.080	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: LIN07-SB1-02D — Lab Sample ID: 320-41403-39

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.16	J	0.38	0.098	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanoic acid (PFOA)	0.18	J M	0.38	0.13	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.13	J	0.50	0.074	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	5.0		0.38	0.078	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.6		1.3	0.30	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: LIN07-SB2-01 — Lab Sample ID: 320-41403-40

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.36	J	0.39	0.10	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanoic acid (PFOA)	0.46	M	0.39	0.13	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorononanoic acid (PFNA)	0.19	J	0.39	0.11	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.6		0.39	0.081	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	9.6		1.3	0.31	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: LIN07-SB2-02 — Lab Sample ID: 320-41403-41

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanesulfonic acid (PFBS)	1.8		0.60	0.089	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.56	M	0.45	0.094	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: LIN02-SB2-01 — Lab Sample ID: 320-41403-42

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.55		0.40	0.10	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanoic acid (PFOA)	0.46	M	0.40	0.13	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.47		0.40	0.083	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.9		1.3	0.32	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: LIN02-SB2-02 — Lab Sample ID: 320-41403-43

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanesulfonic acid (PFBS)	0.17	J	0.53	0.078	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.13	J M	0.40	0.082	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: ER-04 — Lab Sample ID: 320-41403-44

No Detections.

Client Sample ID: LIN08-SB1-01 — Lab Sample ID: 320-41403-45

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.20	J M	0.40	0.10	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanoic acid (PFOA)	0.69		0.40	0.13	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorononanoic acid (PFNA)	0.20	J	0.40	0.11	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: LIN08-SB1-01 (Continued)

Lab Sample ID: 320-41403-45

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanesulfonic acid (PFBS)	0.15	J	0.53	0.078	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.75		0.40	0.082	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	14		1.3	0.32	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: LIN08-SB1-02

Lab Sample ID: 320-41403-46

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanesulfonic acid (PFHxS)	0.16	J	0.37	0.077	ug/Kg	1	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: Field Reagent Blank

Lab Sample ID: 320-41403-47

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: LIN04-SB1-01

Date Collected: 07/18/18 11:35
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-1

Matrix: Solid
Percent Solids: 77.1

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.72		0.39	0.10	ug/Kg	☼	07/27/18 10:32	08/06/18 03:51	1
Perfluorooctanoic acid (PFOA)	0.76	M	0.39	0.13	ug/Kg	☼	07/27/18 10:32	08/06/18 03:51	1
Perfluorononanoic acid (PFNA)	0.66		0.39	0.10	ug/Kg	☼	07/27/18 10:32	08/06/18 03:51	1
Perfluorobutanesulfonic acid (PFBS)	0.33	J	0.52	0.076	ug/Kg	☼	07/27/18 10:32	08/06/18 03:51	1
Perfluorohexanesulfonic acid (PFHxS)	5.3		0.39	0.080	ug/Kg	☼	07/27/18 10:32	08/06/18 03:51	1
Perfluorooctanesulfonic acid (PFOS)	47	E	1.3	0.31	ug/Kg	☼	07/27/18 10:32	08/06/18 03:51	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*60*		*50 - 150*	*07/27/18 10:32*	*08/06/18 03:51*	*1*
13C4-PFHpA	*79*		*50 - 150*	*07/27/18 10:32*	*08/06/18 03:51*	*1*
13C4 PFOA	*74*		*50 - 150*	*07/27/18 10:32*	*08/06/18 03:51*	*1*
13C5 PFNA	*67*		*50 - 150*	*07/27/18 10:32*	*08/06/18 03:51*	*1*
18O2 PFHxS	*72*		*50 - 150*	*07/27/18 10:32*	*08/06/18 03:51*	*1*
13C4 PFOS	*63*		*50 - 150*	*07/27/18 10:32*	*08/06/18 03:51*	*1*

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.77	J D	1.9	0.50	ug/Kg	☼	07/27/18 10:32	08/07/18 16:42	5
Perfluorooctanoic acid (PFOA)	0.82	J D	1.9	0.65	ug/Kg	☼	07/27/18 10:32	08/07/18 16:42	5
Perfluorononanoic acid (PFNA)	0.72	J D	1.9	0.52	ug/Kg	☼	07/27/18 10:32	08/07/18 16:42	5
Perfluorobutanesulfonic acid (PFBS)	1.2	U	2.6	0.38	ug/Kg	☼	07/27/18 10:32	08/07/18 16:42	5
Perfluorohexanesulfonic acid (PFHxS)	5.7	D	1.9	0.40	ug/Kg	☼	07/27/18 10:32	08/07/18 16:42	5
Perfluorooctanesulfonic acid (PFOS)	52	D	6.5	1.6	ug/Kg	☼	07/27/18 10:32	08/07/18 16:42	5

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*66*		*50 - 150*	*07/27/18 10:32*	*08/07/18 16:42*	*5*
13C4-PFHpA	*70*		*50 - 150*	*07/27/18 10:32*	*08/07/18 16:42*	*5*
13C4 PFOA	*73*		*50 - 150*	*07/27/18 10:32*	*08/07/18 16:42*	*5*
13C5 PFNA	*75*		*50 - 150*	*07/27/18 10:32*	*08/07/18 16:42*	*5*
18O2 PFHxS	*66*		*50 - 150*	*07/27/18 10:32*	*08/07/18 16:42*	*5*
13C4 PFOS	*64*		*50 - 150*	*07/27/18 10:32*	*08/07/18 16:42*	*5*

Client Sample ID: LIN04-SB1-02

Date Collected: 07/18/18 11:40
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-2

Matrix: Solid
Percent Solids: 78.0

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	1.5		0.38	0.099	ug/Kg	☼	07/27/18 10:32	08/06/18 03:59	1
Perfluorooctanoic acid (PFOA)	5.9		0.38	0.13	ug/Kg	☼	07/27/18 10:32	08/06/18 03:59	1
Perfluorononanoic acid (PFNA)	0.25	U	0.38	0.10	ug/Kg	☼	07/27/18 10:32	08/06/18 03:59	1
Perfluorobutanesulfonic acid (PFBS)	3.7		0.51	0.075	ug/Kg	☼	07/27/18 10:32	08/06/18 03:59	1
Perfluorohexanesulfonic acid (PFHxS)	98	E	0.38	0.078	ug/Kg	☼	07/27/18 10:32	08/06/18 03:59	1
Perfluorooctanesulfonic acid (PFOS)	0.63	U	1.3	0.30	ug/Kg	☼	07/27/18 10:32	08/06/18 03:59	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*67*		*50 - 150*	*07/27/18 10:32*	*08/06/18 03:59*	*1*

Client Sample ID: LIN04-SB1-02

Date Collected: 07/18/18 11:40
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-2

Matrix: Solid
Percent Solids: 78.0

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4-PFHpA	62		50 - 150	07/27/18 10:32	08/06/18 03:59	1
13C4 PFOA	82		50 - 150	07/27/18 10:32	08/06/18 03:59	1
13C5 PFNA	86		50 - 150	07/27/18 10:32	08/06/18 03:59	1
18O2 PFHxS	63		50 - 150	07/27/18 10:32	08/06/18 03:59	1
13C4 PFOS	73		50 - 150	07/27/18 10:32	08/06/18 03:59	1

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	5.1	U	7.6	2.0	ug/Kg	☼	07/27/18 10:32	08/07/18 16:50	20
Perfluorooctanoic acid (PFOA)	**6.2**	**J D M**	7.6	2.5	ug/Kg	☼	07/27/18 10:32	08/07/18 16:50	20
Perfluorononanoic acid (PFNA)	5.1	U	7.6	2.0	ug/Kg	☼	07/27/18 10:32	08/07/18 16:50	20
Perfluorobutanesulfonic acid (PFBS)	**3.6**	**J D**	10	1.5	ug/Kg	☼	07/27/18 10:32	08/07/18 16:50	20
Perfluorohexanesulfonic acid (PFHxS)	**160**	**D**	7.6	1.6	ug/Kg	☼	07/27/18 10:32	08/07/18 16:50	20
Perfluorooctanesulfonic acid (PFOS)	13	U	25	6.1	ug/Kg	☼	07/27/18 10:32	08/07/18 16:50	20

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-PFBS	71		50 - 150	07/27/18 10:32	08/07/18 16:50	20
13C4-PFHpA	84		50 - 150	07/27/18 10:32	08/07/18 16:50	20
13C4 PFOA	80		50 - 150	07/27/18 10:32	08/07/18 16:50	20
13C5 PFNA	80		50 - 150	07/27/18 10:32	08/07/18 16:50	20
18O2 PFHxS	72		50 - 150	07/27/18 10:32	08/07/18 16:50	20
13C4 PFOS	67		50 - 150	07/27/18 10:32	08/07/18 16:50	20

Client Sample ID: LIN04-SB2-01

Date Collected: 07/18/18 12:10
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-3

Matrix: Solid
Percent Solids: 82.1

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	**0.72**		0.36	0.094	ug/Kg	☼	07/27/18 10:32	08/06/18 04:06	1
Perfluorooctanoic acid (PFOA)	**0.61**		0.36	0.12	ug/Kg	☼	07/27/18 10:32	08/06/18 04:06	1
Perfluorononanoic acid (PFNA)	**0.79**		0.36	0.098	ug/Kg	☼	07/27/18 10:32	08/06/18 04:06	1
Perfluorobutanesulfonic acid (PFBS)	0.22	U	0.48	0.071	ug/Kg	☼	07/27/18 10:32	08/06/18 04:06	1
Perfluorohexanesulfonic acid (PFHxS)	**0.95**		0.36	0.075	ug/Kg	☼	07/27/18 10:32	08/06/18 04:06	1
Perfluorooctanesulfonic acid (PFOS)	**9.0**	**M**	1.2	0.29	ug/Kg	☼	07/27/18 10:32	08/06/18 04:06	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-PFBS	62		50 - 150	07/27/18 10:32	08/06/18 04:06	1
13C4-PFHpA	77		50 - 150	07/27/18 10:32	08/06/18 04:06	1
13C4 PFOA	75		50 - 150	07/27/18 10:32	08/06/18 04:06	1
13C5 PFNA	75		50 - 150	07/27/18 10:32	08/06/18 04:06	1
18O2 PFHxS	70		50 - 150	07/27/18 10:32	08/06/18 04:06	1
13C4 PFOS	64		50 - 150	07/27/18 10:32	08/06/18 04:06	1

Client Sample ID: LIN04-SB2-02

Date Collected: 07/18/18 12:20
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-4

Matrix: Solid
Percent Solids: 82.2

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	**0.17**	**J**	0.36	0.094	ug/Kg	☼	07/27/18 10:32	08/06/18 04:14	1
Perfluorooctanoic acid (PFOA)	0.24	U	0.36	0.12	ug/Kg	☼	07/27/18 10:32	08/06/18 04:14	1
Perfluorononanoic acid (PFNA)	0.24	U	0.36	0.097	ug/Kg	☼	07/27/18 10:32	08/06/18 04:14	1
Perfluorobutanesulfonic acid (PFBS)	**0.11**	**J**	0.48	0.071	ug/Kg	☼	07/27/18 10:32	08/06/18 04:14	1
Perfluorohexanesulfonic acid (PFHxS)	**0.88**		0.36	0.074	ug/Kg	☼	07/27/18 10:32	08/06/18 04:14	1
Perfluorooctanesulfonic acid (PFOS)	0.60	U	1.2	0.29	ug/Kg	☼	07/27/18 10:32	08/06/18 04:14	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*67*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:14*	*1*
13C4-PFHpA	*86*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:14*	*1*
13C4 PFOA	*81*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:14*	*1*
13C5 PFNA	*83*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:14*	*1*
18O2 PFHxS	*77*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:14*	*1*
13C4 PFOS	*68*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:14*	*1*

Client Sample ID: LIN03-SB1-01

Date Collected: 07/18/18 13:20
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-5

Matrix: Solid
Percent Solids: 80.4

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.24	U	0.37	0.095	ug/Kg	☼	07/27/18 10:32	08/06/18 04:22	1
Perfluorooctanoic acid (PFOA)	0.24	U	0.37	0.12	ug/Kg	☼	07/27/18 10:32	08/06/18 04:22	1
Perfluorononanoic acid (PFNA)	0.24	U M	0.37	0.099	ug/Kg	☼	07/27/18 10:32	08/06/18 04:22	1
Perfluorobutanesulfonic acid (PFBS)	0.22	U	0.49	0.072	ug/Kg	☼	07/27/18 10:32	08/06/18 04:22	1
Perfluorohexanesulfonic acid (PFHxS)	**0.10**	**J**	0.37	0.076	ug/Kg	☼	07/27/18 10:32	08/06/18 04:22	1
Perfluorooctanesulfonic acid (PFOS)	**0.91**	**J**	1.2	0.29	ug/Kg	☼	07/27/18 10:32	08/06/18 04:22	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*63*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:22*	*1*
13C4-PFHpA	*82*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:22*	*1*
13C4 PFOA	*77*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:22*	*1*
13C5 PFNA	*80*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:22*	*1*
18O2 PFHxS	*72*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:22*	*1*
13C4 PFOS	*69*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:22*	*1*

Client Sample ID: LIN03-SB1-02

Date Collected: 07/18/18 13:30
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-6

Matrix: Solid
Percent Solids: 80.3

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.25	U	0.37	0.097	ug/Kg	☼	07/27/18 10:32	08/06/18 04:38	1
Perfluorooctanoic acid (PFOA)	0.25	U	0.37	0.12	ug/Kg	☼	07/27/18 10:32	08/06/18 04:38	1
Perfluorononanoic acid (PFNA)	0.25	U	0.37	0.10	ug/Kg	☼	07/27/18 10:32	08/06/18 04:38	1
Perfluorobutanesulfonic acid (PFBS)	**0.12**	**J**	0.50	0.073	ug/Kg	☼	07/27/18 10:32	08/06/18 04:38	1
Perfluorohexanesulfonic acid (PFHxS)	**0.64**		0.37	0.077	ug/Kg	☼	07/27/18 10:32	08/06/18 04:38	1

Client Sample ID: LIN03-SB1-02

Lab Sample ID: 320-41403-6

Date Collected: 07/18/18 13:30
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 80.3

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	0.62	U M	1.2	0.30	ug/Kg	☼	07/27/18 10:32	08/06/18 04:38	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*66*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:38*	*1*
13C4-PFHpA	*87*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:38*	*1*
13C4 PFOA	*82*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:38*	*1*
13C5 PFNA	*84*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:38*	*1*
18O2 PFHxS	*77*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:38*	*1*
13C4 PFOS	*70*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:38*	*1*

Client Sample ID: LIN03-SB3-01

Lab Sample ID: 320-41403-7

Date Collected: 07/18/18 14:10
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 73.2

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.17	J	0.41	0.11	ug/Kg	☼	07/27/18 10:32	08/06/18 04:46	1
Perfluorooctanoic acid (PFOA)	0.38	J M	0.41	0.14	ug/Kg	☼	07/27/18 10:32	08/06/18 04:46	1
Perfluorononanoic acid (PFNA)	0.27	U	0.41	0.11	ug/Kg	☼	07/27/18 10:32	08/06/18 04:46	1
Perfluorobutanesulfonic acid (PFBS)	0.91		0.55	0.081	ug/Kg	☼	07/27/18 10:32	08/06/18 04:46	1
Perfluorohexanesulfonic acid (PFHxS)	2.7		0.41	0.085	ug/Kg	☼	07/27/18 10:32	08/06/18 04:46	1
Perfluorooctanesulfonic acid (PFOS)	4.8		1.4	0.33	ug/Kg	☼	07/27/18 10:32	08/06/18 04:46	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*66*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:46*	*1*
13C4-PFHpA	*83*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:46*	*1*
13C4 PFOA	*79*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:46*	*1*
13C5 PFNA	*81*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:46*	*1*
18O2 PFHxS	*75*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:46*	*1*
13C4 PFOS	*69*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:46*	*1*

Client Sample ID: LIN03-SB3-01D

Lab Sample ID: 320-41403-8

Date Collected: 07/18/18 14:10
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 80.0

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.11	J	0.37	0.096	ug/Kg	☼	07/27/18 10:32	08/06/18 04:53	1
Perfluorooctanoic acid (PFOA)	0.18	J	0.37	0.12	ug/Kg	☼	07/27/18 10:32	08/06/18 04:53	1
Perfluorononanoic acid (PFNA)	0.25	U	0.37	0.10	ug/Kg	☼	07/27/18 10:32	08/06/18 04:53	1
Perfluorobutanesulfonic acid (PFBS)	0.81		0.49	0.073	ug/Kg	☼	07/27/18 10:32	08/06/18 04:53	1
Perfluorohexanesulfonic acid (PFHxS)	1.7		0.37	0.076	ug/Kg	☼	07/27/18 10:32	08/06/18 04:53	1
Perfluorooctanesulfonic acid (PFOS)	0.40	J	1.2	0.30	ug/Kg	☼	07/27/18 10:32	08/06/18 04:53	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*64*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:53*	*1*
13C4-PFHpA	*80*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:53*	*1*
13C4 PFOA	*79*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:53*	*1*

Client Sample ID: LIN03-SB3-01D

Lab Sample ID: 320-41403-8
Date Collected: 07/18/18 14:10
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 80.0

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C5 PFNA	*81*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:53*	*1*
18O2 PFHxS	*72*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:53*	*1*
13C4 PFOS	*66*		*50 - 150*	*07/27/18 10:32*	*08/06/18 04:53*	*1*

Client Sample ID: LIN03-SB3-02

Lab Sample ID: 320-41403-9
Date Collected: 07/18/18 14:20
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 84.5

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.24	U	0.36	0.092	ug/Kg	☼	07/27/18 10:32	08/06/18 05:01	1
Perfluorooctanoic acid (PFOA)	0.24	U	0.36	0.12	ug/Kg	☼	07/27/18 10:32	08/06/18 05:01	1
Perfluorononanoic acid (PFNA)	0.24	U	0.36	0.096	ug/Kg	☼	07/27/18 10:32	08/06/18 05:01	1
Perfluorobutanesulfonic acid (PFBS)	**0.20**	**J**	0.47	0.070	ug/Kg	☼	07/27/18 10:32	08/06/18 05:01	1
Perfluorohexanesulfonic acid (PFHxS)	**0.92**		0.36	0.073	ug/Kg	☼	07/27/18 10:32	08/06/18 05:01	1
Perfluorooctanesulfonic acid (PFOS)	0.59	U M	1.2	0.28	ug/Kg	☼	07/27/18 10:32	08/06/18 05:01	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*68*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:01*	*1*
13C4-PFHpA	*89*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:01*	*1*
13C4 PFOA	*87*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:01*	*1*
13C5 PFNA	*91*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:01*	*1*
18O2 PFHxS	*80*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:01*	*1*
13C4 PFOS	*75*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:01*	*1*

Client Sample ID: LIN03-SB2-01

Lab Sample ID: 320-41403-10
Date Collected: 07/18/18 14:35
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 82.6

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	**0.31**	**J**	0.36	0.094	ug/Kg	☼	07/27/18 10:32	08/06/18 05:09	1
Perfluorooctanoic acid (PFOA)	**1.3**		0.36	0.12	ug/Kg	☼	07/27/18 10:32	08/06/18 05:09	1
Perfluorononanoic acid (PFNA)	0.24	U	0.36	0.098	ug/Kg	☼	07/27/18 10:32	08/06/18 05:09	1
Perfluorobutanesulfonic acid (PFBS)	**0.63**		0.48	0.071	ug/Kg	☼	07/27/18 10:32	08/06/18 05:09	1
Perfluorohexanesulfonic acid (PFHxS)	**5.4**		0.36	0.075	ug/Kg	☼	07/27/18 10:32	08/06/18 05:09	1
Perfluorooctanesulfonic acid (PFOS)	**120**	**E**	1.2	0.29	ug/Kg	☼	07/27/18 10:32	08/06/18 05:09	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*71*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:09*	*1*
13C4-PFHpA	*91*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:09*	*1*
13C4 PFOA	*83*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:09*	*1*
13C5 PFNA	*64*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:09*	*1*
18O2 PFHxS	*82*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:09*	*1*
13C4 PFOS	*67*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:09*	*1*

Client Sample ID: LIN03-SB2-01

Lab Sample ID: 320-41403-10

Date Collected: 07/18/18 14:35
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 82.6

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	2.4	U	3.6	0.94	ug/Kg	☼	07/27/18 10:32	08/07/18 17:06	10
Perfluorooctanoic acid (PFOA)	2.4	U M	3.6	1.2	ug/Kg	☼	07/27/18 10:32	08/07/18 17:06	10
Perfluorononanoic acid (PFNA)	2.4	U	3.6	0.98	ug/Kg	☼	07/27/18 10:32	08/07/18 17:06	10
Perfluorobutanesulfonic acid (PFBS)	2.2	U	4.8	0.71	ug/Kg	☼	07/27/18 10:32	08/07/18 17:06	10
Perfluorohexanesulfonic acid (PFHxS)	**5.9**	**D**	3.6	0.75	ug/Kg	☼	07/27/18 10:32	08/07/18 17:06	10
Perfluorooctanesulfonic acid (PFOS)	**160**	**D**	12	2.9	ug/Kg	☼	07/27/18 10:32	08/07/18 17:06	10

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*85*		*50 - 150*	*07/27/18 10:32*	*08/07/18 17:06*	*10*
13C4-PFHpA	*79*		*50 - 150*	*07/27/18 10:32*	*08/07/18 17:06*	*10*
13C4 PFOA	*80*		*50 - 150*	*07/27/18 10:32*	*08/07/18 17:06*	*10*
13C5 PFNA	*78*		*50 - 150*	*07/27/18 10:32*	*08/07/18 17:06*	*10*
18O2 PFHxS	*73*		*50 - 150*	*07/27/18 10:32*	*08/07/18 17:06*	*10*
13C4 PFOS	*67*		*50 - 150*	*07/27/18 10:32*	*08/07/18 17:06*	*10*

Client Sample ID: LIN03-SB2-02

Lab Sample ID: 320-41403-11

Date Collected: 07/18/18 14:40
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 77.1

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.25	U	0.38	0.099	ug/Kg	☼	07/27/18 10:32	08/06/18 05:17	1
Perfluorooctanoic acid (PFOA)	0.25	U	0.38	0.13	ug/Kg	☼	07/27/18 10:32	08/06/18 05:17	1
Perfluorononanoic acid (PFNA)	0.25	U	0.38	0.10	ug/Kg	☼	07/27/18 10:32	08/06/18 05:17	1
Perfluorobutanesulfonic acid (PFBS)	0.23	U	0.51	0.075	ug/Kg	☼	07/27/18 10:32	08/06/18 05:17	1
Perfluorohexanesulfonic acid (PFHxS)	**0.41**		0.38	0.079	ug/Kg	☼	07/27/18 10:32	08/06/18 05:17	1
Perfluorooctanesulfonic acid (PFOS)	**1.1**	**J**	1.3	0.31	ug/Kg	☼	07/27/18 10:32	08/06/18 05:17	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*66*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:17*	*1*
13C4-PFHpA	*77*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:17*	*1*
13C4 PFOA	*76*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:17*	*1*
13C5 PFNA	*78*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:17*	*1*
18O2 PFHxS	*74*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:17*	*1*
13C4 PFOS	*69*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:17*	*1*

Client Sample ID: LIN02-SB1-01

Lab Sample ID: 320-41403-12

Date Collected: 07/18/18 15:05
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 78.3

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	**0.65**		0.38	0.099	ug/Kg	☼	07/27/18 10:32	08/06/18 05:25	1
Perfluorooctanoic acid (PFOA)	**2.4**		0.38	0.13	ug/Kg	☼	07/27/18 10:32	08/06/18 05:25	1
Perfluorononanoic acid (PFNA)	**0.46**		0.38	0.10	ug/Kg	☼	07/27/18 10:32	08/06/18 05:25	1
Perfluorobutanesulfonic acid (PFBS)	0.23	U	0.51	0.075	ug/Kg	☼	07/27/18 10:32	08/06/18 05:25	1
Perfluorohexanesulfonic acid (PFHxS)	**1.3**		0.38	0.078	ug/Kg	☼	07/27/18 10:32	08/06/18 05:25	1

Client Sample ID: LIN02-SB1-01

Lab Sample ID: 320-41403-12
Date Collected: 07/18/18 15:05
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 78.3

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	14		1.3	0.30	ug/Kg	☼	07/27/18 10:32	08/06/18 05:25	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*65*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:25*	*1*
13C4-PFHpA	*85*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:25*	*1*
13C4 PFOA	*81*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:25*	*1*
13C5 PFNA	*80*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:25*	*1*
18O2 PFHxS	*73*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:25*	*1*
13C4 PFOS	*69*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:25*	*1*

Client Sample ID: LIN02-SB1-02

Lab Sample ID: 320-41403-13
Date Collected: 07/18/18 15:15
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 78.9

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.25	U	0.37	0.097	ug/Kg	☼	07/27/18 10:32	08/06/18 05:32	1
Perfluorooctanoic acid (PFOA)	0.25	U	0.37	0.12	ug/Kg	☼	07/27/18 10:32	08/06/18 05:32	1
Perfluorononanoic acid (PFNA)	0.25	U	0.37	0.10	ug/Kg	☼	07/27/18 10:32	08/06/18 05:32	1
Perfluorobutanesulfonic acid (PFBS)	0.22	U M	0.50	0.074	ug/Kg	☼	07/27/18 10:32	08/06/18 05:32	1
Perfluorohexanesulfonic acid (PFHxS)	0.30	J	0.37	0.077	ug/Kg	☼	07/27/18 10:32	08/06/18 05:32	1
Perfluorooctanesulfonic acid (PFOS)	0.62	U	1.2	0.30	ug/Kg	☼	07/27/18 10:32	08/06/18 05:32	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*69*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:32*	*1*
13C4-PFHpA	*90*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:32*	*1*
13C4 PFOA	*86*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:32*	*1*
13C5 PFNA	*91*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:32*	*1*
18O2 PFHxS	*78*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:32*	*1*
13C4 PFOS	*75*		*50 - 150*	*07/27/18 10:32*	*08/06/18 05:32*	*1*

Client Sample ID: LIN01-SB2-01

Lab Sample ID: 320-41403-14
Date Collected: 07/18/18 15:40
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 78.7

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.23	J	0.38	0.098	ug/Kg	☼	07/27/18 10:32	08/06/18 06:04	1
Perfluorooctanoic acid (PFOA)	0.72		0.38	0.13	ug/Kg	☼	07/27/18 10:32	08/06/18 06:04	1
Perfluorononanoic acid (PFNA)	0.14	J M	0.38	0.10	ug/Kg	☼	07/27/18 10:32	08/06/18 06:04	1
Perfluorobutanesulfonic acid (PFBS)	0.23	U	0.50	0.074	ug/Kg	☼	07/27/18 10:32	08/06/18 06:04	1
Perfluorohexanesulfonic acid (PFHxS)	0.47		0.38	0.078	ug/Kg	☼	07/27/18 10:32	08/06/18 06:04	1
Perfluorooctanesulfonic acid (PFOS)	5.7		1.3	0.30	ug/Kg	☼	07/27/18 10:32	08/06/18 06:04	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*61*		*50 - 150*	*07/27/18 10:32*	*08/06/18 06:04*	*1*
13C4-PFHpA	*82*		*50 - 150*	*07/27/18 10:32*	*08/06/18 06:04*	*1*
13C4 PFOA	*78*		*50 - 150*	*07/27/18 10:32*	*08/06/18 06:04*	*1*
13C5 PFNA	*78*		*50 - 150*	*07/27/18 10:32*	*08/06/18 06:04*	*1*

Client Sample ID: LIN01-SB2-01

Date Collected: 07/18/18 15:40
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-14

Matrix: Solid
Percent Solids: 78.7

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*72*		*50 - 150*	*07/27/18 10:32*	*08/06/18 06:04*	*1*
13C4 PFOS	*66*		*50 - 150*	*07/27/18 10:32*	*08/06/18 06:04*	*1*

Client Sample ID: LIN01-SB2-02

Date Collected: 07/18/18 15:55
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-15

Matrix: Solid
Percent Solids: 82.1

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.24	U	0.36	0.093	ug/Kg	☼	07/27/18 10:32	08/06/18 06:12	1
Perfluorooctanoic acid (PFOA)	0.24	U	0.36	0.12	ug/Kg	☼	07/27/18 10:32	08/06/18 06:12	1
Perfluorononanoic acid (PFNA)	0.24	U	0.36	0.097	ug/Kg	☼	07/27/18 10:32	08/06/18 06:12	1
Perfluorobutanesulfonic acid (PFBS)	0.22	U	0.48	0.071	ug/Kg	☼	07/27/18 10:32	08/06/18 06:12	1
Perfluorohexanesulfonic acid (PFHxS)	0.24	U	0.36	0.074	ug/Kg	☼	07/27/18 10:32	08/06/18 06:12	1
Perfluorooctanesulfonic acid (PFOS)	0.60	U	1.2	0.29	ug/Kg	☼	07/27/18 10:32	08/06/18 06:12	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*69*		*50 - 150*	*07/27/18 10:32*	*08/06/18 06:12*	*1*
13C4-PFHpA	*89*		*50 - 150*	*07/27/18 10:32*	*08/06/18 06:12*	*1*
13C4 PFOA	*87*		*50 - 150*	*07/27/18 10:32*	*08/06/18 06:12*	*1*
13C5 PFNA	*90*		*50 - 150*	*07/27/18 10:32*	*08/06/18 06:12*	*1*
18O2 PFHxS	*78*		*50 - 150*	*07/27/18 10:32*	*08/06/18 06:12*	*1*
13C4 PFOS	*75*		*50 - 150*	*07/27/18 10:32*	*08/06/18 06:12*	*1*

Client Sample ID: LIN01-SB1-01

Date Collected: 07/18/18 16:20
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-16

Matrix: Solid
Percent Solids: 82.2

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	**0.14**	**J**	0.36	0.095	ug/Kg	☼	07/27/18 10:32	08/06/18 06:19	1
Perfluorooctanoic acid (PFOA)	**0.25**	**J**	0.36	0.12	ug/Kg	☼	07/27/18 10:32	08/06/18 06:19	1
Perfluorononanoic acid (PFNA)	**0.17**	**J**	0.36	0.098	ug/Kg	☼	07/27/18 10:32	08/06/18 06:19	1
Perfluorobutanesulfonic acid (PFBS)	0.22	U	0.49	0.072	ug/Kg	☼	07/27/18 10:32	08/06/18 06:19	1
Perfluorohexanesulfonic acid (PFHxS)	**0.59**		0.36	0.075	ug/Kg	☼	07/27/18 10:32	08/06/18 06:19	1
Perfluorooctanesulfonic acid (PFOS)	**10**		1.2	0.29	ug/Kg	☼	07/27/18 10:32	08/06/18 06:19	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*57*		*50 - 150*	*07/27/18 10:32*	*08/06/18 06:19*	*1*
13C4-PFHpA	*74*		*50 - 150*	*07/27/18 10:32*	*08/06/18 06:19*	*1*
13C4 PFOA	*73*		*50 - 150*	*07/27/18 10:32*	*08/06/18 06:19*	*1*
13C5 PFNA	*72*		*50 - 150*	*07/27/18 10:32*	*08/06/18 06:19*	*1*
18O2 PFHxS	*65*		*50 - 150*	*07/27/18 10:32*	*08/06/18 06:19*	*1*
13C4 PFOS	*63*		*50 - 150*	*07/27/18 10:32*	*08/06/18 06:19*	*1*

Client Sample ID: LIN01-SB1-02

Date Collected: 07/18/18 16:25
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-17

Matrix: Solid
Percent Solids: 75.2

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.10	J	0.39	0.10	ug/Kg	☼	07/27/18 10:33	08/06/18 06:27	1
Perfluorooctanoic acid (PFOA)	0.58		0.39	0.13	ug/Kg	☼	07/27/18 10:33	08/06/18 06:27	1
Perfluorononanoic acid (PFNA)	1.3		0.39	0.11	ug/Kg	☼	07/27/18 10:33	08/06/18 06:27	1
Perfluorobutanesulfonic acid (PFBS)	0.24	U	0.52	0.077	ug/Kg	☼	07/27/18 10:33	08/06/18 06:27	1
Perfluorohexanesulfonic acid (PFHxS)	2.5		0.39	0.081	ug/Kg	☼	07/27/18 10:33	08/06/18 06:27	1
Perfluorooctanesulfonic acid (PFOS)	220	E	1.3	0.31	ug/Kg	☼	07/27/18 10:33	08/06/18 06:27	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*70*		*50 - 150*	*07/27/18 10:33*	*08/06/18 06:27*	*1*
13C4-PFHpA	*89*		*50 - 150*	*07/27/18 10:33*	*08/06/18 06:27*	*1*
13C4 PFOA	*83*		*50 - 150*	*07/27/18 10:33*	*08/06/18 06:27*	*1*
13C5 PFNA	*47*	*Q*	*50 - 150*	*07/27/18 10:33*	*08/06/18 06:27*	*1*
18O2 PFHxS	*77*		*50 - 150*	*07/27/18 10:33*	*08/06/18 06:27*	*1*
13C4 PFOS	*54*		*50 - 150*	*07/27/18 10:33*	*08/06/18 06:27*	*1*

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	5.2	U	7.9	2.0	ug/Kg	☼	07/27/18 10:33	08/07/18 17:21	20
Perfluorooctanoic acid (PFOA)	5.2	U	7.9	2.6	ug/Kg	☼	07/27/18 10:33	08/07/18 17:21	20
Perfluorononanoic acid (PFNA)	5.2	U M	7.9	2.1	ug/Kg	☼	07/27/18 10:33	08/07/18 17:21	20
Perfluorobutanesulfonic acid (PFBS)	4.7	U	10	1.5	ug/Kg	☼	07/27/18 10:33	08/07/18 17:21	20
Perfluorohexanesulfonic acid (PFHxS)	2.8	J D	7.9	1.6	ug/Kg	☼	07/27/18 10:33	08/07/18 17:21	20
Perfluorooctanesulfonic acid (PFOS)	320	D	26	6.3	ug/Kg	☼	07/27/18 10:33	08/07/18 17:21	20

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*70*	*M*	*50 - 150*	*07/27/18 10:33*	*08/07/18 17:21*	*20*
13C4-PFHpA	*83*		*50 - 150*	*07/27/18 10:33*	*08/07/18 17:21*	*20*
13C4 PFOA	*84*		*50 - 150*	*07/27/18 10:33*	*08/07/18 17:21*	*20*
13C5 PFNA	*77*		*50 - 150*	*07/27/18 10:33*	*08/07/18 17:21*	*20*
18O2 PFHxS	*73*		*50 - 150*	*07/27/18 10:33*	*08/07/18 17:21*	*20*
13C4 PFOS	*73*		*50 - 150*	*07/27/18 10:33*	*08/07/18 17:21*	*20*

Client Sample ID: LIN01-SB1-02D

Date Collected: 07/18/18 16:25
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-18

Matrix: Solid
Percent Solids: 71.5

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.28	U	0.42	0.11	ug/Kg	☼	07/27/18 10:33	08/06/18 06:35	1
Perfluorooctanoic acid (PFOA)	0.53	M	0.42	0.14	ug/Kg	☼	07/27/18 10:33	08/06/18 06:35	1
Perfluorononanoic acid (PFNA)	1.0		0.42	0.11	ug/Kg	☼	07/27/18 10:33	08/06/18 06:35	1
Perfluorobutanesulfonic acid (PFBS)	0.25	U	0.56	0.082	ug/Kg	☼	07/27/18 10:33	08/06/18 06:35	1
Perfluorohexanesulfonic acid (PFHxS)	2.3		0.42	0.086	ug/Kg	☼	07/27/18 10:33	08/06/18 06:35	1
Perfluorooctanesulfonic acid (PFOS)	220	E	1.4	0.33	ug/Kg	☼	07/27/18 10:33	08/06/18 06:35	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*66*		*50 - 150*	*07/27/18 10:33*	*08/06/18 06:35*	*1*
13C4-PFHpA	*83*		*50 - 150*	*07/27/18 10:33*	*08/06/18 06:35*	*1*

Client Sample ID: LIN01-SB1-02D

Lab Sample ID: 320-41403-18

Date Collected: 07/18/18 16:25
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 71.5

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOA	*78*		*50 - 150*	*07/27/18 10:33*	*08/06/18 06:35*	*1*
13C5 PFNA	*47*	*Q*	*50 - 150*	*07/27/18 10:33*	*08/06/18 06:35*	*1*
18O2 PFHxS	*74*		*50 - 150*	*07/27/18 10:33*	*08/06/18 06:35*	*1*
13C4 PFOS	*52*		*50 - 150*	*07/27/18 10:33*	*08/06/18 06:35*	*1*

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	5.6	U	8.4	2.2	ug/Kg	☼	07/27/18 10:33	08/07/18 17:29	20
Perfluorooctanoic acid (PFOA)	5.6	U M	8.4	2.8	ug/Kg	☼	07/27/18 10:33	08/07/18 17:29	20
Perfluorononanoic acid (PFNA)	5.6	U	8.4	2.3	ug/Kg	☼	07/27/18 10:33	08/07/18 17:29	20
Perfluorobutanesulfonic acid (PFBS)	5.0	U	11	1.6	ug/Kg	☼	07/27/18 10:33	08/07/18 17:29	20
Perfluorohexanesulfonic acid (PFHxS)	**2.3**	**J D**	8.4	1.7	ug/Kg	☼	07/27/18 10:33	08/07/18 17:29	20
Perfluorooctanesulfonic acid (PFOS)	**330**	**D**	28	6.7	ug/Kg	☼	07/27/18 10:33	08/07/18 17:29	20

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*96*		*50 - 150*	*07/27/18 10:33*	*08/07/18 17:29*	*20*
13C4-PFHpA	*77*		*50 - 150*	*07/27/18 10:33*	*08/07/18 17:29*	*20*
13C4 PFOA	*80*		*50 - 150*	*07/27/18 10:33*	*08/07/18 17:29*	*20*
13C5 PFNA	*76*		*50 - 150*	*07/27/18 10:33*	*08/07/18 17:29*	*20*
18O2 PFHxS	*72*		*50 - 150*	*07/27/18 10:33*	*08/07/18 17:29*	*20*
13C4 PFOS	*69*		*50 - 150*	*07/27/18 10:33*	*08/07/18 17:29*	*20*

Client Sample ID: LIN05-SB2-01

Lab Sample ID: 320-41403-19

Date Collected: 07/18/18 17:00
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 76.3

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	**0.20**	**J**	0.39	0.10	ug/Kg	☼	07/27/18 10:33	08/06/18 06:43	1
Perfluorooctanoic acid (PFOA)	**0.45**		0.39	0.13	ug/Kg	☼	07/27/18 10:33	08/06/18 06:43	1
Perfluorononanoic acid (PFNA)	**0.52**		0.39	0.11	ug/Kg	☼	07/27/18 10:33	08/06/18 06:43	1
Perfluorobutanesulfonic acid (PFBS)	**0.46**	**J**	0.52	0.077	ug/Kg	☼	07/27/18 10:33	08/06/18 06:43	1
Perfluorohexanesulfonic acid (PFHxS)	**2.1**		0.39	0.080	ug/Kg	☼	07/27/18 10:33	08/06/18 06:43	1
Perfluorooctanesulfonic acid (PFOS)	**9.2**		1.3	0.31	ug/Kg	☼	07/27/18 10:33	08/06/18 06:43	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*62*		*50 - 150*	*07/27/18 10:33*	*08/06/18 06:43*	*1*
13C4-PFHpA	*73*		*50 - 150*	*07/27/18 10:33*	*08/06/18 06:43*	*1*
13C4 PFOA	*72*		*50 - 150*	*07/27/18 10:33*	*08/06/18 06:43*	*1*
13C5 PFNA	*71*		*50 - 150*	*07/27/18 10:33*	*08/06/18 06:43*	*1*
18O2 PFHxS	*68*		*50 - 150*	*07/27/18 10:33*	*08/06/18 06:43*	*1*
13C4 PFOS	*63*		*50 - 150*	*07/27/18 10:33*	*08/06/18 06:43*	*1*

Client Sample ID: LIN05-SB2-02

Date Collected: 07/18/18 17:25
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-20

Matrix: Solid
Percent Solids: 75.2

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.26	U	0.39	0.10	ug/Kg	☼	07/31/18 10:42	08/06/18 08:01	1
Perfluorooctanoic acid (PFOA)	0.26	U	0.39	0.13	ug/Kg	☼	07/31/18 10:42	08/06/18 08:01	1
Perfluorononanoic acid (PFNA)	0.26	U	0.39	0.11	ug/Kg	☼	07/31/18 10:42	08/06/18 08:01	1
Perfluorobutanesulfonic acid (PFBS)	0.24	U	0.52	0.077	ug/Kg	☼	07/31/18 10:42	08/06/18 08:01	1
Perfluorohexanesulfonic acid (PFHxS)	0.087	J	0.39	0.081	ug/Kg	☼	07/31/18 10:42	08/06/18 08:01	1
Perfluorooctanesulfonic acid (PFOS)	0.66	U	1.3	0.31	ug/Kg	☼	07/31/18 10:42	08/06/18 08:01	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*63*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:01*	*1*
13C4-PFHpA	*83*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:01*	*1*
13C4 PFOA	*75*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:01*	*1*
13C5 PFNA	*84*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:01*	*1*
18O2 PFHxS	*75*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:01*	*1*
13C4 PFOS	*70*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:01*	*1*

Client Sample ID: ER-01

Date Collected: 07/18/18 16:05
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-21

Matrix: Water

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	1.3	U	1.7	0.53	ng/L		08/01/18 08:32	08/03/18 21:23	1
Perfluorooctanoic acid (PFOA)	1.3	U Q	1.7	0.47	ng/L		08/01/18 08:32	08/03/18 21:23	1
Perfluorononanoic acid (PFNA)	1.3	U	1.7	0.45	ng/L		08/01/18 08:32	08/03/18 21:23	1
Perfluorobutanesulfonic acid (PFBS)	0.87	U M Q	1.7	0.40	ng/L		08/01/18 08:32	08/03/18 21:23	1
Perfluorohexanesulfonic acid (PFHxS)	0.33	J M	1.7	0.33	ng/L		08/01/18 08:32	08/03/18 21:23	1
Perfluorooctanesulfonic acid (PFOS)	1.1	J Q	3.5	0.95	ng/L		08/01/18 08:32	08/03/18 21:23	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*81*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:23*	*1*
13C4-PFHpA	*92*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:23*	*1*
13C4 PFOA	*95*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:23*	*1*
13C5 PFNA	*93*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:23*	*1*
18O2 PFHxS	*84*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:23*	*1*
13C4 PFOS	*89*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:23*	*1*

Client Sample ID: FB-01

Date Collected: 07/19/18 09:25
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-22

Matrix: Water

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	2.8		1.9	0.58	ng/L		08/01/18 08:32	08/03/18 21:31	1
Perfluorooctanoic acid (PFOA)	2.1	M Q	1.9	0.51	ng/L		08/01/18 08:32	08/03/18 21:31	1
Perfluorononanoic acid (PFNA)	0.78	J	1.9	0.49	ng/L		08/01/18 08:32	08/03/18 21:31	1
Perfluorobutanesulfonic acid (PFBS)	1.1	J Q	1.9	0.43	ng/L		08/01/18 08:32	08/03/18 21:31	1
Perfluorohexanesulfonic acid (PFHxS)	4.3		1.9	0.36	ng/L		08/01/18 08:32	08/03/18 21:31	1

Client Sample ID: FB-01

Lab Sample ID: 320-41403-22
Date Collected: 07/19/18 09:25
Matrix: Water
Date Received: 07/24/18 09:00

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	16	Q	3.8	1.0	ng/L		08/01/18 08:32	08/03/18 21:31	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*73*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:31*	*1*
13C4-PFHpA	*87*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:31*	*1*
13C4 PFOA	*86*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:31*	*1*
13C5 PFNA	*91*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:31*	*1*
18O2 PFHxS	*79*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:31*	*1*
13C4 PFOS	*76*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:31*	*1*

Client Sample ID: LIN09-SB2-01

Lab Sample ID: 320-41403-24
Date Collected: 07/19/18 12:20
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 74.1

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.55	M	0.40	0.10	ug/Kg	☼	07/31/18 10:42	08/06/18 08:09	1
Perfluorooctanoic acid (PFOA)	0.72		0.40	0.13	ug/Kg	☼	07/31/18 10:42	08/06/18 08:09	1
Perfluorononanoic acid (PFNA)	0.54		0.40	0.11	ug/Kg	☼	07/31/18 10:42	08/06/18 08:09	1
Perfluorobutanesulfonic acid (PFBS)	0.21	J	0.53	0.078	ug/Kg	☼	07/31/18 10:42	08/06/18 08:09	1
Perfluorohexanesulfonic acid (PFHxS)	2.3		0.40	0.082	ug/Kg	☼	07/31/18 10:42	08/06/18 08:09	1
Perfluorooctanesulfonic acid (PFOS)	8.6		1.3	0.32	ug/Kg	☼	07/31/18 10:42	08/06/18 08:09	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*60*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:09*	*1*
13C4-PFHpA	*81*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:09*	*1*
13C4 PFOA	*73*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:09*	*1*
13C5 PFNA	*77*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:09*	*1*
18O2 PFHxS	*70*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:09*	*1*
13C4 PFOS	*65*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:09*	*1*

Client Sample ID: LIN09-SB2-02

Lab Sample ID: 320-41403-25
Date Collected: 07/19/18 12:25
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 74.7

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.27	U	0.40	0.10	ug/Kg	☼	07/31/18 10:42	08/06/18 08:16	1
Perfluorooctanoic acid (PFOA)	0.27	U	0.40	0.13	ug/Kg	☼	07/31/18 10:42	08/06/18 08:16	1
Perfluorononanoic acid (PFNA)	0.27	U	0.40	0.11	ug/Kg	☼	07/31/18 10:42	08/06/18 08:16	1
Perfluorobutanesulfonic acid (PFBS)	0.24	U	0.53	0.079	ug/Kg	☼	07/31/18 10:42	08/06/18 08:16	1
Perfluorohexanesulfonic acid (PFHxS)	0.12	J	0.40	0.083	ug/Kg	☼	07/31/18 10:42	08/06/18 08:16	1
Perfluorooctanesulfonic acid (PFOS)	0.67	U M	1.3	0.32	ug/Kg	☼	07/31/18 10:42	08/06/18 08:16	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*69*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:16*	*1*
13C4-PFHpA	*85*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:16*	*1*
13C4 PFOA	*78*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:16*	*1*

Client Sample ID: LIN09-SB2-02

Date Collected: 07/19/18 12:25
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-25

Matrix: Solid
Percent Solids: 74.7

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C5 PFNA	80		50 - 150	07/31/18 10:42	08/06/18 08:16	1
18O2 PFHxS	75		50 - 150	07/31/18 10:42	08/06/18 08:16	1
13C4 PFOS	72		50 - 150	07/31/18 10:42	08/06/18 08:16	1

Client Sample ID: LIN09-SB1-01

Date Collected: 07/19/18 12:40
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-26

Matrix: Solid
Percent Solids: 77.9

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.64		0.38	0.099	ug/Kg	☼	07/31/18 10:42	08/06/18 08:24	1
Perfluorooctanoic acid (PFOA)	0.61		0.38	0.13	ug/Kg	☼	07/31/18 10:42	08/06/18 08:24	1
Perfluorononanoic acid (PFNA)	0.20	J	0.38	0.10	ug/Kg	☼	07/31/18 10:42	08/06/18 08:24	1
Perfluorobutanesulfonic acid (PFBS)	0.16	J	0.51	0.075	ug/Kg	☼	07/31/18 10:42	08/06/18 08:24	1
Perfluorohexanesulfonic acid (PFHxS)	1.6		0.38	0.079	ug/Kg	☼	07/31/18 10:42	08/06/18 08:24	1
Perfluorooctanesulfonic acid (PFOS)	6.3		1.3	0.31	ug/Kg	☼	07/31/18 10:42	08/06/18 08:24	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-PFBS	58		50 - 150	07/31/18 10:42	08/06/18 08:24	1
13C4-PFHpA	79		50 - 150	07/31/18 10:42	08/06/18 08:24	1
13C4 PFOA	75		50 - 150	07/31/18 10:42	08/06/18 08:24	1
13C5 PFNA	85		50 - 150	07/31/18 10:42	08/06/18 08:24	1
18O2 PFHxS	63		50 - 150	07/31/18 10:42	08/06/18 08:24	1
13C4 PFOS	66		50 - 150	07/31/18 10:42	08/06/18 08:24	1

Client Sample ID: LIN09-SB1-02

Date Collected: 07/19/18 12:45
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-27

Matrix: Solid
Percent Solids: 75.2

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.15	J	0.39	0.10	ug/Kg	☼	07/31/18 10:42	08/06/18 08:32	1
Perfluorooctanoic acid (PFOA)	0.18	J M	0.39	0.13	ug/Kg	☼	07/31/18 10:42	08/06/18 08:32	1
Perfluorononanoic acid (PFNA)	0.26	U	0.39	0.11	ug/Kg	☼	07/31/18 10:42	08/06/18 08:32	1
Perfluorobutanesulfonic acid (PFBS)	0.54		0.52	0.077	ug/Kg	☼	07/31/18 10:42	08/06/18 08:32	1
Perfluorohexanesulfonic acid (PFHxS)	1.9		0.39	0.081	ug/Kg	☼	07/31/18 10:42	08/06/18 08:32	1
Perfluorooctanesulfonic acid (PFOS)	1.6		1.3	0.31	ug/Kg	☼	07/31/18 10:42	08/06/18 08:32	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-PFBS	61		50 - 150	07/31/18 10:42	08/06/18 08:32	1
13C4-PFHpA	86		50 - 150	07/31/18 10:42	08/06/18 08:32	1
13C4 PFOA	79		50 - 150	07/31/18 10:42	08/06/18 08:32	1
13C5 PFNA	84		50 - 150	07/31/18 10:42	08/06/18 08:32	1
18O2 PFHxS	71		50 - 150	07/31/18 10:42	08/06/18 08:32	1
13C4 PFOS	71		50 - 150	07/31/18 10:42	08/06/18 08:32	1

Client Sample ID: LIN05-SB3-01

Date Collected: 07/19/18 13:00
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-28

Matrix: Solid
Percent Solids: 75.2

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.46		0.40	0.10	ug/Kg	☼	07/31/18 10:42	08/06/18 08:40	1
Perfluorooctanoic acid (PFOA)	2.7		0.40	0.13	ug/Kg	☼	07/31/18 10:42	08/06/18 08:40	1
Perfluorononanoic acid (PFNA)	0.71		0.40	0.11	ug/Kg	☼	07/31/18 10:42	08/06/18 08:40	1
Perfluorobutanesulfonic acid (PFBS)	0.24	J	0.53	0.078	ug/Kg	☼	07/31/18 10:42	08/06/18 08:40	1
Perfluorohexanesulfonic acid (PFHxS)	4.7		0.40	0.082	ug/Kg	☼	07/31/18 10:42	08/06/18 08:40	1
Perfluorooctanesulfonic acid (PFOS)	18		1.3	0.32	ug/Kg	☼	07/31/18 10:42	08/06/18 08:40	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*55*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:40*	*1*
13C4-PFHpA	*78*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:40*	*1*
13C4 PFOA	*73*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:40*	*1*
13C5 PFNA	*73*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:40*	*1*
18O2 PFHxS	*65*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:40*	*1*
13C4 PFOS	*61*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:40*	*1*

Client Sample ID: LIN05-SB3-01D

Date Collected: 07/19/18 13:00
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-29

Matrix: Solid
Percent Solids: 79.6

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.53		0.37	0.096	ug/Kg	☼	07/31/18 10:42	08/06/18 08:48	1
Perfluorooctanoic acid (PFOA)	2.6		0.37	0.12	ug/Kg	☼	07/31/18 10:42	08/06/18 08:48	1
Perfluorononanoic acid (PFNA)	0.50		0.37	0.10	ug/Kg	☼	07/31/18 10:42	08/06/18 08:48	1
Perfluorobutanesulfonic acid (PFBS)	0.31	J	0.49	0.073	ug/Kg	☼	07/31/18 10:42	08/06/18 08:48	1
Perfluorohexanesulfonic acid (PFHxS)	5.4		0.37	0.076	ug/Kg	☼	07/31/18 10:42	08/06/18 08:48	1
Perfluorooctanesulfonic acid (PFOS)	17		1.2	0.30	ug/Kg	☼	07/31/18 10:42	08/06/18 08:48	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*55*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:48*	*1*
13C4-PFHpA	*75*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:48*	*1*
13C4 PFOA	*68*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:48*	*1*
13C5 PFNA	*72*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:48*	*1*
18O2 PFHxS	*62*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:48*	*1*
13C4 PFOS	*62*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:48*	*1*

Client Sample ID: LIN05-SB3-02

Date Collected: 07/19/18 13:05
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-30

Matrix: Solid
Percent Solids: 79.0

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.25	U	0.37	0.097	ug/Kg	☼	07/31/18 10:42	08/06/18 08:56	1
Perfluorooctanoic acid (PFOA)	0.25	U M	0.37	0.12	ug/Kg	☼	07/31/18 10:42	08/06/18 08:56	1
Perfluorononanoic acid (PFNA)	0.25	U	0.37	0.10	ug/Kg	☼	07/31/18 10:42	08/06/18 08:56	1
Perfluorobutanesulfonic acid (PFBS)	0.31	J	0.50	0.074	ug/Kg	☼	07/31/18 10:42	08/06/18 08:56	1

Client Sample ID: LIN05-SB3-02

Date Collected: 07/19/18 13:05
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-30

Matrix: Solid
Percent Solids: 79.0

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanesulfonic acid (PFHxS)	0.99		0.37	0.077	ug/Kg	☼	07/31/18 10:42	08/06/18 08:56	1
Perfluorooctanesulfonic acid (PFOS)	0.76	J	1.2	0.30	ug/Kg	☼	07/31/18 10:42	08/06/18 08:56	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*62*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:56*	*1*
13C4-PFHpA	*81*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:56*	*1*
13C4 PFOA	*75*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:56*	*1*
13C5 PFNA	*82*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:56*	*1*
18O2 PFHxS	*68*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:56*	*1*
13C4 PFOS	*71*		*50 - 150*	*07/31/18 10:42*	*08/06/18 08:56*	*1*

Client Sample ID: ER-02

Date Collected: 07/19/18 13:15
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-31

Matrix: Water

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	1.3	U	1.8	0.53	ng/L		08/01/18 08:32	08/03/18 21:38	1
Perfluorooctanoic acid (PFOA)	1.3	U Q	1.8	0.47	ng/L		08/01/18 08:32	08/03/18 21:38	1
Perfluorononanoic acid (PFNA)	1.3	U	1.8	0.46	ng/L		08/01/18 08:32	08/03/18 21:38	1
Perfluorobutanesulfonic acid (PFBS)	0.88	U Q	1.8	0.40	ng/L		08/01/18 08:32	08/03/18 21:38	1
Perfluorohexanesulfonic acid (PFHxS)	0.88	U	1.8	0.33	ng/L		08/01/18 08:32	08/03/18 21:38	1
Perfluorooctanesulfonic acid (PFOS)	2.6	U M Q	3.5	0.96	ng/L		08/01/18 08:32	08/03/18 21:38	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*81*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:38*	*1*
13C4-PFHpA	*82*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:38*	*1*
13C4 PFOA	*95*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:38*	*1*
13C5 PFNA	*85*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:38*	*1*
18O2 PFHxS	*79*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:38*	*1*
13C4 PFOS	*77*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:38*	*1*

Client Sample ID: ER-03

Date Collected: 07/19/18 15:35
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-32

Matrix: Water

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	2.1	U	2.7	0.83	ng/L		08/01/18 08:32	08/03/18 21:46	1
Perfluorooctanoic acid (PFOA)	2.1	U Q	2.7	0.74	ng/L		08/01/18 08:32	08/03/18 21:46	1
Perfluorononanoic acid (PFNA)	2.1	U	2.7	0.71	ng/L		08/01/18 08:32	08/03/18 21:46	1
Perfluorobutanesulfonic acid (PFBS)	1.4	U Q	2.7	0.63	ng/L		08/01/18 08:32	08/03/18 21:46	1
Perfluorohexanesulfonic acid (PFHxS)	2.2	J M	2.7	0.52	ng/L		08/01/18 08:32	08/03/18 21:46	1
Perfluorooctanesulfonic acid (PFOS)	25	Q	5.5	1.5	ng/L		08/01/18 08:32	08/03/18 21:46	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*50*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:46*	*1*
13C4-PFHpA	*55*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:46*	*1*
13C4 PFOA	*59*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:46*	*1*

Client Sample ID: ER-03

Date Collected: 07/19/18 15:35
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-32

Matrix: Water

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C5 PFNA	*58*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:46*	*1*
18O2 PFHxS	*51*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:46*	*1*
13C4 PFOS	*47*	*Q*	*50 - 150*	*08/01/18 08:32*	*08/03/18 21:46*	*1*

Client Sample ID: LIN05-SB1-01

Date Collected: 07/19/18 13:20
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-33

Matrix: Solid
Percent Solids: 82.8

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.59		0.36	0.093	ug/Kg	☼	07/31/18 10:42	08/06/18 09:11	1
Perfluorooctanoic acid (PFOA)	1.6		0.36	0.12	ug/Kg	☼	07/31/18 10:42	08/06/18 09:11	1
Perfluorononanoic acid (PFNA)	2.2		0.36	0.097	ug/Kg	☼	07/31/18 10:42	08/06/18 09:11	1
Perfluorobutanesulfonic acid (PFBS)	1.3		0.48	0.070	ug/Kg	☼	07/31/18 10:42	08/06/18 09:11	1
Perfluorohexanesulfonic acid (PFHxS)	21		0.36	0.074	ug/Kg	☼	07/31/18 10:42	08/06/18 09:11	1
Perfluorooctanesulfonic acid (PFOS)	480	E	1.2	0.29	ug/Kg	☼	07/31/18 10:42	08/06/18 09:11	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*52*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:11*	*1*
13C4-PFHpA	*77*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:11*	*1*
13C4 PFOA	*75*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:11*	*1*
13C5 PFNA	*40*	*Q*	*50 - 150*	*07/31/18 10:42*	*08/06/18 09:11*	*1*
18O2 PFHxS	*60*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:11*	*1*
13C4 PFOS	*31*	*Q*	*50 - 150*	*07/31/18 10:42*	*08/06/18 09:11*	*1*

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	24	U	36	9.3	ug/Kg	☼	07/31/18 10:42	08/07/18 20:53	100
Perfluorooctanoic acid (PFOA)	24	U	36	12	ug/Kg	☼	07/31/18 10:42	08/07/18 20:53	100
Perfluorononanoic acid (PFNA)	24	U	36	9.7	ug/Kg	☼	07/31/18 10:42	08/07/18 20:53	100
Perfluorobutanesulfonic acid (PFBS)	21	U	48	7.0	ug/Kg	☼	07/31/18 10:42	08/07/18 20:53	100
Perfluorohexanesulfonic acid (PFHxS)	20	J D	36	7.4	ug/Kg	☼	07/31/18 10:42	08/07/18 20:53	100
Perfluorooctanesulfonic acid (PFOS)	770	D	120	29	ug/Kg	☼	07/31/18 10:42	08/07/18 20:53	100

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*148*	*M*	*50 - 150*	*07/31/18 10:42*	*08/07/18 20:53*	*100*
13C4-PFHpA	*80*		*50 - 150*	*07/31/18 10:42*	*08/07/18 20:53*	*100*
13C4 PFOA	*82*		*50 - 150*	*07/31/18 10:42*	*08/07/18 20:53*	*100*
13C5 PFNA	*74*		*50 - 150*	*07/31/18 10:42*	*08/07/18 20:53*	*100*
18O2 PFHxS	*77*		*50 - 150*	*07/31/18 10:42*	*08/07/18 20:53*	*100*
13C4 PFOS	*74*		*50 - 150*	*07/31/18 10:42*	*08/07/18 20:53*	*100*

Client Sample ID: LIN05-SB1-02

Date Collected: 07/19/18 13:25
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-34

Matrix: Solid
Percent Solids: 77.2

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.13	J	0.38	0.099	ug/Kg	☼	07/31/18 10:42	08/06/18 09:19	1
Perfluorooctanoic acid (PFOA)	0.47		0.38	0.13	ug/Kg	☼	07/31/18 10:42	08/06/18 09:19	1
Perfluorononanoic acid (PFNA)	0.25	U M	0.38	0.10	ug/Kg	☼	07/31/18 10:42	08/06/18 09:19	1
Perfluorobutanesulfonic acid (PFBS)	0.27	J	0.51	0.075	ug/Kg	☼	07/31/18 10:42	08/06/18 09:19	1
Perfluorohexanesulfonic acid (PFHxS)	2.3		0.38	0.079	ug/Kg	☼	07/31/18 10:42	08/06/18 09:19	1
Perfluorooctanesulfonic acid (PFOS)	1.6		1.3	0.30	ug/Kg	☼	07/31/18 10:42	08/06/18 09:19	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*62*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:19*	*1*
13C4-PFHpA	*89*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:19*	*1*
13C4 PFOA	*82*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:19*	*1*
13C5 PFNA	*88*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:19*	*1*
18O2 PFHxS	*72*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:19*	*1*
13C4 PFOS	*70*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:19*	*1*

Client Sample ID: LIN08-SB2-01

Date Collected: 07/20/18 10:05
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-35

Matrix: Solid
Percent Solids: 80.7

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.24	U	0.37	0.095	ug/Kg	☼	07/31/18 10:42	08/06/18 09:27	1
Perfluorooctanoic acid (PFOA)	0.24	U M	0.37	0.12	ug/Kg	☼	07/31/18 10:42	08/06/18 09:27	1
Perfluorononanoic acid (PFNA)	0.24	U	0.37	0.099	ug/Kg	☼	07/31/18 10:42	08/06/18 09:27	1
Perfluorobutanesulfonic acid (PFBS)	0.22	U	0.49	0.072	ug/Kg	☼	07/31/18 10:42	08/06/18 09:27	1
Perfluorohexanesulfonic acid (PFHxS)	0.16	J	0.37	0.076	ug/Kg	☼	07/31/18 10:42	08/06/18 09:27	1
Perfluorooctanesulfonic acid (PFOS)	1.3		1.2	0.29	ug/Kg	☼	07/31/18 10:42	08/06/18 09:27	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*66*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:27*	*1*
13C4-PFHpA	*83*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:27*	*1*
13C4 PFOA	*76*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:27*	*1*
13C5 PFNA	*84*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:27*	*1*
18O2 PFHxS	*75*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:27*	*1*
13C4 PFOS	*73*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:27*	*1*

Client Sample ID: LIN08-SB2-02

Date Collected: 07/20/18 10:10
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-36

Matrix: Solid
Percent Solids: 72.5

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.28	U	0.41	0.11	ug/Kg	☼	07/31/18 10:42	08/06/18 09:35	1
Perfluorooctanoic acid (PFOA)	0.69		0.41	0.14	ug/Kg	☼	07/31/18 10:42	08/06/18 09:35	1
Perfluorononanoic acid (PFNA)	0.28	U	0.41	0.11	ug/Kg	☼	07/31/18 10:42	08/06/18 09:35	1
Perfluorobutanesulfonic acid (PFBS)	0.25	U	0.55	0.081	ug/Kg	☼	07/31/18 10:42	08/06/18 09:35	1
Perfluorohexanesulfonic acid (PFHxS)	0.74		0.41	0.086	ug/Kg	☼	07/31/18 10:42	08/06/18 09:35	1

Client Sample ID: LIN08-SB2-02

Lab Sample ID: 320-41403-36
Date Collected: 07/20/18 10:10
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 72.5

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	3.3	J1	1.4	0.33	ug/Kg	☼	07/31/18 10:42	08/06/18 09:35	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*62*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:35*	*1*
13C4-PFHpA	*83*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:35*	*1*
13C4 PFOA	*81*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:35*	*1*
13C5 PFNA	*83*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:35*	*1*
18O2 PFHxS	*72*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:35*	*1*
13C4 PFOS	*71*		*50 - 150*	*07/31/18 10:42*	*08/06/18 09:35*	*1*

Client Sample ID: LIN07-SB1-01

Lab Sample ID: 320-41403-37
Date Collected: 07/20/18 10:20
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 76.2

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.38	J	0.39	0.10	ug/Kg	☼	07/31/18 10:42	08/06/18 13:23	1
Perfluorooctanoic acid (PFOA)	0.41		0.39	0.13	ug/Kg	☼	07/31/18 10:42	08/06/18 13:23	1
Perfluorononanoic acid (PFNA)	0.14	J	0.39	0.10	ug/Kg	☼	07/31/18 10:42	08/06/18 13:23	1
Perfluorobutanesulfonic acid (PFBS)	0.23	U	0.52	0.076	ug/Kg	☼	07/31/18 10:42	08/06/18 13:23	1
Perfluorohexanesulfonic acid (PFHxS)	1.7		0.39	0.080	ug/Kg	☼	07/31/18 10:42	08/06/18 13:23	1
Perfluorooctanesulfonic acid (PFOS)	4.3		1.3	0.31	ug/Kg	☼	07/31/18 10:42	08/06/18 13:23	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*71*		*50 - 150*	*07/31/18 10:42*	*08/06/18 13:23*	*1*
13C4-PFHpA	*74*		*50 - 150*	*07/31/18 10:42*	*08/06/18 13:23*	*1*
13C4 PFOA	*78*		*50 - 150*	*07/31/18 10:42*	*08/06/18 13:23*	*1*
13C5 PFNA	*78*		*50 - 150*	*07/31/18 10:42*	*08/06/18 13:23*	*1*
18O2 PFHxS	*72*		*50 - 150*	*07/31/18 10:42*	*08/06/18 13:23*	*1*
13C4 PFOS	*70*		*50 - 150*	*07/31/18 10:42*	*08/06/18 13:23*	*1*

Client Sample ID: LIN07-SB1-02

Lab Sample ID: 320-41403-38
Date Collected: 07/20/18 10:25
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 77.8

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.18	J	0.39	0.10	ug/Kg	☼	07/31/18 10:42	08/06/18 13:30	1
Perfluorooctanoic acid (PFOA)	0.26	U M	0.39	0.13	ug/Kg	☼	07/31/18 10:42	08/06/18 13:30	1
Perfluorononanoic acid (PFNA)	0.26	U	0.39	0.10	ug/Kg	☼	07/31/18 10:42	08/06/18 13:30	1
Perfluorobutanesulfonic acid (PFBS)	0.17	J	0.51	0.076	ug/Kg	☼	07/31/18 10:42	08/06/18 13:30	1
Perfluorohexanesulfonic acid (PFHxS)	5.9		0.39	0.080	ug/Kg	☼	07/31/18 10:42	08/06/18 13:30	1
Perfluorooctanesulfonic acid (PFOS)	0.64	U M	1.3	0.31	ug/Kg	☼	07/31/18 10:42	08/06/18 13:30	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*65*		*50 - 150*	*07/31/18 10:42*	*08/06/18 13:30*	*1*
13C4-PFHpA	*72*		*50 - 150*	*07/31/18 10:42*	*08/06/18 13:30*	*1*
13C4 PFOA	*74*		*50 - 150*	*07/31/18 10:42*	*08/06/18 13:30*	*1*

Client Sample ID: LIN07-SB1-02

Date Collected: 07/20/18 10:25
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-38

Matrix: Solid
Percent Solids: 77.8

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C5 PFNA	74		50 - 150	07/31/18 10:42	08/06/18 13:30	1
18O2 PFHxS	70		50 - 150	07/31/18 10:42	08/06/18 13:30	1
13C4 PFOS	68		50 - 150	07/31/18 10:42	08/06/18 13:30	1

Client Sample ID: LIN07-SB1-02D

Date Collected: 07/20/18 10:25
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-39

Matrix: Solid
Percent Solids: 78.2

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.16	J	0.38	0.098	ug/Kg	☼	07/31/18 10:42	08/06/18 13:38	1
Perfluorooctanoic acid (PFOA)	0.18	J M	0.38	0.13	ug/Kg	☼	07/31/18 10:42	08/06/18 13:38	1
Perfluorononanoic acid (PFNA)	0.25	U	0.38	0.10	ug/Kg	☼	07/31/18 10:42	08/06/18 13:38	1
Perfluorobutanesulfonic acid (PFBS)	0.13	J	0.50	0.074	ug/Kg	☼	07/31/18 10:42	08/06/18 13:38	1
Perfluorohexanesulfonic acid (PFHxS)	5.0		0.38	0.078	ug/Kg	☼	07/31/18 10:42	08/06/18 13:38	1
Perfluorooctanesulfonic acid (PFOS)	2.6		1.3	0.30	ug/Kg	☼	07/31/18 10:42	08/06/18 13:38	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-PFBS	87		50 - 150	07/31/18 10:42	08/06/18 13:38	1
13C4-PFHpA	95		50 - 150	07/31/18 10:42	08/06/18 13:38	1
13C4 PFOA	95		50 - 150	07/31/18 10:42	08/06/18 13:38	1
13C5 PFNA	97		50 - 150	07/31/18 10:42	08/06/18 13:38	1
18O2 PFHxS	90		50 - 150	07/31/18 10:42	08/06/18 13:38	1
13C4 PFOS	91		50 - 150	07/31/18 10:42	08/06/18 13:38	1

Client Sample ID: LIN07-SB2-01

Date Collected: 07/20/18 10:40
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-40

Matrix: Solid
Percent Solids: 75.2

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.36	J	0.39	0.10	ug/Kg	☼	07/31/18 10:42	08/06/18 13:46	1
Perfluorooctanoic acid (PFOA)	0.46	M	0.39	0.13	ug/Kg	☼	07/31/18 10:42	08/06/18 13:46	1
Perfluorononanoic acid (PFNA)	0.19	J	0.39	0.11	ug/Kg	☼	07/31/18 10:42	08/06/18 13:46	1
Perfluorobutanesulfonic acid (PFBS)	0.24	U	0.52	0.077	ug/Kg	☼	07/31/18 10:42	08/06/18 13:46	1
Perfluorohexanesulfonic acid (PFHxS)	1.6		0.39	0.081	ug/Kg	☼	07/31/18 10:42	08/06/18 13:46	1
Perfluorooctanesulfonic acid (PFOS)	9.6		1.3	0.31	ug/Kg	☼	07/31/18 10:42	08/06/18 13:46	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-PFBS	51		50 - 150	07/31/18 10:42	08/06/18 13:46	1
13C4-PFHpA	58		50 - 150	07/31/18 10:42	08/06/18 13:46	1
13C4 PFOA	59		50 - 150	07/31/18 10:42	08/06/18 13:46	1
13C5 PFNA	60		50 - 150	07/31/18 10:42	08/06/18 13:46	1
18O2 PFHxS	53		50 - 150	07/31/18 10:42	08/06/18 13:46	1
13C4 PFOS	56		50 - 150	07/31/18 10:42	08/06/18 13:46	1

Client Sample ID: LIN07-SB2-02

Date Collected: 07/20/18 11:00
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-41

Matrix: Solid
Percent Solids: 65.2

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.30	U M	0.45	0.12	ug/Kg	☼	07/31/18 10:42	08/06/18 14:02	1
Perfluorooctanoic acid (PFOA)	0.30	U M	0.45	0.15	ug/Kg	☼	07/31/18 10:42	08/06/18 14:02	1
Perfluorononanoic acid (PFNA)	0.30	U M	0.45	0.12	ug/Kg	☼	07/31/18 10:42	08/06/18 14:02	1
Perfluorobutanesulfonic acid (PFBS)	**1.8**		0.60	0.089	ug/Kg	☼	07/31/18 10:42	08/06/18 14:02	1
Perfluorohexanesulfonic acid (PFHxS)	**0.56**	**M**	0.45	0.094	ug/Kg	☼	07/31/18 10:42	08/06/18 14:02	1
Perfluorooctanesulfonic acid (PFOS)	0.76	U	1.5	0.36	ug/Kg	☼	07/31/18 10:42	08/06/18 14:02	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*71*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:02*	*1*
13C4-PFHpA	*75*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:02*	*1*
13C4 PFOA	*80*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:02*	*1*
13C5 PFNA	*78*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:02*	*1*
18O2 PFHxS	*76*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:02*	*1*
13C4 PFOS	*76*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:02*	*1*

Client Sample ID: LIN02-SB2-01

Date Collected: 07/20/18 11:25
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-42

Matrix: Solid
Percent Solids: 73.2

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	**0.55**		0.40	0.10	ug/Kg	☼	07/31/18 10:42	08/06/18 14:10	1
Perfluorooctanoic acid (PFOA)	**0.46**	**M**	0.40	0.13	ug/Kg	☼	07/31/18 10:42	08/06/18 14:10	1
Perfluorononanoic acid (PFNA)	0.27	U	0.40	0.11	ug/Kg	☼	07/31/18 10:42	08/06/18 14:10	1
Perfluorobutanesulfonic acid (PFBS)	0.24	U	0.54	0.079	ug/Kg	☼	07/31/18 10:42	08/06/18 14:10	1
Perfluorohexanesulfonic acid (PFHxS)	**0.47**		0.40	0.083	ug/Kg	☼	07/31/18 10:42	08/06/18 14:10	1
Perfluorooctanesulfonic acid (PFOS)	**1.9**		1.3	0.32	ug/Kg	☼	07/31/18 10:42	08/06/18 14:10	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*73*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:10*	*1*
13C4-PFHpA	*73*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:10*	*1*
13C4 PFOA	*74*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:10*	*1*
13C5 PFNA	*77*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:10*	*1*
18O2 PFHxS	*77*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:10*	*1*
13C4 PFOS	*74*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:10*	*1*

Client Sample ID: LIN02-SB2-02

Date Collected: 07/20/18 11:30
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-43

Matrix: Solid
Percent Solids: 74.5

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.26	U	0.40	0.10	ug/Kg	☼	07/31/18 10:42	08/06/18 14:17	1
Perfluorooctanoic acid (PFOA)	0.26	U M	0.40	0.13	ug/Kg	☼	07/31/18 10:42	08/06/18 14:17	1
Perfluorononanoic acid (PFNA)	0.26	U	0.40	0.11	ug/Kg	☼	07/31/18 10:42	08/06/18 14:17	1
Perfluorobutanesulfonic acid (PFBS)	**0.17**	**J**	0.53	0.078	ug/Kg	☼	07/31/18 10:42	08/06/18 14:17	1
Perfluorohexanesulfonic acid (PFHxS)	**0.13**	**J M**	0.40	0.082	ug/Kg	☼	07/31/18 10:42	08/06/18 14:17	1

Client Sample ID: LIN02-SB2-02

Lab Sample ID: 320-41403-43
Date Collected: 07/20/18 11:30
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 74.5

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	0.66	U	1.3	0.32	ug/Kg	☼	07/31/18 10:42	08/06/18 14:17	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*75*	*M*	*50 - 150*	*07/31/18 10:42*	*08/06/18 14:17*	*1*
13C4-PFHpA	*80*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:17*	*1*
13C4 PFOA	*79*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:17*	*1*
13C5 PFNA	*77*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:17*	*1*
18O2 PFHxS	*77*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:17*	*1*
13C4 PFOS	*76*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:17*	*1*

Client Sample ID: ER-04

Lab Sample ID: 320-41403-44
Date Collected: 07/20/18 11:35
Matrix: Water
Date Received: 07/24/18 09:00

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	1.6	U	2.1	0.65	ng/L		08/01/18 08:32	08/03/18 21:53	1
Perfluorooctanoic acid (PFOA)	1.6	U Q	2.1	0.57	ng/L		08/01/18 08:32	08/03/18 21:53	1
Perfluorononanoic acid (PFNA)	1.6	U	2.1	0.55	ng/L		08/01/18 08:32	08/03/18 21:53	1
Perfluorobutanesulfonic acid (PFBS)	1.1	U M Q	2.1	0.49	ng/L		08/01/18 08:32	08/03/18 21:53	1
Perfluorohexanesulfonic acid (PFHxS)	1.1	U M	2.1	0.40	ng/L		08/01/18 08:32	08/03/18 21:53	1
Perfluorooctanesulfonic acid (PFOS)	3.2	U M Q	4.3	1.2	ng/L		08/01/18 08:32	08/03/18 21:53	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*60*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:53*	*1*
13C4-PFHpA	*67*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:53*	*1*
13C4 PFOA	*71*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:53*	*1*
13C5 PFNA	*66*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:53*	*1*
18O2 PFHxS	*62*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:53*	*1*
13C4 PFOS	*63*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:53*	*1*

Client Sample ID: LIN08-SB1-01

Lab Sample ID: 320-41403-45
Date Collected: 07/20/18 11:45
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 74.7

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.20	J M	0.40	0.10	ug/Kg	☼	07/31/18 10:42	08/06/18 14:25	1
Perfluorooctanoic acid (PFOA)	0.69		0.40	0.13	ug/Kg	☼	07/31/18 10:42	08/06/18 14:25	1
Perfluorononanoic acid (PFNA)	0.20	J	0.40	0.11	ug/Kg	☼	07/31/18 10:42	08/06/18 14:25	1
Perfluorobutanesulfonic acid (PFBS)	0.15	J	0.53	0.078	ug/Kg	☼	07/31/18 10:42	08/06/18 14:25	1
Perfluorohexanesulfonic acid (PFHxS)	0.75		0.40	0.082	ug/Kg	☼	07/31/18 10:42	08/06/18 14:25	1
Perfluorooctanesulfonic acid (PFOS)	14		1.3	0.32	ug/Kg	☼	07/31/18 10:42	08/06/18 14:25	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*68*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:25*	*1*
13C4-PFHpA	*74*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:25*	*1*
13C4 PFOA	*74*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:25*	*1*
13C5 PFNA	*77*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:25*	*1*
18O2 PFHxS	*72*		*50 - 150*	*07/31/18 10:42*	*08/06/18 14:25*	*1*

Client Sample ID: LIN08-SB1-01

Lab Sample ID: 320-41403-45
Date Collected: 07/20/18 11:45
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 74.7

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	72		50 - 150	07/31/18 10:42	08/06/18 14:25	1

Client Sample ID: LIN08-SB1-02

Lab Sample ID: 320-41403-46
Date Collected: 07/20/18 11:50
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 80.3

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.25	U	0.37	0.097	ug/Kg	☼	07/31/18 11:42	08/04/18 16:54	1
Perfluorooctanoic acid (PFOA)	0.25	U M	0.37	0.12	ug/Kg	☼	07/31/18 11:42	08/04/18 16:54	1
Perfluorononanoic acid (PFNA)	0.25	U	0.37	0.10	ug/Kg	☼	07/31/18 11:42	08/04/18 16:54	1
Perfluorobutanesulfonic acid (PFBS)	0.22	U	0.50	0.073	ug/Kg	☼	07/31/18 11:42	08/04/18 16:54	1
Perfluorohexanesulfonic acid (PFHxS)	0.16	J	0.37	0.077	ug/Kg	☼	07/31/18 11:42	08/04/18 16:54	1
Perfluorooctanesulfonic acid (PFOS)	0.62	U M	1.2	0.30	ug/Kg	☼	07/31/18 11:42	08/04/18 16:54	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-PFBS	65		50 - 150	07/31/18 11:42	08/04/18 16:54	1
13C4-PFHpA	80		50 - 150	07/31/18 11:42	08/04/18 16:54	1
13C4 PFOA	78		50 - 150	07/31/18 11:42	08/04/18 16:54	1
13C5 PFNA	78		50 - 150	07/31/18 11:42	08/04/18 16:54	1
18O2 PFHxS	73		50 - 150	07/31/18 11:42	08/04/18 16:54	1
13C4 PFOS	71		50 - 150	07/31/18 11:42	08/04/18 16:54	1

Client Sample ID: Field Reagent Blank

Lab Sample ID: 320-41403-47
Date Collected: 07/19/18 09:40
Matrix: Water
Date Received: 07/24/18 09:00

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	1.3	U	1.7	0.53	ng/L		08/01/18 08:32	08/03/18 22:01	1
Perfluorooctanoic acid (PFOA)	1.3	U Q	1.7	0.47	ng/L		08/01/18 08:32	08/03/18 22:01	1
Perfluorononanoic acid (PFNA)	1.3	U	1.7	0.45	ng/L		08/01/18 08:32	08/03/18 22:01	1
Perfluorobutanesulfonic acid (PFBS)	0.87	U M Q	1.7	0.40	ng/L		08/01/18 08:32	08/03/18 22:01	1
Perfluorohexanesulfonic acid (PFHxS)	0.87	U M	1.7	0.33	ng/L		08/01/18 08:32	08/03/18 22:01	1
Perfluorooctanesulfonic acid (PFOS)	2.6	U M Q	3.5	0.96	ng/L		08/01/18 08:32	08/03/18 22:01	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-PFBS	83		50 - 150	08/01/18 08:32	08/03/18 22:01	1
13C4-PFHpA	83		50 - 150	08/01/18 08:32	08/03/18 22:01	1
13C4 PFOA	90		50 - 150	08/01/18 08:32	08/03/18 22:01	1
13C5 PFNA	96		50 - 150	08/01/18 08:32	08/03/18 22:01	1
18O2 PFHxS	83		50 - 150	08/01/18 08:32	08/03/18 22:01	1
13C4 PFOS	84		50 - 150	08/01/18 08:32	08/03/18 22:01	1

Default Detection Limits

Client: Leidos, Inc.
Project/Site: Phase III, ANG - Lincoln ANG

TestAmerica Job ID: 320-41403-1

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15
Prep: 3535

Analyte	LOQ	DL	Units	Method
Perfluorobutanesulfonic acid (PFBS)	2.0	0.46	ng/L	EPA 537 (Mod)
Perfluoroheptanoic acid (PFHpA)	2.0	0.61	ng/L	EPA 537 (Mod)
Perfluorohexanesulfonic acid (PFHxS)	2.0	0.38	ng/L	EPA 537 (Mod)
Perfluorononanoic acid (PFNA)	2.0	0.52	ng/L	EPA 537 (Mod)
Perfluorooctanesulfonic acid (PFOS)	4.0	1.1	ng/L	EPA 537 (Mod)
Perfluorooctanoic acid (PFOA)	2.0	0.54	ng/L	EPA 537 (Mod)

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15
Prep: SHAKE

Analyte	LOQ	DL	Units	Method
Perfluorobutanesulfonic acid (PFBS)	0.40	0.059	ug/Kg	EPA 537 (Mod)
Perfluoroheptanoic acid (PFHpA)	0.30	0.078	ug/Kg	EPA 537 (Mod)
Perfluorohexanesulfonic acid (PFHxS)	0.30	0.062	ug/Kg	EPA 537 (Mod)
Perfluorononanoic acid (PFNA)	0.30	0.081	ug/Kg	EPA 537 (Mod)
Perfluorooctanesulfonic acid (PFOS)	1.0	0.24	ug/Kg	EPA 537 (Mod)
Perfluorooctanoic acid (PFOA)	0.30	0.10	ug/Kg	EPA 537 (Mod)

Isotope Dilution Summary

Client: Leidos, Inc.
Project/Site: Phase III, ANG - Lincoln ANG

TestAmerica Job ID: 320-41403-1

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Matrix: Solid

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	3C3-PFBS (50-150)	PFHpA (50-150)	PFOA (50-150)	PFNA (50-150)	PFHxS (50-150)	PFOS (50-150)
320-41403-1	LIN04-SB1-01	60	79	74	67	72	63
320-41403-1 - DL	LIN04-SB1-01	66	70	73	75	66	64
320-41403-2	LIN04-SB1-02	67	62	82	86	63	73
320-41403-2 - DL	LIN04-SB1-02	71	84	80	80	72	67
320-41403-3	LIN04-SB2-01	62	77	75	75	70	64
320-41403-4	LIN04-SB2-02	67	86	81	83	77	68
320-41403-5	LIN03-SB1-01	63	82	77	80	72	69
320-41403-6	LIN03-SB1-02	66	87	82	84	77	70
320-41403-7	LIN03-SB3-01	66	83	79	81	75	69
320-41403-8	LIN03-SB3-01D	64	80	79	81	72	66
320-41403-9	LIN03-SB3-02	68	89	87	91	80	75
320-41403-10	LIN03-SB2-01	71	91	83	64	82	67
320-41403-10 - DL	LIN03-SB2-01	85	79	80	78	73	67
320-41403-11	LIN03-SB2-02	66	77	76	78	74	69
320-41403-12	LIN02-SB1-01	65	85	81	80	73	69
320-41403-13	LIN02-SB1-02	69	90	86	91	78	75
320-41403-13 MS	LIN02-SB1-02	66	86	79	83	75	69
320-41403-13 MSD	LIN02-SB1-02	70	92	86	88	78	72
320-41403-14	LIN01-SB2-01	61	82	78	78	72	66
320-41403-15	LIN01-SB2-02	69	89	87	90	78	75
320-41403-16	LIN01-SB1-01	57	74	73	72	65	63
320-41403-17	LIN01-SB1-02	70	89	83	47 Q	77	54
320-41403-17 - DL	LIN01-SB1-02	70 M	83	84	77	73	73
320-41403-18	LIN01-SB1-02D	66	83	78	47 Q	74	52
320-41403-18 - DL	LIN01-SB1-02D	96	77	80	76	72	69
320-41403-19	LIN05-SB2-01	62	73	72	71	68	63
320-41403-20	LIN05-SB2-02	63	83	75	84	75	70
320-41403-24	LIN09-SB2-01	60	81	73	77	70	65
320-41403-25	LIN09-SB2-02	69	85	78	80	75	72
320-41403-26	LIN09-SB1-01	58	79	75	85	63	66
320-41403-27	LIN09-SB1-02	61	86	79	84	71	71
320-41403-28	LIN05-SB3-01	55	78	73	73	65	61
320-41403-29	LIN05-SB3-01D	55	75	68	72	62	62
320-41403-30	LIN05-SB3-02	62	81	75	82	68	71
320-41403-33	LIN05-SB1-01	52	77	75	40 Q	60	31 Q
320-41403-33 - DL	LIN05-SB1-01	148 M	80	82	74	77	74
320-41403-34	LIN05-SB1-02	62	89	82	88	72	70
320-41403-35	LIN08-SB2-01	66	83	76	84	75	73
320-41403-36	LIN08-SB2-02	62	83	81	83	72	71
320-41403-36 MS	LIN08-SB2-02	60	79	75	80	67	66
320-41403-36 MSD	LIN08-SB2-02	60	81	78	82	69	67
320-41403-37	LIN07-SB1-01	71	74	78	78	72	70
320-41403-38	LIN07-SB1-02	65	72	74	74	70	68
320-41403-39	LIN07-SB1-02D	87	95	95	97	90	91
320-41403-40	LIN07-SB2-01	51	58	59	60	53	56
320-41403-41	LIN07-SB2-02	71	75	80	78	76	76
320-41403-42	LIN02-SB2-01	73	73	74	77	77	74
320-41403-43	LIN02-SB2-02	75 M	80	79	77	77	76
320-41403-45	LIN08-SB1-01	68	74	74	77	72	72

Isotope Dilution Summary

Client: Leidos, Inc.
Project/Site: Phase III, ANG - Lincoln ANG

TestAmerica Job ID: 320-41403-1

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 (Continued)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	3C3-PFBS (50-150)	PFHpA (50-150)	PFOA (50-150)	PFNA (50-150)	PFHxS (50-150)	PFOS (50-150)
320-41403-46	LIN08-SB1-02	65	80	78	78	73	71
LCS 320-236486/2-A	Lab Control Sample	74	85	81	84	85	79
LCS 320-237139/2-A	Lab Control Sample	77	90	83	88	86	79
LCS 320-237168/2-A	Lab Control Sample	76	84	83	83	88	83
MB 320-236486/1-A	Method Blank	79	84	82	83	86	79
MB 320-237139/1-A	Method Blank	81	94	83	88	86	81
MB 320-237168/1-A	Method Blank	79	84	87	86	88	83

Surrogate Legend

13C3-PFBS = 13C3-PFBS
PFHpA = 13C4-PFHpA
PFOA = 13C4 PFOA
PFNA = 13C5 PFNA
PFHxS = 18O2 PFHxS
PFOS = 13C4 PFOS

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Matrix: Water — **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	3C3-PFBS (50-150)	PFHpA (50-150)	PFOA (50-150)	PFNA (50-150)	PFHxS (50-150)	PFOS (50-150)
320-41403-21	ER-01	81	92	95	93	84	89
320-41403-22	FB-01	73	87	86	91	79	76
320-41403-31	ER-02	81	82	95	85	79	77
320-41403-32	ER-03	50	55	59	58	51	47 Q
320-41403-44	ER-04	60	67	71	66	62	63
320-41403-47	Field Reagent Blank	83	83	90	96	83	84
LCS 320-237294/2-A	Lab Control Sample	70	84	89	88	83	75
LCSD 320-237294/3-A	Lab Control Sample Dup	81	90	93	92	86	84
MB 320-237294/1-A	Method Blank	76	86	87	87	77	80

Surrogate Legend

13C3-PFBS = 13C3-PFBS
PFHpA = 13C4-PFHpA
PFOA = 13C4 PFOA
PFNA = 13C5 PFNA
PFHxS = 18O2 PFHxS
PFOS = 13C4 PFOS

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15

Lab Sample ID: MB 320-236486/1-A

Client Sample ID: Method Blank
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 238093
Prep Batch: 236486

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Per9uorohegtanoic acid KP78gA6	0.20	5	0.30	0.0f (	uF/BF		0f /2f /1(10:32	0(/0) /1(03:2f	1
Per9uorooctanoic acid KP7UA6	0.20	5	0.30	0.10	uF/BF		0f /2f /1(10:32	0(/0) /1(03:2f	1
Per9uorononanoic acid KP7NA6	0.20	5	0.30	0.0(1	uF/BF		0f /2f /1(10:32	0(/0) /1(03:2f	1
Per9uorobutanesul9onic acid KP7HS6	0.1(	5	0.40	0.0Op	uF/BF		0f /2f /1(10:32	0(/0) /1(03:2f	1
Per9uoroheManesul9onic acid KP78MS6	0.20	5	0.30	0.0) 2	uF/BF		0f /2f /1(10:32	0(/0) /1(03:2f	1
Per9uorooctanesul9onic acid KP7US6	0.OO	5	1.0	0.24	uF/BF		0f /2f /1(10:32	0(/0) /1(03:2f	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*79*		*50 - 150*	*07/27/18 10:32*	*08/06/18 03:27*	*1*
13C4-PFHpA	*84*		*50 - 150*	*07/27/18 10:32*	*08/06/18 03:27*	*1*
13C4 PFOA	*82*		*50 - 150*	*07/27/18 10:32*	*08/06/18 03:27*	*1*
13C5 PFNA	*83*		*50 - 150*	*07/27/18 10:32*	*08/06/18 03:27*	*1*
18O2 PFHxS	*86*		*50 - 150*	*07/27/18 10:32*	*08/06/18 03:27*	*1*
13C4 PFOS	*79*		*50 - 150*	*07/27/18 10:32*	*08/06/18 03:27*	*1*

Lab Sample ID: LCS 320-236486/2-A

Client Sample ID: Lab Control Sample
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 238093
Prep Batch: 236486

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Per9uorohegtanoic acid KP78gA6	2.00	1.f 4		uF/BF		(f	f) - 124
Per9uorooctanoic acid KP7UA6	2.00	1.(0		uF/BF		p0	f) - 121
Per9uorononanoic acid KP7NA6	2.00	1.(2		uF/BF		p1	f 4 - 12)
Per9uorobutanesul9onic acid KP7HS6	1.f f	1.f 3		uF/BF		p(	f 3 - 142
Per9uoroheManesul9onic acid KP78MS6	1.(2	1.O4		uF/BF		(O	f O- 121
Per9uorooctanesul9onic acid KP7US6	1.( )	1.f f		uF/BF		pO	) p - 131

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C3-PFBS	*74*		*50 - 150*
13C4-PFHpA	*85*		*50 - 150*
13C4 PFOA	*81*		*50 - 150*
13C5 PFNA	*84*		*50 - 150*
18O2 PFHxS	*85*		*50 - 150*
13C4 PFOS	*79*		*50 - 150*

Lab Sample ID: 320-41403-13 MS

Client Sample ID: LIN02-SB1-02
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 238093
Prep Batch: 236486

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Per9uorohegtanoic acid KP78gA6	0.2O	5	2.OO	2.34		uF/BF	☼	p4	f) - 124
Per9uorooctanoic acid KP7UA6	0.2O	5	2.OO	2.3)		uF/BF	☼	p4	f) - 121
Per9uorononanoic acid KP7NA6	0.2O	5	2.OO	2.43		uF/BF	☼	pf	f 4 - 12)
Per9uorobutanesul9onic acid KP7HS6	0.22	5 x	2.21	2.2)		uF/BF	☼	102	f 3 - 142
Per9uoroheManesul9onic acid KP78MS6	0.30	J	2.2f	2.21		uF/BF	☼	(4	f O- 121

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 (Continued)

Lab Sample ID: 320-41403-13 MS
Matrix: Solid
Analysis Batch: 238093

Client Sample ID: LIN02-SB1-02
Prep Type: Total/NA
Prep Batch: 236486

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Per9uorooctanesul9onic acid KP7US6	0.)2	5	2.32	2.1(		uF/BF	☼	p4	)p-131

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
13C3-PFBS	*66*		*50-150*
13C4-PFHpA	*86*		*50-150*
13C4 PFOA	*79*		*50-150*
13C5 PFNA	*83*		*50-150*
18O2 PFHxS	*75*		*50-150*
13C4 PFOS	*69*		*50-150*

Lab Sample ID: 320-41403-13 MSD
Matrix: Solid
Analysis Batch: 238093

Client Sample ID: LIN02-SB1-02
Prep Type: Total/NA
Prep Batch: 236486

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Per9uorohegtanoic acid KP78gA6	0.2O	5	2.O2	2.2O		uF/BF	☼	(p	f)-124	4	30
Per9uorooctanoic acid KP7UA6	0.2O	5	2.O2	2.3)		uF/BF	☼	p4	f)-121	0	30
Per9uorononanoic acid KP7NA6	0.2O	5	2.O2	2.4f		uF/BF	☼	p(	f4-12)	2	30
Per9uorobutanesul9onic acid KP7HS6	0.22	5 x	2.23	2.22		uF/BF	☼	100	f3-142	2	30
Per9uoroheManesul9onic acid KP78MS6	0.30	J	2.2p	2.2f		uF/BF	☼	( )	fO-121	3	30
Per9uorooctanesul9onic acid KP7US6	0.)2	5	2.34	2.2f		uF/BF	☼	pf	)p-131	4	30

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
13C3-PFBS	*70*		*50-150*
13C4-PFHpA	*92*		*50-150*
13C4 PFOA	*86*		*50-150*
13C5 PFNA	*88*		*50-150*
18O2 PFHxS	*78*		*50-150*
13C4 PFOS	*72*		*50-150*

Lab Sample ID: MB 320-237139/1-A
Matrix: Solid
Analysis Batch: 238095

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 237139

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Per9uorohegtanoic acid KP78gA6	0.20	5	0.30	0.0f(	uF/BF		0f/31/1(10:42	0(/0)/1(0f:4O	1
Per9uorooctanoic acid KP7UA6	0.20	5	0.30	0.10	uF/BF		0f/31/1(10:42	0(/0)/1(0f:4O	1
Per9uorononanoic acid KP7NA6	0.20	5	0.30	0.0(1	uF/BF		0f/31/1(10:42	0(/0)/1(0f:4O	1
Per9uorobutanesul9onic acid KP7HS6	0.1(	5	0.40	0.0Cp	uF/BF		0f/31/1(10:42	0(/0)/1(0f:4O	1
Per9uoroheManesul9onic acid KP78MS6	0.20	5	0.30	0.0)2	uF/BF		0f/31/1(10:42	0(/0)/1(0f:4O	1
Per9uorooctanesul9onic acid KP7US6	0.C0	5 x	1.0	0.24	uF/BF		0f/31/1(10:42	0(/0)/1(0f:4O	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*81*		*50-150*	*07/31/18 10:42*	*08/06/18 07:45*	*1*
13C4-PFHpA	*94*		*50-150*	*07/31/18 10:42*	*08/06/18 07:45*	*1*
13C4 PFOA	*83*		*50-150*	*07/31/18 10:42*	*08/06/18 07:45*	*1*

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 (Continued)

Lab Sample ID: MB 320-237139/1-A
Matrix: Solid
Analysis Batch: 238095

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 237139

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C5 PFNA	88		50 - 150	07/31/18 10:42	08/06/18 07:45	1
18O2 PFHxS	86		50 - 150	07/31/18 10:42	08/06/18 07:45	1
13C4 PFOS	81		50 - 150	07/31/18 10:42	08/06/18 07:45	1

Lab Sample ID: LCS 320-237139/2-A
Matrix: Solid
Analysis Batch: 238095

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 237139

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Per9uorohegtanoic acid KP78 gA6	2.00	1.p3		uF/BF		p)	f) - 124
Per9uorooctanoic acid KP7UA6	2.00	2.00		uF/BF		100	f) - 121
Per9uorononanoic acid KP7NA6	2.00	1.p)		uF/BF		p(	f 4 - 12)
Per9uorobutanesul9onic acid KP7HS6	1.f f	1.((		uF/BF		10)	f 3 - 142
Per9uoroheManesul9onic acid KP78 MS6	1.(2	1.) 4		uF/BF		p0	f O- 121
Per9uorooctanesul9onic acid KP7US6	1.( )	1.p0		uF/BF		102	) p - 131

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C3-PFBS	77		50 - 150
13C4-PFHpA	90		50 - 150
13C4 PFOA	83		50 - 150
13C5 PFNA	88		50 - 150
18O2 PFHxS	86		50 - 150
13C4 PFOS	79		50 - 150

Lab Sample ID: 320-41403-36 MS
Matrix: Solid
Analysis Batch: 238095

Client Sample ID: LIN08-SB2-02
Prep Type: Total/NA
Prep Batch: 237139

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Per9uorohegtanoic acid KP78 gA6	0.2(	5	2.f 2	2.CO		uF/BF	☼	p4	f) - 124
Per9uorooctanoic acid KP7UA6	0.) p		2.f 2	3.4(		uF/BF	☼	103	f) - 121
Per9uorononanoic acid KP7NA6	0.2(	5	2.f 2	2.))		uF/BF	☼	p(	f 4 - 12)
Per9uorobutanesul9onic acid KP7HS6	0.2O	5	2.40	2.C0		uF/BF	☼	104	f 3 - 142
Per9uoroheManesul9onic acid KP78 MS6	0.f 4		2.4f	2.p2		uF/BF	☼	((	f O- 121
Per9uorooctanesul9onic acid KP7US6	3.3	J1	2.C2	) .02		uF/BF	☼	10(	) p - 131

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
13C3-PFBS	60		50 - 150
13C4-PFHpA	79		50 - 150
13C4 PFOA	75		50 - 150
13C5 PFNA	80		50 - 150
18O2 PFHxS	67		50 - 150
13C4 PFOS	66		50 - 150

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 (Continued)

Lab Sample ID: 320-41403-36 MSD
Matrix: Solid
Analysis Batch: 238095

Client Sample ID: LIN08-SB2-02
Prep Type: Total/NA
Prep Batch: 237139

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Per9uorohegtanoic acid KP78gA6	0.2(	5	2.f)	2.O(		uF/BF	☼	p3	f) - 124	1	30
Per9uorooctanoic acid KP7UA6	0.) p		2.f)	3.0p		uF/BF	☼	(f	f) - 121	12	30
Per9uorononanoic acid KP7NA6	0.2(	5	2.f)	2.O(		uF/BF	☼	p4	f 4 - 12)	3	30
Per9uorobutanesul9onic acid KP7HS6	0.2O	5	2.44	2.O)		uF/BF	☼	10O	f 3 - 142	3	30
Per9uoroheManesul9onic acid KP78MS6	0.f 4		2.Of	2.(p		uF/BF	☼	( )	f O - 121	1	30
Per9uorooctanesul9onic acid KP7US6	3.3	J1	2.O)	p.2f	J1	uF/BF	☼	234	) p - 131	43	30

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
13C3-PFBS	*60*		*50 - 150*
13C4-PFHpA	*81*		*50 - 150*
13C4 PFOA	*78*		*50 - 150*
13C5 PFNA	*82*		*50 - 150*
18O2 PFHxS	*69*		*50 - 150*
13C4 PFOS	*67*		*50 - 150*

Lab Sample ID: MB 320-237168/1-A
Matrix: Solid
Analysis Batch: 238037

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 237168

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Per9uorohegtanoic acid KP78gA6	0.20	5	0.30	0.0f (	uF/BF		0f /31/1(11:42	0(/04/1(1) :3(	1
Per9uorooctanoic acid KP7UA6	0.20	5	0.30	0.10	uF/BF		0f /31/1(11:42	0(/04/1(1) :3(	1
Per9uorononanoic acid KP7NA6	0.20	5	0.30	0.0(1	uF/BF		0f /31/1(11:42	0(/04/1(1) :3(	1
Per9uorobutanesul9onic acid KP7HS6	0.1(	5	0.40	0.0Op	uF/BF		0f /31/1(11:42	0(/04/1(1) :3(	1
Per9uoroheManesul9onic acid KP78MS6	0.20	5	0.30	0.0) 2	uF/BF		0f /31/1(11:42	0(/04/1(1) :3(	1
Per9uorooctanesul9onic acid KP7US6	0.O0	5	1.0	0.24	uF/BF		0f /31/1(11:42	0(/04/1(1) :3(	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*79*		*50 - 150*	*07/31/18 11:42*	*08/04/18 16:38*	*1*
13C4-PFHpA	*84*		*50 - 150*	*07/31/18 11:42*	*08/04/18 16:38*	*1*
13C4 PFOA	*87*		*50 - 150*	*07/31/18 11:42*	*08/04/18 16:38*	*1*
13C5 PFNA	*86*		*50 - 150*	*07/31/18 11:42*	*08/04/18 16:38*	*1*
18O2 PFHxS	*88*		*50 - 150*	*07/31/18 11:42*	*08/04/18 16:38*	*1*
13C4 PFOS	*83*		*50 - 150*	*07/31/18 11:42*	*08/04/18 16:38*	*1*

Lab Sample ID: LCS 320-237168/2-A
Matrix: Solid
Analysis Batch: 238037

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 237168

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Per9uorohegtanoic acid KP78gA6	2.00	1.(4		uF/BF		p2	f) - 124
Per9uorooctanoic acid KP7UA6	2.00	1.pO		uF/BF		pf	f) - 121
Per9uorononanoic acid KP7NA6	2.00	2.03		uF/BF		101	f 4 - 12)
Per9uorobutanesul9onic acid KP7HS6	1.f f	1.(2		uF/BF		103	f 3 - 142
Per9uoroheManesul9onic acid KP78MS6	1.(2	1.) 4		uF/BF		p0	f O - 121

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 (Continued)

Lab Sample ID: LCS 320-237168/2-A
Matrix: Solid
Analysis Batch: 238037

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 237168

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Per9uorooctanesul9onic acid KP7US6	1.( )	1.p(	x	uF/BF		10f	) p - 131

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C3-PFBS	*76*		*50 - 150*
13C4-PFHpA	*84*		*50 - 150*
13C4 PFOA	*83*		*50 - 150*
13C5 PFNA	*83*		*50 - 150*
18O2 PFHxS	*88*		*50 - 150*
13C4 PFOS	*83*		*50 - 150*

Lab Sample ID: MB 320-237294/1-A
Matrix: Water
Analysis Batch: 237990

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 237294

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Per9uoroheptanoic acid KP78gA6	1.O	5	2.0	0.) 1	nF/L		0(/01/1(0(:32	0(/03/1(21:01	1
Per9uorooctanoic acid KP7UA6	1.O	5	2.0	0.O4	nF/L		0(/01/1(0(:32	0(/03/1(21:01	1
Per9uorononanoic acid KP7NA6	1.O	5	2.0	0.O2	nF/L		0(/01/1(0(:32	0(/03/1(21:01	1
Per9uorobutanesul9onic acid KP7HS6	1.0	5 x	2.0	0.4)	nF/L		0(/01/1(0(:32	0(/03/1(21:01	1
Per9uoroheManesul9onic acid KP78MS6	1.0	5	2.0	0.3(	nF/L		0(/01/1(0(:32	0(/03/1(21:01	1
Per9uorooctanesul9onic acid KP7US6	3.0	5 x	4.0	1.1	nF/L		0(/01/1(0(:32	0(/03/1(21:01	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*76*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:01*	*1*
13C4-PFHpA	*86*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:01*	*1*
13C4 PFOA	*87*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:01*	*1*
13C5 PFNA	*87*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:01*	*1*
18O2 PFHxS	*77*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:01*	*1*
13C4 PFOS	*80*		*50 - 150*	*08/01/18 08:32*	*08/03/18 21:01*	*1*

Lab Sample ID: LCS 320-237294/2-A
Matrix: Water
Analysis Batch: 237990

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 237294

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Per9uoroheptanoic acid KP78gA6	40.0	4Q1		nF/L		113	(0 - 113
Per9uorooctanoic acid KP7UA6	40.0	44.2	Q	nF/L		111	(0 - 10f
Per9uorononanoic acid KP7NA6	40.0	43.p		nF/L		110	(3 - 113
Per9uorobutanesul9onic acid KP7HS6	3O4	44.)	Q	nF/L		12)	(f - 120
Per9uoroheManesul9onic acid KP78MS6	3) .4	3) .3		nF/L		100	(1 - 10)
Per9uorooctanesul9onic acid KP7US6	3f .1	4f .4	Q	nF/L		12(	(2 - 112

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C3-PFBS	*70*		*50 - 150*
13C4-PFHpA	*84*		*50 - 150*
13C4 PFOA	*89*		*50 - 150*

Method: EPA 537 (Mod) - PFAS for QSM 5.1, Table B-15 (Continued)

Lab Sample ID: LCS 320-237294/2-A
Matrix: Water
Analysis Batch: 237990

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 237294

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C5 PFNA	88		50 - 150
18O2 PFHxS	83		50 - 150
13C4 PFOS	75		50 - 150

Lab Sample ID: LCSD 320-237294/3-A
Matrix: Water
Analysis Batch: 237990

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 237294

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Per9uorohegtanoic acid KP78 gA6	40.0	41.(		nF/L		10O	(0 - 113	f	30
Per9uorooctanoic acid KP7UA6	40.0	42.2		nF/L		10)	(0 - 10f	O	30
Per9uorononanoic acid KP7NA6	40.0	41.4		nF/L		104	(3 - 113	)	30
Per9uorobutanesul9onic acid KP7HS6	3Q4	3(.f		nF/L		10p	(f - 120	14	30
Per9uoroheManesul9onic acid KP78MS6	3) .4	34.4		nF/L		pO	(1 - 10)	O	30
Per9uorooctanesul9onic acid KP7US6	3f .1	3p.O		nF/L		10)	(2 - 112	1(	30

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
13C3-PFBS	81		50 - 150
13C4-PFHpA	90		50 - 150
13C4 PFOA	93		50 - 150
13C5 PFNA	92		50 - 150
18O2 PFHxS	86		50 - 150
13C4 PFOS	84		50 - 150

LCMS

Prep Batch: 236486

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-41403-1 - DL	LIN04-SB1-01	Total/NA	Solid	SHAKE	
320-41403-1	LIN04-SB1-01	Total/NA	Solid	SHAKE	
320-41403-2 - DL	LIN04-SB1-02	Total/NA	Solid	SHAKE	
320-41403-2	LIN04-SB1-02	Total/NA	Solid	SHAKE	
320-41403-3	LIN04-SB2-01	Total/NA	Solid	SHAKE	
320-41403-4	LIN04-SB2-02	Total/NA	Solid	SHAKE	
320-41403-5	LIN03-SB1-01	Total/NA	Solid	SHAKE	
320-41403-6	LIN03-SB1-02	Total/NA	Solid	SHAKE	
320-41403-7	LIN03-SB3-01	Total/NA	Solid	SHAKE	
320-41403-8	LIN03-SB3-01D	Total/NA	Solid	SHAKE	
320-41403-9	LIN03-SB3-02	Total/NA	Solid	SHAKE	
320-41403-10	LIN03-SB2-01	Total/NA	Solid	SHAKE	
320-41403-10 - DL	LIN03-SB2-01	Total/NA	Solid	SHAKE	
320-41403-11	LIN03-SB2-02	Total/NA	Solid	SHAKE	
320-41403-12	LIN02-SB1-01	Total/NA	Solid	SHAKE	
320-41403-13	LIN02-SB1-02	Total/NA	Solid	SHAKE	
320-41403-14	LIN01-SB2-01	Total/NA	Solid	SHAKE	
320-41403-15	LIN01-SB2-02	Total/NA	Solid	SHAKE	
320-41403-16	LIN01-SB1-01	Total/NA	Solid	SHAKE	
320-41403-17 - DL	LIN01-SB1-02	Total/NA	Solid	SHAKE	
320-41403-17	LIN01-SB1-02	Total/NA	Solid	SHAKE	
320-41403-18	LIN01-SB1-02D	Total/NA	Solid	SHAKE	
320-41403-18 - DL	LIN01-SB1-02D	Total/NA	Solid	SHAKE	
320-41403-19	LIN05-SB2-01	Total/NA	Solid	SHAKE	
MB 320-236486/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 320-236486/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
320-41403-13 MS	LIN02-SB1-02	Total/NA	Solid	SHAKE	
320-41403-13 MSD	LIN02-SB1-02	Total/NA	Solid	SHAKE	

Prep Batch: 237139

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-41403-20	LIN05-SB2-02	Total/NA	Solid	SHAKE	
320-41403-24	LIN09-SB2-01	Total/NA	Solid	SHAKE	
320-41403-25	LIN09-SB2-02	Total/NA	Solid	SHAKE	
320-41403-26	LIN09-SB1-01	Total/NA	Solid	SHAKE	
320-41403-27	LIN09-SB1-02	Total/NA	Solid	SHAKE	
320-41403-28	LIN05-SB3-01	Total/NA	Solid	SHAKE	
320-41403-29	LIN05-SB3-01D	Total/NA	Solid	SHAKE	
320-41403-30	LIN05-SB3-02	Total/NA	Solid	SHAKE	
320-41403-33	LIN05-SB1-01	Total/NA	Solid	SHAKE	
320-41403-33 - DL	LIN05-SB1-01	Total/NA	Solid	SHAKE	
320-41403-34	LIN05-SB1-02	Total/NA	Solid	SHAKE	
320-41403-35	LIN08-SB2-01	Total/NA	Solid	SHAKE	
320-41403-36	LIN08-SB2-02	Total/NA	Solid	SHAKE	
320-41403-37	LIN07-SB1-01	Total/NA	Solid	SHAKE	
320-41403-38	LIN07-SB1-02	Total/NA	Solid	SHAKE	
320-41403-39	LIN07-SB1-02D	Total/NA	Solid	SHAKE	
320-41403-40	LIN07-SB2-01	Total/NA	Solid	SHAKE	
320-41403-41	LIN07-SB2-02	Total/NA	Solid	SHAKE	
320-41403-42	LIN02-SB2-01	Total/NA	Solid	SHAKE	
320-41403-43	LIN02-SB2-02	Total/NA	Solid	SHAKE	

LCMS (Continued)

Prep Batch: 237139 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-41403-45	LIN08-SB1-01	Total/NA	Solid	SHAKE	
MB 320-237139/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 320-237139/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
320-41403-36 MS	LIN08-SB2-02	Total/NA	Solid	SHAKE	
320-41403-36 MSD	LIN08-SB2-02	Total/NA	Solid	SHAKE	

Prep Batch: 237168

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-41403-46	LIN08-SB1-02	Total/NA	Solid	SHAKE	
MB 320-237168/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 320-237168/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Prep Batch: 237294

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-41403-21	ER-01	Total/NA	Water	3535	
320-41403-22	FB-01	Total/NA	Water	3535	
320-41403-31	ER-02	Total/NA	Water	3535	
320-41403-32	ER-03	Total/NA	Water	3535	
320-41403-44	ER-04	Total/NA	Water	3535	
320-41403-47	Field Reagent Blank	Total/NA	Water	3535	
MB 320-237294/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-237294/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-237294/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 237990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-41403-21	ER-01	Total/NA	Water	EPA 537 (Mod)	237294
320-41403-22	FB-01	Total/NA	Water	EPA 537 (Mod)	237294
320-41403-31	ER-02	Total/NA	Water	EPA 537 (Mod)	237294
320-41403-32	ER-03	Total/NA	Water	EPA 537 (Mod)	237294
320-41403-44	ER-04	Total/NA	Water	EPA 537 (Mod)	237294
320-41403-47	Field Reagent Blank	Total/NA	Water	EPA 537 (Mod)	237294
MB 320-237294/1-A	Method Blank	Total/NA	Water	EPA 537 (Mod)	237294
LCS 320-237294/2-A	Lab Control Sample	Total/NA	Water	EPA 537 (Mod)	237294
LCSD 320-237294/3-A	Lab Control Sample Dup	Total/NA	Water	EPA 537 (Mod)	237294

Analysis Batch: 238037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-41403-46	LIN08-SB1-02	Total/NA	Solid	EPA 537 (Mod)	237168
MB 320-237168/1-A	Method Blank	Total/NA	Solid	EPA 537 (Mod)	237168
LCS 320-237168/2-A	Lab Control Sample	Total/NA	Solid	EPA 537 (Mod)	237168

Analysis Batch: 238093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-41403-1	LIN04-SB1-01	Total/NA	Solid	EPA 537 (Mod)	236486
320-41403-2	LIN04-SB1-02	Total/NA	Solid	EPA 537 (Mod)	236486
320-41403-3	LIN04-SB2-01	Total/NA	Solid	EPA 537 (Mod)	236486
320-41403-4	LIN04-SB2-02	Total/NA	Solid	EPA 537 (Mod)	236486
320-41403-5	LIN03-SB1-01	Total/NA	Solid	EPA 537 (Mod)	236486
320-41403-6	LIN03-SB1-02	Total/NA	Solid	EPA 537 (Mod)	236486
320-41403-7	LIN03-SB3-01	Total/NA	Solid	EPA 537 (Mod)	236486

LCMS (Continued)

Analysis Batch: 238093 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-41403-8	LIN03-SB3-01D	Total/NA	Solid	EPA 537 (Mod)	236486
320-41403-9	LIN03-SB3-02	Total/NA	Solid	EPA 537 (Mod)	236486
320-41403-10	LIN03-SB2-01	Total/NA	Solid	EPA 537 (Mod)	236486
320-41403-11	LIN03-SB2-02	Total/NA	Solid	EPA 537 (Mod)	236486
320-41403-12	LIN02-SB1-01	Total/NA	Solid	EPA 537 (Mod)	236486
320-41403-13	LIN02-SB1-02	Total/NA	Solid	EPA 537 (Mod)	236486
320-41403-14	LIN01-SB2-01	Total/NA	Solid	EPA 537 (Mod)	236486
320-41403-15	LIN01-SB2-02	Total/NA	Solid	EPA 537 (Mod)	236486
320-41403-16	LIN01-SB1-01	Total/NA	Solid	EPA 537 (Mod)	236486
320-41403-17	LIN01-SB1-02	Total/NA	Solid	EPA 537 (Mod)	236486
320-41403-18	LIN01-SB1-02D	Total/NA	Solid	EPA 537 (Mod)	236486
320-41403-19	LIN05-SB2-01	Total/NA	Solid	EPA 537 (Mod)	236486
MB 320-236486/1-A	Method Blank	Total/NA	Solid	EPA 537 (Mod)	236486
LCS 320-236486/2-A	Lab Control Sample	Total/NA	Solid	EPA 537 (Mod)	236486
320-41403-13 MS	LIN02-SB1-02	Total/NA	Solid	EPA 537 (Mod)	236486
320-41403-13 MSD	LIN02-SB1-02	Total/NA	Solid	EPA 537 (Mod)	236486

Analysis Batch: 238095

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-41403-20	LIN05-SB2-02	Total/NA	Solid	EPA 537 (Mod)	237139
320-41403-24	LIN09-SB2-01	Total/NA	Solid	EPA 537 (Mod)	237139
320-41403-25	LIN09-SB2-02	Total/NA	Solid	EPA 537 (Mod)	237139
320-41403-26	LIN09-SB1-01	Total/NA	Solid	EPA 537 (Mod)	237139
320-41403-27	LIN09-SB1-02	Total/NA	Solid	EPA 537 (Mod)	237139
320-41403-28	LIN05-SB3-01	Total/NA	Solid	EPA 537 (Mod)	237139
320-41403-29	LIN05-SB3-01D	Total/NA	Solid	EPA 537 (Mod)	237139
320-41403-30	LIN05-SB3-02	Total/NA	Solid	EPA 537 (Mod)	237139
320-41403-33	LIN05-SB1-01	Total/NA	Solid	EPA 537 (Mod)	237139
320-41403-34	LIN05-SB1-02	Total/NA	Solid	EPA 537 (Mod)	237139
320-41403-35	LIN08-SB2-01	Total/NA	Solid	EPA 537 (Mod)	237139
320-41403-36	LIN08-SB2-02	Total/NA	Solid	EPA 537 (Mod)	237139
MB 320-237139/1-A	Method Blank	Total/NA	Solid	EPA 537 (Mod)	237139
LCS 320-237139/2-A	Lab Control Sample	Total/NA	Solid	EPA 537 (Mod)	237139
320-41403-36 MS	LIN08-SB2-02	Total/NA	Solid	EPA 537 (Mod)	237139
320-41403-36 MSD	LIN08-SB2-02	Total/NA	Solid	EPA 537 (Mod)	237139

Analysis Batch: 238283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-41403-37	LIN07-SB1-01	Total/NA	Solid	EPA 537 (Mod)	237139
320-41403-38	LIN07-SB1-02	Total/NA	Solid	EPA 537 (Mod)	237139
320-41403-39	LIN07-SB1-02D	Total/NA	Solid	EPA 537 (Mod)	237139
320-41403-40	LIN07-SB2-01	Total/NA	Solid	EPA 537 (Mod)	237139
320-41403-41	LIN07-SB2-02	Total/NA	Solid	EPA 537 (Mod)	237139
320-41403-42	LIN02-SB2-01	Total/NA	Solid	EPA 537 (Mod)	237139
320-41403-43	LIN02-SB2-02	Total/NA	Solid	EPA 537 (Mod)	237139
320-41403-45	LIN08-SB1-01	Total/NA	Solid	EPA 537 (Mod)	237139

Analysis Batch: 238576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-41403-1 - DL	LIN04-SB1-01	Total/NA	Solid	EPA 537 (Mod)	236486
320-41403-2 - DL	LIN04-SB1-02	Total/NA	Solid	EPA 537 (Mod)	236486

LCMS (Continued)

Analysis Batch: 238576 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-41403-10 - DL	LIN03-SB2-01	Total/NA	Solid	EPA 537 (Mod)	236486
320-41403-17 - DL	LIN01-SB1-02	Total/NA	Solid	EPA 537 (Mod)	236486
320-41403-18 - DL	LIN01-SB1-02D	Total/NA	Solid	EPA 537 (Mod)	236486

Analysis Batch: 238588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-41403-33 - DL	LIN05-SB1-01	Total/NA	Solid	EPA 537 (Mod)	237139

General Chemistry

Analysis Batch: 236217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-41403-36	LIN08-SB2-02	Total/NA	Solid	D 2216	
320-41403-37	LIN07-SB1-01	Total/NA	Solid	D 2216	
320-41403-38	LIN07-SB1-02	Total/NA	Solid	D 2216	
320-41403-39	LIN07-SB1-02D	Total/NA	Solid	D 2216	
320-41403-40	LIN07-SB2-01	Total/NA	Solid	D 2216	
320-41403-41	LIN07-SB2-02	Total/NA	Solid	D 2216	
320-41403-42	LIN02-SB2-01	Total/NA	Solid	D 2216	

Analysis Batch: 236218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-41403-4	LIN04-SB2-02	Total/NA	Solid	D 2216	
320-41403-5	LIN03-SB1-01	Total/NA	Solid	D 2216	
320-41403-6	LIN03-SB1-02	Total/NA	Solid	D 2216	
320-41403-7	LIN03-SB3-01	Total/NA	Solid	D 2216	
320-41403-19	LIN05-SB2-01	Total/NA	Solid	D 2216	
320-41403-20	LIN05-SB2-02	Total/NA	Solid	D 2216	
320-41403-24	LIN09-SB2-01	Total/NA	Solid	D 2216	
320-41403-25	LIN09-SB2-02	Total/NA	Solid	D 2216	
320-41403-26	LIN09-SB1-01	Total/NA	Solid	D 2216	
320-41403-27	LIN09-SB1-02	Total/NA	Solid	D 2216	
320-41403-28	LIN05-SB3-01	Total/NA	Solid	D 2216	
320-41403-29	LIN05-SB3-01D	Total/NA	Solid	D 2216	
320-41403-30	LIN05-SB3-02	Total/NA	Solid	D 2216	
320-41403-33	LIN05-SB1-01	Total/NA	Solid	D 2216	
320-41403-34	LIN05-SB1-02	Total/NA	Solid	D 2216	
320-41403-35	LIN08-SB2-01	Total/NA	Solid	D 2216	
320-41403-43	LIN02-SB2-02	Total/NA	Solid	D 2216	
320-41403-45	LIN08-SB1-01	Total/NA	Solid	D 2216	
320-41403-46	LIN08-SB1-02	Total/NA	Solid	D 2216	
320-41403-4 DU	LIN04-SB2-02	Total/NA	Solid	D 2216	

Analysis Batch: 236247

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-41403-1	LIN04-SB1-01	Total/NA	Solid	D 2216	
320-41403-2	LIN04-SB1-02	Total/NA	Solid	D 2216	
320-41403-3	LIN04-SB2-01	Total/NA	Solid	D 2216	

General Chemistry (Continued)

Analysis Batch: 236402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-41403-8	LIN03-SB3-01D	Total/NA	Solid	D 2216	
320-41403-9	LIN03-SB3-02	Total/NA	Solid	D 2216	
320-41403-10	LIN03-SB2-01	Total/NA	Solid	D 2216	
320-41403-11	LIN03-SB2-02	Total/NA	Solid	D 2216	
320-41403-12	LIN02-SB1-01	Total/NA	Solid	D 2216	
320-41403-14	LIN01-SB2-01	Total/NA	Solid	D 2216	
320-41403-15	LIN01-SB2-02	Total/NA	Solid	D 2216	
320-41403-16	LIN01-SB1-01	Total/NA	Solid	D 2216	
320-41403-17	LIN01-SB1-02	Total/NA	Solid	D 2216	
320-41403-18	LIN01-SB1-02D	Total/NA	Solid	D 2216	
320-41403-8 DU	LIN03-SB3-01D	Total/NA	Solid	D 2216	

Analysis Batch: 236526

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-41403-13	LIN02-SB1-02	Total/NA	Solid	D 2216	

Client Sample ID: LIN04-SB1-01
Date Collected: 07/18/18 11:35
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236247	07/26/18 11:14	TCS	TAL SAC

Client Sample ID: LIN04-SB1-01
Date Collected: 07/18/18 11:35
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-1
Matrix: Solid
Percent Solids: 77.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			236486	07/27/18 10:32	HJA	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238093	08/06/18 03:51	JRB	TAL SAC
Total/NA	Prep	SHAKE	DL		236486	07/27/18 10:32	HJA	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)	DL	5	238576	08/07/18 16:42	ABH	TAL SAC

Client Sample ID: LIN04-SB1-02
Date Collected: 07/18/18 11:40
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236247	07/26/18 11:14	TCS	TAL SAC

Client Sample ID: LIN04-SB1-02
Date Collected: 07/18/18 11:40
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-2
Matrix: Solid
Percent Solids: 78.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			236486	07/27/18 10:32	HJA	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238093	08/06/18 03:59	JRB	TAL SAC
Total/NA	Prep	SHAKE	DL		236486	07/27/18 10:32	HJA	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)	DL	20	238576	08/07/18 16:50	ABH	TAL SAC

Client Sample ID: LIN04-SB2-01
Date Collected: 07/18/18 12:10
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236247	07/26/18 11:14	TCS	TAL SAC

Client Sample ID: LIN04-SB2-01
Date Collected: 07/18/18 12:10
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-3
Matrix: Solid
Percent Solids: 82.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			236486	07/27/18 10:32	HJA	TAL SAC

Client Sample ID: LIN04-SB2-01

Lab Sample ID: 320-41403-3
Date Collected: 07/18/18 12:10
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 82.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 537 (Mod)		1	238093	08/06/18 04:06	JRB	TAL SAC

Client Sample ID: LIN04-SB2-02

Lab Sample ID: 320-41403-4
Date Collected: 07/18/18 12:20
Matrix: Solid
Date Received: 07/24/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236218	07/25/18 21:59	SSS	TAL SAC

Client Sample ID: LIN04-SB2-02

Lab Sample ID: 320-41403-4
Date Collected: 07/18/18 12:20
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 82.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			236486	07/27/18 10:32	HJA	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238093	08/06/18 04:14	JRB	TAL SAC

Client Sample ID: LIN03-SB1-01

Lab Sample ID: 320-41403-5
Date Collected: 07/18/18 13:20
Matrix: Solid
Date Received: 07/24/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236218	07/25/18 21:59	SSS	TAL SAC

Client Sample ID: LIN03-SB1-01

Lab Sample ID: 320-41403-5
Date Collected: 07/18/18 13:20
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 80.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			236486	07/27/18 10:32	HJA	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238093	08/06/18 04:22	JRB	TAL SAC

Client Sample ID: LIN03-SB1-02

Lab Sample ID: 320-41403-6
Date Collected: 07/18/18 13:30
Matrix: Solid
Date Received: 07/24/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236218	07/25/18 21:59	SSS	TAL SAC

Client Sample ID: LIN03-SB1-02
Lab Sample ID: 320-41403-6
Date Collected: 07/18/18 13:30
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 80.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			236486	07/27/18 10:32	HJA	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238093	08/06/18 04:38	JRB	TAL SAC

Client Sample ID: LIN03-SB3-01
Lab Sample ID: 320-41403-7
Date Collected: 07/18/18 14:10
Matrix: Solid
Date Received: 07/24/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236218	07/25/18 21:59	SSS	TAL SAC

Client Sample ID: LIN03-SB3-01
Lab Sample ID: 320-41403-7
Date Collected: 07/18/18 14:10
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 73.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			236486	07/27/18 10:32	HJA	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238093	08/06/18 04:46	JRB	TAL SAC

Client Sample ID: LIN03-SB3-01D
Lab Sample ID: 320-41403-8
Date Collected: 07/18/18 14:10
Matrix: Solid
Date Received: 07/24/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236402	07/26/18 18:00	JCB	TAL SAC

Client Sample ID: LIN03-SB3-01D
Lab Sample ID: 320-41403-8
Date Collected: 07/18/18 14:10
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 80.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			236486	07/27/18 10:32	HJA	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238093	08/06/18 04:53	JRB	TAL SAC

Client Sample ID: LIN03-SB3-02
Lab Sample ID: 320-41403-9
Date Collected: 07/18/18 14:20
Matrix: Solid
Date Received: 07/24/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236402	07/26/18 18:00	JCB	TAL SAC

Client Sample ID: LIN03-SB3-02
Date Collected: 07/18/18 14:20
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-9
Matrix: Solid
Percent Solids: 84.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			236486	07/27/18 10:32	HJA	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238093	08/06/18 05:01	JRB	TAL SAC

Client Sample ID: LIN03-SB2-01
Date Collected: 07/18/18 14:35
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236402	07/26/18 18:00	JCB	TAL SAC

Client Sample ID: LIN03-SB2-01
Date Collected: 07/18/18 14:35
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-10
Matrix: Solid
Percent Solids: 82.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			236486	07/27/18 10:32	HJA	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238093	08/06/18 05:09	JRB	TAL SAC
Total/NA	Prep	SHAKE	DL		236486	07/27/18 10:32	HJA	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)	DL	10	238576	08/07/18 17:06	ABH	TAL SAC

Client Sample ID: LIN03-SB2-02
Date Collected: 07/18/18 14:40
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236402	07/26/18 18:00	JCB	TAL SAC

Client Sample ID: LIN03-SB2-02
Date Collected: 07/18/18 14:40
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-11
Matrix: Solid
Percent Solids: 77.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			236486	07/27/18 10:32	HJA	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238093	08/06/18 05:17	JRB	TAL SAC

Client Sample ID: LIN02-SB1-01
Date Collected: 07/18/18 15:05
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236402	07/26/18 18:00	JCB	TAL SAC

Client Sample ID: LIN02-SB1-01
Date Collected: 07/18/18 15:05
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-12
Matrix: Solid
Percent Solids: 78.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			236486	07/27/18 10:32	HJA	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238093	08/06/18 05:25	JRB	TAL SAC

Client Sample ID: LIN02-SB1-02
Date Collected: 07/18/18 15:15
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236526	07/27/18 13:05	SSS	TAL SAC

Client Sample ID: LIN02-SB1-02
Date Collected: 07/18/18 15:15
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-13
Matrix: Solid
Percent Solids: 78.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			236486	07/27/18 10:32	HJA	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238093	08/06/18 05:32	JRB	TAL SAC

Client Sample ID: LIN01-SB2-01
Date Collected: 07/18/18 15:40
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236402	07/26/18 18:00	JCB	TAL SAC

Client Sample ID: LIN01-SB2-01
Date Collected: 07/18/18 15:40
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-14
Matrix: Solid
Percent Solids: 78.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			236486	07/27/18 10:32	HJA	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238093	08/06/18 06:04	JRB	TAL SAC

Client Sample ID: LIN01-SB2-02
Date Collected: 07/18/18 15:55
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236402	07/26/18 18:00	JCB	TAL SAC

Client Sample ID: LIN01-SB2-02
Date Collected: 07/18/18 15:55
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-15
Matrix: Solid
Percent Solids: 82.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			236486	07/27/18 10:32	HJA	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238093	08/06/18 06:12	JRB	TAL SAC

Client Sample ID: LIN01-SB1-01
Date Collected: 07/18/18 16:20
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-16
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236402	07/26/18 18:00	JCB	TAL SAC

Client Sample ID: LIN01-SB1-01
Date Collected: 07/18/18 16:20
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-16
Matrix: Solid
Percent Solids: 82.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			236486	07/27/18 10:32	HJA	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238093	08/06/18 06:19	JRB	TAL SAC

Client Sample ID: LIN01-SB1-02
Date Collected: 07/18/18 16:25
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236402	07/26/18 18:00	JCB	TAL SAC

Client Sample ID: LIN01-SB1-02
Date Collected: 07/18/18 16:25
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-17
Matrix: Solid
Percent Solids: 75.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			236486	07/27/18 10:33	HJA	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238093	08/06/18 06:27	JRB	TAL SAC
Total/NA	Prep	SHAKE	DL		236486	07/27/18 10:33	HJA	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)	DL	20	238576	08/07/18 17:21	ABH	TAL SAC

Client Sample ID: LIN01-SB1-02D
Date Collected: 07/18/18 16:25
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-18
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236402	07/26/18 18:00	JCB	TAL SAC

Client Sample ID: LIN01-SB1-02D
Lab Sample ID: 320-41403-18
Date Collected: 07/18/18 16:25
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 71.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			236486	07/27/18 10:33	HJA	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238093	08/06/18 06:35	JRB	TAL SAC
Total/NA	Prep	SHAKE	DL		236486	07/27/18 10:33	HJA	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)	DL	20	238576	08/07/18 17:29	ABH	TAL SAC

Client Sample ID: LIN05-SB2-01
Lab Sample ID: 320-41403-19
Date Collected: 07/18/18 17:00
Matrix: Solid
Date Received: 07/24/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236218	07/25/18 21:59	SSS	TAL SAC

Client Sample ID: LIN05-SB2-01
Lab Sample ID: 320-41403-19
Date Collected: 07/18/18 17:00
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 76.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			236486	07/27/18 10:33	HJA	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238093	08/06/18 06:43	JRB	TAL SAC

Client Sample ID: LIN05-SB2-02
Lab Sample ID: 320-41403-20
Date Collected: 07/18/18 17:25
Matrix: Solid
Date Received: 07/24/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236218	07/25/18 21:59	SSS	TAL SAC

Client Sample ID: LIN05-SB2-02
Lab Sample ID: 320-41403-20
Date Collected: 07/18/18 17:25
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 75.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			237139	07/31/18 10:42	KJP	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238095	08/06/18 08:01	D1R	TAL SAC

Client Sample ID: ER-01
Lab Sample ID: 320-41403-21
Date Collected: 07/18/18 16:05
Matrix: Water
Date Received: 07/24/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			237294	08/01/18 08:32	SK	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	237990	08/03/18 21:23	S1M	TAL SAC

Client Sample ID: FB-01
Lab Sample ID: 320-41403-22
Date Collected: 07/19/18 09:25
Matrix: Water
Date Received: 07/24/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			237294	08/01/18 08:32	SK	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	237990	08/03/18 21:31	S1M	TAL SAC

Client Sample ID: LIN09-SB2-01
Lab Sample ID: 320-41403-24
Date Collected: 07/19/18 12:20
Matrix: Solid
Date Received: 07/24/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236218	07/25/18 21:59	SSS	TAL SAC

Client Sample ID: LIN09-SB2-01
Lab Sample ID: 320-41403-24
Date Collected: 07/19/18 12:20
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 74.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			237139	07/31/18 10:42	KJP	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238095	08/06/18 08:09	D1R	TAL SAC

Client Sample ID: LIN09-SB2-02
Lab Sample ID: 320-41403-25
Date Collected: 07/19/18 12:25
Matrix: Solid
Date Received: 07/24/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236218	07/25/18 21:59	SSS	TAL SAC

Client Sample ID: LIN09-SB2-02
Lab Sample ID: 320-41403-25
Date Collected: 07/19/18 12:25
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 74.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			237139	07/31/18 10:42	KJP	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238095	08/06/18 08:16	D1R	TAL SAC

Client Sample ID: LIN09-SB1-01
Lab Sample ID: 320-41403-26
Date Collected: 07/19/18 12:40
Matrix: Solid
Date Received: 07/24/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236218	07/25/18 21:59	SSS	TAL SAC

Client Sample ID: LIN09-SB1-01
Lab Sample ID: 320-41403-26
Date Collected: 07/19/18 12:40
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 77.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			237139	07/31/18 10:42	KJP	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238095	08/06/18 08:24	D1R	TAL SAC

Client Sample ID: LIN09-SB1-02
Lab Sample ID: 320-41403-27
Date Collected: 07/19/18 12:45
Matrix: Solid
Date Received: 07/24/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236218	07/25/18 21:59	SSS	TAL SAC

Client Sample ID: LIN09-SB1-02
Lab Sample ID: 320-41403-27
Date Collected: 07/19/18 12:45
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 75.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			237139	07/31/18 10:42	KJP	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238095	08/06/18 08:32	D1R	TAL SAC

Client Sample ID: LIN05-SB3-01
Lab Sample ID: 320-41403-28
Date Collected: 07/19/18 13:00
Matrix: Solid
Date Received: 07/24/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236218	07/25/18 21:59	SSS	TAL SAC

Client Sample ID: LIN05-SB3-01
Lab Sample ID: 320-41403-28
Date Collected: 07/19/18 13:00
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 75.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			237139	07/31/18 10:42	KJP	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238095	08/06/18 08:40	D1R	TAL SAC

Client Sample ID: LIN05-SB3-01D
Lab Sample ID: 320-41403-29
Date Collected: 07/19/18 13:00
Matrix: Solid
Date Received: 07/24/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236218	07/25/18 21:59	SSS	TAL SAC

Client Sample ID: LIN05-SB3-01D
Lab Sample ID: 320-41403-29
Date Collected: 07/19/18 13:00
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 79.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			237139	07/31/18 10:42	KJP	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238095	08/06/18 08:48	D1R	TAL SAC

Client Sample ID: LIN05-SB3-02
Lab Sample ID: 320-41403-30
Date Collected: 07/19/18 13:05
Matrix: Solid
Date Received: 07/24/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236218	07/25/18 21:59	SSS	TAL SAC

Client Sample ID: LIN05-SB3-02
Lab Sample ID: 320-41403-30
Date Collected: 07/19/18 13:05
Matrix: Solid
Date Received: 07/24/18 09:00
Percent Solids: 79.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			237139	07/31/18 10:42	KJP	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238095	08/06/18 08:56	D1R	TAL SAC

Client Sample ID: ER-02
Lab Sample ID: 320-41403-31
Date Collected: 07/19/18 13:15
Matrix: Water
Date Received: 07/24/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			237294	08/01/18 08:32	SK	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	237990	08/03/18 21:38	S1M	TAL SAC

Client Sample ID: ER-03
Lab Sample ID: 320-41403-32
Date Collected: 07/19/18 15:35
Matrix: Water
Date Received: 07/24/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			237294	08/01/18 08:32	SK	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	237990	08/03/18 21:46	S1M	TAL SAC

Client Sample ID: LIN05-SB1-01
Lab Sample ID: 320-41403-33
Date Collected: 07/19/18 13:20
Matrix: Solid
Date Received: 07/24/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236218	07/25/18 21:59	SSS	TAL SAC

Client Sample ID: LIN05-SB1-01
Date Collected: 07/19/18 13:20
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-33
Matrix: Solid
Percent Solids: 82.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			237139	07/31/18 10:42	KJP	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238095	08/06/18 09:11	D1R	TAL SAC
Total/NA	Prep	SHAKE	DL		237139	07/31/18 10:42	KJP	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)	DL	100	238588	08/07/18 20:53	S1M	TAL SAC

Client Sample ID: LIN05-SB1-02
Date Collected: 07/19/18 13:25
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-34
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236218	07/25/18 21:59	SSS	TAL SAC

Client Sample ID: LIN05-SB1-02
Date Collected: 07/19/18 13:25
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-34
Matrix: Solid
Percent Solids: 77.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			237139	07/31/18 10:42	KJP	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238095	08/06/18 09:19	D1R	TAL SAC

Client Sample ID: LIN08-SB2-01
Date Collected: 07/20/18 10:05
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-35
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236218	07/25/18 21:59	SSS	TAL SAC

Client Sample ID: LIN08-SB2-01
Date Collected: 07/20/18 10:05
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-35
Matrix: Solid
Percent Solids: 80.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			237139	07/31/18 10:42	KJP	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238095	08/06/18 09:27	D1R	TAL SAC

Client Sample ID: LIN08-SB2-02
Date Collected: 07/20/18 10:10
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-36
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236217	07/25/18 21:59	SSS	TAL SAC

Client Sample ID: LIN08-SB2-02 — **Lab Sample ID: 320-41403-36**
Date Collected: 07/20/18 10:10 — **Matrix: Solid**
Date Received: 07/24/18 09:00 — **Percent Solids: 72.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			237139	07/31/18 10:42	KJP	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238095	08/06/18 09:35	D1R	TAL SAC

Client Sample ID: LIN07-SB1-01 — **Lab Sample ID: 320-41403-37**
Date Collected: 07/20/18 10:20 — **Matrix: Solid**
Date Received: 07/24/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236217	07/25/18 21:59	SSS	TAL SAC

Client Sample ID: LIN07-SB1-01 — **Lab Sample ID: 320-41403-37**
Date Collected: 07/20/18 10:20 — **Matrix: Solid**
Date Received: 07/24/18 09:00 — **Percent Solids: 76.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			237139	07/31/18 10:42	KJP	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238283	08/06/18 13:23	S1M	TAL SAC

Client Sample ID: LIN07-SB1-02 — **Lab Sample ID: 320-41403-38**
Date Collected: 07/20/18 10:25 — **Matrix: Solid**
Date Received: 07/24/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236217	07/25/18 21:59	SSS	TAL SAC

Client Sample ID: LIN07-SB1-02 — **Lab Sample ID: 320-41403-38**
Date Collected: 07/20/18 10:25 — **Matrix: Solid**
Date Received: 07/24/18 09:00 — **Percent Solids: 77.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			237139	07/31/18 10:42	KJP	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238283	08/06/18 13:30	S1M	TAL SAC

Client Sample ID: LIN07-SB1-02D — **Lab Sample ID: 320-41403-39**
Date Collected: 07/20/18 10:25 — **Matrix: Solid**
Date Received: 07/24/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236217	07/25/18 21:59	SSS	TAL SAC

Client Sample ID: LIN07-SB1-02D — **Lab Sample ID: 320-41403-39**
Date Collected: 07/20/18 10:25 — **Matrix: Solid**
Date Received: 07/24/18 09:00 — **Percent Solids: 78.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			237139	07/31/18 10:42	KJP	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238283	08/06/18 13:38	S1M	TAL SAC

Client Sample ID: LIN07-SB2-01 — **Lab Sample ID: 320-41403-40**
Date Collected: 07/20/18 10:40 — **Matrix: Solid**
Date Received: 07/24/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236217	07/25/18 21:59	SSS	TAL SAC

Client Sample ID: LIN07-SB2-01 — **Lab Sample ID: 320-41403-40**
Date Collected: 07/20/18 10:40 — **Matrix: Solid**
Date Received: 07/24/18 09:00 — **Percent Solids: 75.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			237139	07/31/18 10:42	KJP	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238283	08/06/18 13:46	S1M	TAL SAC

Client Sample ID: LIN07-SB2-02 — **Lab Sample ID: 320-41403-41**
Date Collected: 07/20/18 11:00 — **Matrix: Solid**
Date Received: 07/24/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236217	07/25/18 21:59	SSS	TAL SAC

Client Sample ID: LIN07-SB2-02 — **Lab Sample ID: 320-41403-41**
Date Collected: 07/20/18 11:00 — **Matrix: Solid**
Date Received: 07/24/18 09:00 — **Percent Solids: 65.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			237139	07/31/18 10:42	KJP	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238283	08/06/18 14:02	S1M	TAL SAC

Client Sample ID: LIN02-SB2-01 — **Lab Sample ID: 320-41403-42**
Date Collected: 07/20/18 11:25 — **Matrix: Solid**
Date Received: 07/24/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236217	07/25/18 21:59	SSS	TAL SAC

Client Sample ID: LIN02-SB2-01
Date Collected: 07/20/18 11:25
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-42
Matrix: Solid
Percent Solids: 73.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			237139	07/31/18 10:42	KJP	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238283	08/06/18 14:10	S1M	TAL SAC

Client Sample ID: LIN02-SB2-02
Date Collected: 07/20/18 11:30
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-43
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236218	07/25/18 21:59	SSS	TAL SAC

Client Sample ID: LIN02-SB2-02
Date Collected: 07/20/18 11:30
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-43
Matrix: Solid
Percent Solids: 74.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			237139	07/31/18 10:42	KJP	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238283	08/06/18 14:17	S1M	TAL SAC

Client Sample ID: ER-04
Date Collected: 07/20/18 11:35
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-44
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			237294	08/01/18 08:32	SK	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	237990	08/03/18 21:53	S1M	TAL SAC

Client Sample ID: LIN08-SB1-01
Date Collected: 07/20/18 11:45
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-45
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236218	07/25/18 21:59	SSS	TAL SAC

Client Sample ID: LIN08-SB1-01
Date Collected: 07/20/18 11:45
Date Received: 07/24/18 09:00

Lab Sample ID: 320-41403-45
Matrix: Solid
Percent Solids: 74.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			237139	07/31/18 10:42	KJP	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238283	08/06/18 14:25	S1M	TAL SAC

Client Sample ID: LIN08-SB1-02

Lab Sample ID: 320-41403-46

Date Collected: 07/20/18 11:50

Matrix: Solid

Date Received: 07/24/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	236218	07/25/18 21:59	SSS	TAL SAC

Client Sample ID: LIN08-SB1-02

Lab Sample ID: 320-41403-46

Date Collected: 07/20/18 11:50

Matrix: Solid

Date Received: 07/24/18 09:00

Percent Solids: 80.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			237168	07/31/18 11:42	KJP	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	238037	08/04/18 16:54	S1M	TAL SAC

Client Sample ID: Field Reagent Blank

Lab Sample ID: 320-41403-47

Date Collected: 07/19/18 09:40

Matrix: Water

Date Received: 07/24/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			237294	08/01/18 08:32	SK	TAL SAC
Total/NA	Analysis	EPA 537 (Mod)		1	237990	08/03/18 22:01	S1M	TAL SAC

Laboratory References:

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: Leidos, Inc.
Project/Site: Phase III, ANG - Lincoln ANG

TestAmerica Job ID: 320-41403-1

Laboratory: TestAmerica Sacramento

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Oregon	NELAP	10	4040	01-29-19

Analysis Method	Prep Method	Matrix	Analyte

Method Summary

Client: Leidos, Inc.
Project/Site: Phase III, ANG - Lincoln ANG

TestAmerica Job ID: 320-41403-1

Method	Method Description	Protocol	Laboratory
EPA 537 (Mod)	PFAS for QSM 5.1, Table B-15	DOD 5.1	TAL SAC
D 2216	Percent Moisture	ASTM	TAL SAC
3535	Solid-Phase Extraction (SPE)	SW846	TAL SAC
SHAKE	Shake Extraction with Ultrasonic Bath Extraction	SW846	TAL SAC

Protocol References:

ASTM = ASTM International

DOD 5.1 = Department of Defense Quality Systems Manual V5.1

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: Leidos, Inc.
Project/Site: Phase III, ANG - Lincoln ANG

TestAmerica Job ID: 320-41403-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-41403-1	LIN04-SB1-01	Solid	07/18/18 11:35	07/24/18 09:00
320-41403-2	LIN04-SB1-02	Solid	07/18/18 11:40	07/24/18 09:00
320-41403-3	LIN04-SB2-01	Solid	07/18/18 12:10	07/24/18 09:00
320-41403-4	LIN04-SB2-02	Solid	07/18/18 12:20	07/24/18 09:00
320-41403-5	LIN03-SB1-01	Solid	07/18/18 13:20	07/24/18 09:00
320-41403-6	LIN03-SB1-02	Solid	07/18/18 13:30	07/24/18 09:00
320-41403-7	LIN03-SB3-01	Solid	07/18/18 14:10	07/24/18 09:00
320-41403-8	LIN03-SB3-01D	Solid	07/18/18 14:10	07/24/18 09:00
320-41403-9	LIN03-SB3-02	Solid	07/18/18 14:20	07/24/18 09:00
320-41403-10	LIN03-SB2-01	Solid	07/18/18 14:35	07/24/18 09:00
320-41403-11	LIN03-SB2-02	Solid	07/18/18 14:40	07/24/18 09:00
320-41403-12	LIN02-SB1-01	Solid	07/18/18 15:05	07/24/18 09:00
320-41403-13	LIN02-SB1-02	Solid	07/18/18 15:15	07/24/18 09:00
320-41403-14	LIN01-SB2-01	Solid	07/18/18 15:40	07/24/18 09:00
320-41403-15	LIN01-SB2-02	Solid	07/18/18 15:55	07/24/18 09:00
320-41403-16	LIN01-SB1-01	Solid	07/18/18 16:20	07/24/18 09:00
320-41403-17	LIN01-SB1-02	Solid	07/18/18 16:25	07/24/18 09:00
320-41403-18	LIN01-SB1-02D	Solid	07/18/18 16:25	07/24/18 09:00
320-41403-19	LIN05-SB2-01	Solid	07/18/18 17:00	07/24/18 09:00
320-41403-20	LIN05-SB2-02	Solid	07/18/18 17:25	07/24/18 09:00
320-41403-21	ER-01	Water	07/18/18 16:05	07/24/18 09:00
320-41403-22	FB-01	Water	07/19/18 09:25	07/24/18 09:00
320-41403-24	LIN09-SB2-01	Solid	07/19/18 12:20	07/24/18 09:00
320-41403-25	LIN09-SB2-02	Solid	07/19/18 12:25	07/24/18 09:00
320-41403-26	LIN09-SB1-01	Solid	07/19/18 12:40	07/24/18 09:00
320-41403-27	LIN09-SB1-02	Solid	07/19/18 12:45	07/24/18 09:00
320-41403-28	LIN05-SB3-01	Solid	07/19/18 13:00	07/24/18 09:00
320-41403-29	LIN05-SB3-01D	Solid	07/19/18 13:00	07/24/18 09:00
320-41403-30	LIN05-SB3-02	Solid	07/19/18 13:05	07/24/18 09:00
320-41403-31	ER-02	Water	07/19/18 13:15	07/24/18 09:00
320-41403-32	ER-03	Water	07/19/18 15:35	07/24/18 09:00
320-41403-33	LIN05-SB1-01	Solid	07/19/18 13:20	07/24/18 09:00
320-41403-34	LIN05-SB1-02	Solid	07/19/18 13:25	07/24/18 09:00
320-41403-35	LIN08-SB2-01	Solid	07/20/18 10:05	07/24/18 09:00
320-41403-36	LIN08-SB2-02	Solid	07/20/18 10:10	07/24/18 09:00
320-41403-37	LIN07-SB1-01	Solid	07/20/18 10:20	07/24/18 09:00
320-41403-38	LIN07-SB1-02	Solid	07/20/18 10:25	07/24/18 09:00
320-41403-39	LIN07-SB1-02D	Solid	07/20/18 10:25	07/24/18 09:00
320-41403-40	LIN07-SB2-01	Solid	07/20/18 10:40	07/24/18 09:00
320-41403-41	LIN07-SB2-02	Solid	07/20/18 11:00	07/24/18 09:00
320-41403-42	LIN02-SB2-01	Solid	07/20/18 11:25	07/24/18 09:00
320-41403-43	LIN02-SB2-02	Solid	07/20/18 11:30	07/24/18 09:00
320-41403-44	ER-04	Water	07/20/18 11:35	07/24/18 09:00
320-41403-45	LIN08-SB1-01	Solid	07/20/18 11:45	07/24/18 09:00
320-41403-46	LIN08-SB1-02	Solid	07/20/18 11:50	07/24/18 09:00
320-41403-47	Field Reagent Blank	Water	07/19/18 09:40	07/24/18 09:00

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Instrument ID: A8_N Analysis Batch Number: 237402

Lab Sample ID: IC 320-237402/2 Client Sample ID:

Date Analyzed: 08/01/18 12:59 Lab File ID: 2018.08.01LLICAL_002.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorobutanoic acid (PFBA)	1.40	Baseline	roycea	08/01/18 14:23
Perfluorohexanoic acid (PFHxA)	1.90	Assign Peak	roycea	08/01/18 14:24
Perfluoroheptanoic acid (PFHpA)	2.23	Baseline	roycea	08/01/18 14:24
Perfluorooctanoic acid (PFOA)	2.58	Baseline	roycea	08/01/18 14:23
Perfluorononanoic acid (PFNA)	2.95	Baseline	roycea	08/01/18 14:25
Perfluorooctanesulfonic acid (PFOS)	2.95	Assign Peak	roycea	08/01/18 14:24
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	3.47	Baseline	roycea	08/01/18 14:25
Perfluorodecanesulfonic acid (PFDS)	3.63	Baseline	roycea	08/01/18 14:26
Perfluoroundecanoic acid (PFUnA)	3.64	Baseline	roycea	08/01/18 14:27
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	3.65	Baseline	roycea	08/01/18 14:26

Lab Sample ID: IC 320-237402/3 Client Sample ID:

Date Analyzed: 08/01/18 13:06 Lab File ID: 2018.08.01LLICAL_003.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorohexanoic acid (PFHxA)	1.91	Baseline	roycea	08/01/18 14:29
Perfluoroheptanoic acid (PFHpA)	2.23	Baseline	roycea	08/01/18 14:29
Perfluorooctanoic acid (PFOA)	2.59	Baseline	roycea	08/01/18 14:28
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	3.47	Assign Peak	roycea	08/01/18 14:29

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Instrument ID: A8_N Analysis Batch Number: 237402

Lab Sample ID: IC 320-237402/5 ICIS Client Sample ID:

Date Analyzed: 08/01/18 13:22 Lab File ID: 2018.08.01LLICAL_005.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorooctanesulfonic acid (PFOS)	2.95	Isomers	roycea	08/01/18 14:33

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Instrument ID: A8_N Analysis Batch Number: 238031

Lab Sample ID: CCB 320-238031/1 Client Sample ID:

Date Analyzed: 08/04/18 12:35 Lab File ID: 2018.08.03LLE_004.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorooctanoic acid (PFOA)	2.56	Peak assignment corrected	hannigana	08/06/18 10:10

Lab Sample ID: CCVL 320-238031/2 Client Sample ID:

Date Analyzed: 08/04/18 12:43 Lab File ID: 2018.08.03LLE_005.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluoropentanoic acid (PFPeA)	1.63	Baseline	roycea	08/04/18 14:44
Perfluorohexanoic acid (PFHxA)	1.90	Baseline	hannigana	08/06/18 10:11

Lab Sample ID: CCV 320-238031/3 CCVIS Client Sample ID:

Date Analyzed: 08/04/18 12:51 Lab File ID: 2018.08.03LLE_006.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorooctanesulfonic acid (PFOS)	2.93	Isomers	hannigana	08/06/18 10:12

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Instrument ID: A8_N Analysis Batch Number: 238037

Lab Sample ID: CCV 320-238037/1 Client Sample ID:

Date Analyzed: 08/04/18 16:30 Lab File ID: 2018.08.03LLE_034.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorooctanesulfonic acid (PFOS)	2.94	Isomers	mongkols	08/07/18 09:10

Lab Sample ID: LCS 320-237168/2-A Client Sample ID:

Date Analyzed: 08/04/18 16:46 Lab File ID: 2018.08.03LLE_036.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorooctanesulfonic acid (PFOS)	2.94	Isomers	mongkols	08/07/18 09:12

Lab Sample ID: 320-41403-46 Client Sample ID: LIN08-SB1-02

Date Analyzed: 08/04/18 16:54 Lab File ID: 2018.08.03LLE_037.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorooctanoic acid (PFOA)	2.58	Isomers	mongkols	08/07/18 09:13
Perfluorooctanesulfonic acid (PFOS)	2.95	Baseline	mongkols	08/07/18 09:14

Lab Sample ID: CCV 320-238037/12 Client Sample ID:

Date Analyzed: 08/04/18 17:57 Lab File ID: 2018.08.03LLE_045.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorooctanesulfonic acid (PFOS)	2.94	Isomers	mongkols	08/07/18 09:41

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Instrument ID: A8_N Analysis Batch Number: 238089

Lab Sample ID: CCB 320-238089/1 Client Sample ID:

Date Analyzed: 08/05/18 23:56 Lab File ID: 2018.08.05LLA_004.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorooctanoic acid (PFOA)	2.55	Split Peak	barnettj	08/06/18 17:03

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Instrument ID: A8_N Analysis Batch Number: 238093

Lab Sample ID: 320-41403-1 Client Sample ID: LIN04-SB1-01

Date Analyzed: 08/06/18 03:51 Lab File ID: 2018.08.05LLA_034.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorooctanoic acid (PFOA)	2.56	Baseline	barnettj	08/06/18 16:31

Lab Sample ID: 320-41403-3 Client Sample ID: LIN04-SB2-01

Date Analyzed: 08/06/18 04:06 Lab File ID: 2018.08.05LLA_036.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorooctanesulfonic acid (PFOS)	2.92	Isomers	barnettj	08/06/18 16:38

Lab Sample ID: 320-41403-5 Client Sample ID: LIN03-SB1-01

Date Analyzed: 08/06/18 04:22 Lab File ID: 2018.08.05LLA_038.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorononanoic acid (PFNA)	2.92	Baseline	barnettj	08/06/18 16:43

Lab Sample ID: 320-41403-6 Client Sample ID: LIN03-SB1-02

Date Analyzed: 08/06/18 04:38 Lab File ID: 2018.08.05LLA_040.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorooctanesulfonic acid (PFOS)	2.92	Missed Peak	barnettj	08/06/18 16:43

Lab Sample ID: 320-41403-7 Client Sample ID: LIN03-SB3-01

Date Analyzed: 08/06/18 04:46 Lab File ID: 2018.08.05LLA_041.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorooctanoic acid (PFOA)	2.55	Baseline	barnettj	08/06/18 16:44

EPA 537 (Mod)

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Instrument ID: A8_N Analysis Batch Number: 238093

Lab Sample ID: 320-41403-9 Client Sample ID: LIN03-SB3-02

Date Analyzed: 08/06/18 05:01 Lab File ID: 2018.08.05LLA_043.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorooctanesulfonic acid (PFOS)	2.92	Missed Peak	barnettj	08/06/18 16:46

Lab Sample ID: 320-41403-13 Client Sample ID: LIN02-SB1-02

Date Analyzed: 08/06/18 05:32 Lab File ID: 2018.08.05LLA_047.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorobutanesulfonic acid (PFBS)	1.66	Peak assignment corrected	barnettj	08/06/18 16:49

Lab Sample ID: 320-41403-14 Client Sample ID: LIN01-SB2-01

Date Analyzed: 08/06/18 06:04 Lab File ID: 2018.08.05LLA_051.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorononanoic acid (PFNA)	2.92	Baseline	barnettj	08/06/18 16:53

Lab Sample ID: 320-41403-18 Client Sample ID: LIN01-SB1-02D

Date Analyzed: 08/06/18 06:35 Lab File ID: 2018.08.05LLA_055.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorooctanoic acid (PFOA)	2.56	Baseline	barnettj	08/06/18 16:56

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Instrument ID: A8_N Analysis Batch Number: 238095

Lab Sample ID: CCVL 320-238095/2 Client Sample ID:

Date Analyzed: 08/06/18 07:30 Lab File ID: 2018.08.05LLB_005.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	3.42	Assign Peak	ruangyotsakuld	08/07/18 12:10

Lab Sample ID: CCV 320-238095/3 CCVIS Client Sample ID:

Date Analyzed: 08/06/18 07:37 Lab File ID: 2018.08.05LLB_006.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorobutanoic acid (PFBA)	1.39	Baseline	ruangyotsakuld	08/07/18 12:10
Perfluoropentanoic acid (PFPeA)	1.63	Baseline	ruangyotsakuld	08/07/18 12:10

Lab Sample ID: MB 320-237139/1-A Client Sample ID:

Date Analyzed: 08/06/18 07:45 Lab File ID: 2018.08.05LLB_007.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorooctanesulfonic acid (PFOS)	2.91	Baseline	ruangyotsakuld	08/07/18 12:12

Lab Sample ID: 320-41403-24 Client Sample ID: LIN09-SB2-01

Date Analyzed: 08/06/18 08:09 Lab File ID: 2018.08.05LLB_010.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluoroheptanoic acid (PFHpA)	2.21	Baseline	ruangyotsakuld	08/07/18 12:14

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Instrument ID: A8_N Analysis Batch Number: 238095

Lab Sample ID: 320-41403-25 Client Sample ID: LIN09-SB2-02

Date Analyzed: 08/06/18 08:16 Lab File ID: 2018.08.05LLB_011.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorooctanesulfonic acid (PFOS)	2.92	Baseline	ruangyotsakuld	08/07/18 12:14

Lab Sample ID: 320-41403-27 Client Sample ID: LIN09-SB1-02

Date Analyzed: 08/06/18 08:32 Lab File ID: 2018.08.05LLB_013.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorooctanoic acid (PFOA)	2.56	Baseline	ruangyotsakuld	08/07/18 12:15

Lab Sample ID: 320-41403-30 Client Sample ID: LIN05-SB3-02

Date Analyzed: 08/06/18 08:56 Lab File ID: 2018.08.05LLB_016.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorooctanoic acid (PFOA)	2.56	Baseline	ruangyotsakuld	08/07/18 12:16

Lab Sample ID: CCV 320-238095/14 Client Sample ID:

Date Analyzed: 08/06/18 09:04 Lab File ID: 2018.08.05LLB_017.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorobutanoic acid (PFBA)	1.39	Baseline	ruangyotsakuld	08/07/18 12:17

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Instrument ID: A8_N Analysis Batch Number: 238095

Lab Sample ID: 320-41403-34 Client Sample ID: LIN05-SB1-02

Date Analyzed: 08/06/18 09:19 Lab File ID: 2018.08.05LLB_019.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorononanoic acid (PFNA)	2.92	Baseline	ruangyotsakuld	08/07/18 12:18

Lab Sample ID: 320-41403-35 Client Sample ID: LIN08-SB2-01

Date Analyzed: 08/06/18 09:27 Lab File ID: 2018.08.05LLB_020.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorooctanoic acid (PFOA)	2.57	Baseline	ruangyotsakuld	08/07/18 12:19

Lab Sample ID: CCV 320-238095/25 Client Sample ID:

Date Analyzed: 08/06/18 09:58 Lab File ID: 2018.08.05LLB_028.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorobutanoic acid (PFBA)	1.40	Baseline	ruangyotsakuld	08/07/18 12:21

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Instrument ID: A8_N Analysis Batch Number: 238193

Lab Sample ID: IC 320-238193/3 Client Sample ID:

Date Analyzed: 08/06/18 11:17 Lab File ID: 2018.08.06LLICAL_003.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorobutanoic acid (PFBA)	1.39	Incomplete Integration	westendorfc	08/06/18 15:52

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Instrument ID: A8_N Analysis Batch Number: 238283

Lab Sample ID: 320-41403-38 Client Sample ID: LIN07-SB1-02

Date Analyzed: 08/06/18 13:30 Lab File ID: 2018.08.05LLBBB_025.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorooctanoic acid (PFOA)	2.49	Baseline	mongkols	08/07/18 12:16
Perfluorooctanesulfonic acid (PFOS)	2.81	Baseline	mongkols	08/07/18 12:17

Lab Sample ID: 320-41403-39 Client Sample ID: LIN07-SB1-02D

Date Analyzed: 08/06/18 13:38 Lab File ID: 2018.08.05LLBBB_026.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorooctanoic acid (PFOA)	2.57	Isomers	mongkols	08/07/18 12:18

Lab Sample ID: 320-41403-40 Client Sample ID: LIN07-SB2-01

Date Analyzed: 08/06/18 13:46 Lab File ID: 2018.08.05LLBBB_027.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorooctanoic acid (PFOA)	2.57	Baseline	mongkols	08/07/18 13:49

Lab Sample ID: CCV 320-238283/6 Client Sample ID:

Date Analyzed: 08/06/18 13:54 Lab File ID: 2018.08.05LLBBB_028.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorobutanoic acid (PFBA)	1.40	Incomplete Integration	mongkols	08/07/18 12:19

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Instrument ID: A8_N Analysis Batch Number: 238283

Lab Sample ID: 320-41403-41 Client Sample ID: LIN07-SB2-02

Date Analyzed: 08/06/18 14:02 Lab File ID: 2018.08.05LLBBB_029.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorohexanesulfonic acid (PFHxS)	2.15	Isomers	roycea	08/09/18 09:24
Perfluoroheptanoic acid (PFHpA)	2.19	Split Peak	mongkols	08/07/18 12:21
Perfluorononanoic acid (PFNA)		Invalid Compound ID	mongkols	08/07/18 12:21
Perfluorooctanoic acid (PFOA)		Invalid Compound ID	mongkols	08/07/18 12:21

Lab Sample ID: 320-41403-42 Client Sample ID: LIN02-SB2-01

Date Analyzed: 08/06/18 14:10 Lab File ID: 2018.08.05LLBBB_030.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorooctanoic acid (PFOA)	2.57	Baseline	mongkols	08/07/18 12:22

Lab Sample ID: 320-41403-43 Client Sample ID: LIN02-SB2-02

Date Analyzed: 08/06/18 14:17 Lab File ID: 2018.08.05LLBBB_031.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
13C3-PFBS	1.67	Incomplete Integration	mongkols	08/07/18 12:22
Perfluorohexanesulfonic acid (PFHxS)	2.16	Isomers	roycea	08/09/18 09:25
Perfluorooctanoic acid (PFOA)	2.57	Isomers	mongkols	08/07/18 13:48

Lab Sample ID: 320-41403-45 Client Sample ID: LIN08-SB1-01

Date Analyzed: 08/06/18 14:25 Lab File ID: 2018.08.05LLBBB_032.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluoroheptanoic acid (PFHpA)	2.22	Baseline	mongkols	08/07/18 12:23

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Instrument ID: A8_N Analysis Batch Number: 238576

Lab Sample ID: 320-41403-2 DL Client Sample ID: LIN04-SB1-02 DL

Date Analyzed: 08/07/18 16:50 Lab File ID: 2018.08.07LLBB_021.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorooctanoic acid (PFOA)	2.57	Isomers	hannigana	08/08/18 13:36

Lab Sample ID: 320-41403-10 DL Client Sample ID: LIN03-SB2-01 DL

Date Analyzed: 08/07/18 17:06 Lab File ID: 2018.08.07LLBB_023.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorooctanoic acid (PFOA)	2.57	Isomers	hannigana	08/08/18 13:37

Lab Sample ID: 320-41403-17 DL Client Sample ID: LIN01-SB1-02 DL

Date Analyzed: 08/07/18 17:21 Lab File ID: 2018.08.07LLBB_025.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
13C3-PFBS	1.67	Assign Peak	hannigana	08/08/18 13:38
Perfluorononanoic acid (PFNA)	2.94	Baseline	hannigana	08/08/18 13:38

Lab Sample ID: 320-41403-18 DL Client Sample ID: LIN01-SB1-02D DL

Date Analyzed: 08/07/18 17:29 Lab File ID: 2018.08.07LLBB_026.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorooctanoic acid (PFOA)	2.57	Baseline	hannigana	08/08/18 13:39

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Instrument ID: A8_N Analysis Batch Number: 238588

Lab Sample ID: CCV 320-238588/1 Client Sample ID:

Date Analyzed: 08/07/18 20:45 Lab File ID: 2018.08.07LLBB_051.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	3.62	Isomers	mongkols	08/09/18 09:45

Lab Sample ID: 320-41403-33 DL Client Sample ID: LIN05-SB1-01 DL

Date Analyzed: 08/07/18 20:53 Lab File ID: 2018.08.07LLBB_052.d GC Column: GeminiC18 3x1 ID: 3(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
13C3-PFBS	1.66	Assign Peak	mongkols	08/09/18 09:46

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Instrument ID: A9 Analysis Batch Number: 237921

Lab Sample ID: IC 320-237921/2 Client Sample ID:

Date Analyzed: 08/03/18 16:12 Lab File ID: 2018.08.03LLICAL_005.d GC Column: Acquity ID: 2.1(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorobutanoic acid (PFBA)	1.49	Incomplete Integration	roycea	08/03/18 17:12
Perfluorohexanoic acid (PFHxA)	2.05	Baseline	roycea	08/03/18 17:12
Perfluorohexanesulfonic acid (PFHxS)	2.40	Baseline	roycea	08/03/18 17:12
Perfluorononanoic acid (PFNA)	3.14	Baseline	roycea	08/03/18 17:13
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	3.83	Baseline	roycea	08/03/18 17:13
Perfluorododecanoic acid (PFDoA)	4.13	Baseline	roycea	08/03/18 17:13
Perfluorotetradecanoic acid (PFTeA)	4.64	Baseline	roycea	08/03/18 17:13

Lab Sample ID: IC 320-237921/3 Client Sample ID:

Date Analyzed: 08/03/18 16:19 Lab File ID: 2018.08.03LLICAL_006.d GC Column: Acquity ID: 2.1(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorobutanoic acid (PFBA)	1.49	Baseline	roycea	08/03/18 17:49
Perfluorohexanoic acid (PFHxA)	2.05	Baseline	roycea	08/03/18 17:50
Perfluorohexanesulfonic acid (PFHxS)	2.40	Baseline	roycea	08/03/18 17:50
Perfluorooctanesulfonic acid (PFOS)	3.14	Baseline	roycea	08/03/18 17:50
Perfluorodecanoic acid (PFDA)	3.51	Baseline	roycea	08/03/18 17:50
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	3.66	Baseline	roycea	08/03/18 17:50
Perfluorododecanoic acid (PFDoA)	4.13	Baseline	roycea	08/03/18 17:50

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Instrument ID: A9 Analysis Batch Number: 237921

Lab Sample ID: IC 320-237921/4 Client Sample ID:

Date Analyzed: 08/03/18 16:27 Lab File ID: 2018.08.03LLICAL_007.d GC Column: Acquity ID: 2.1(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorobutanoic acid (PFBA)	1.49	Baseline	roycea	08/03/18 17:52

Lab Sample ID: IC 320-237921/6 Client Sample ID:

Date Analyzed: 08/03/18 16:42 Lab File ID: 2018.08.03LLICAL_009.d GC Column: Acquity ID: 2.1(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorobutanoic acid (PFBA)	1.49	Incomplete Integration	roycea	08/03/18 17:54

Lab Sample ID: ICB 320-237921/9 Client Sample ID:

Date Analyzed: 08/03/18 17:04 Lab File ID: 2018.08.03LLICAL_012.d GC Column: Acquity ID: 2.1(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorooctanesulfonic acid (PFOS)		Invalid Compound ID	roycea	08/03/18 17:57

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Instrument ID: A9 Analysis Batch Number: 237990

Lab Sample ID: MB 320-237294/1-A Client Sample ID:

Date Analyzed: 08/03/18 21:01 Lab File ID: 2018.08.03LLAAAA_033.d GC Column: Acquity ID: 2.1(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorooctanesulfonic acid (PFOS)	3.10	Baseline	mongkols	08/08/18 09:48
Perfluorobutanesulfonic acid (PFBS)		Invalid Compound ID	mongkols	08/08/18 09:47

Lab Sample ID: 320-41403-21 Client Sample ID: ER-01

Date Analyzed: 08/03/18 21:23 Lab File ID: 2018.08.03LLAAAA_036.d GC Column: Acquity ID: 2.1(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorohexanesulfonic acid (PFHxS)	2.37	Baseline	mongkols	08/08/18 09:50
Perfluorobutanesulfonic acid (PFBS)		Invalid Compound ID	mongkols	08/08/18 09:50

Lab Sample ID: 320-41403-22 Client Sample ID: FB-01

Date Analyzed: 08/03/18 21:31 Lab File ID: 2018.08.03LLAAAA_037.d GC Column: Acquity ID: 2.1(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorooctanoic acid (PFOA)	2.72	Baseline	mongkols	08/08/18 09:51

Lab Sample ID: 320-41403-31 Client Sample ID: ER-02

Date Analyzed: 08/03/18 21:38 Lab File ID: 2018.08.03LLAAAA_038.d GC Column: Acquity ID: 2.1(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorooctanesulfonic acid (PFOS)	3.10	Baseline	mongkols	08/08/18 09:51

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Instrument ID: A9 Analysis Batch Number: 237990

Lab Sample ID: 320-41403-32 Client Sample ID: ER-03

Date Analyzed: 08/03/18 21:46 Lab File ID: 2018.08.03LLAAAA_039.d GC Column: Acquity ID: 2.1(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorohexanesulfonic acid (PFHxS)	2.39	Baseline	mongkols	08/08/18 09:52

Lab Sample ID: 320-41403-44 Client Sample ID: ER-04

Date Analyzed: 08/03/18 21:53 Lab File ID: 2018.08.03LLAAAA_040.d GC Column: Acquity ID: 2.1(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorohexanesulfonic acid (PFHxS)	2.37	Baseline	mongkols	08/08/18 09:53
Perfluorooctanesulfonic acid (PFOS)	3.10	Baseline	mongkols	08/08/18 09:53
Perfluorobutanesulfonic acid (PFBS)		Invalid Compound ID	mongkols	08/08/18 09:52

Lab Sample ID: 320-41403-47 Client Sample ID: Field Reagent Blank

Date Analyzed: 08/03/18 22:01 Lab File ID: 2018.08.03LLAAAA_041.d GC Column: Acquity ID: 2.1(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorohexanesulfonic acid (PFHxS)	2.37	Baseline	mongkols	08/08/18 09:54
Perfluorooctanesulfonic acid (PFOS)	3.10	Baseline	mongkols	08/08/18 09:54
Perfluorobutanesulfonic acid (PFBS)		Invalid Compound ID	mongkols	08/08/18 09:53

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
LCMPFC_ALL_SU_00088	01/17/19	07/17/18	Methanol, Lot Fisher 168632	200 mL	LCd3-NMeFOSAA_00009	200 uL	d3-NMeFOSAA	0.05 ug/mL
					LCd5-NEtFOSAA_00009	200 uL	d5-NEtFOSAA	0.05 ug/mL
					LCM2-6:FTS_00009	200 uL	M2-6:2FTS	0.0475 ug/mL
					LCM2-8:2FTS_00011	200 uL	M2-8:2FTS	0.0479 ug/mL
					LCM2PFHxDA_00017	200 uL	13C2-PFHxDA	0.05 ug/mL
					LCM2PFTeDA_00015	200 uL	13C2-PFTeDA	0.05 ug/mL
					LCM3HFPO-DA_00004	200 uL	13C3 HFPO-DA	0.05 ug/mL
					LCM4PFHPA_00015	200 uL	13C4-PFHpA	0.05 ug/mL
					LCM5PFPEA_00016	200 uL	13C5-PFPeA	0.05 ug/mL
					LCM8FOSA_00020	200 uL	13C8 FOSA	0.05 ug/mL
					LCMPFBA_00016	200 uL	13C4 PFBA	0.05 ug/mL
					LCMPFBS_00009	200 uL	13C3-PFBS	0.0465 ug/mL
					LCMPFDA_00021	200 uL	13C2 PFDA	0.05 ug/mL
					LCMPFDoA_00016	200 uL	13C2 PFDoA	0.05 ug/mL
					LCMPFHxA_00023	200 uL	13C2 PFHxA	0.05 ug/mL
					LCMPFHxS_00016	200 uL	18O2 PFHxS	0.0473 ug/mL
					LCMPFNA_00016	200 uL	13C5 PFNA	0.05 ug/mL
					LCMPFOA_00020	200 uL	13C4 PFOA	0.05 ug/mL
					LCMPFOS_00028	200 uL	13C4 PFOS	0.0478 ug/mL
					LCMPFUdA_00018	200 uL	13C2 PFUnA	0.05 ug/mL
.LCd3-NMeFOSAA_00009	11/08/22	WELLINGTON, Lot d3NMeFOSAA1117			(Purchased Reagent)		d3-NMeFOSAA	50 ug/mL
.LCd5-NEtFOSAA_00009	11/08/22	WELLINGTON, Lot d5NEtFOSAA1117			(Purchased Reagent)		d5-NEtFOSAA	50 ug/mL
.LCM2-6:FTS_00009	02/16/23	WELLINGTON, Lot M262FTS0218			(Purchased Reagent)		M2-6:2FTS	47.5 ug/mL
.LCM2-8:2FTS_00011	01/24/23	WELLINGTON, Lot M282FTS0118			(Purchased Reagent)		M2-8:2FTS	47.9 ug/mL
.LCM2PFHxDA_00017	07/13/22	Wellington Laboratories, Lot M2PFHxDA0717			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
.LCM2PFTeDA_00015	11/30/22	Wellington Laboratories, Lot M2PFTeDA1117			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
.LCM3HFPO-DA_00004	05/18/21	WELLINGTON, Lot M3HFPODA0518			(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
.LCM4PFHPA_00015	05/03/22	Wellington Laboratories, Lot M4PFHpA0517			(Purchased Reagent)		13C4-PFHpA	50 ug/mL
.LCM5PFPEA_00016	07/20/22	Wellington Laboratories, Lot M5PFPeA0717			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
.LCM8FOSA_00020	10/11/22	Wellington Laboratories, Lot M8FOSA1017I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
.LCMPFBA_00016	02/16/23	Wellington Laboratories, Lot MPFBA0218			(Purchased Reagent)		13C4 PFBA	50 ug/mL
.LCMPFBS_00009	02/15/23	Wellington Laboratories, Lot M3PFBS0218			(Purchased Reagent)		13C3-PFBS	46.5 ug/mL
.LCMPFDA_00021	02/16/23	Wellington Laboratories, Lot MPFDA0218			(Purchased Reagent)		13C2 PFDA	50 ug/mL
.LCMPFDoA_00016	02/16/23	Wellington Laboratories, Lot MPFDoA0218			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
.LCMPFHxA_00023	10/27/22	Wellington Laboratories, Lot MPFHxA1017			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
.LCMPFHxS_00016	03/22/23	Wellington Laboratories, Lot MPFHxS0318			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
.LCMPFNA_00016	12/14/22	Wellington Laboratories, Lot MPFNA1217			(Purchased Reagent)		13C5 PFNA	50 ug/mL
.LCMPFOA_00020	05/04/23	Wellington Laboratories, Lot MPFOA0418			(Purchased Reagent)		13C4 PFOA	50 ug/mL
.LCMPFOS_00028	06/15/23	Wellington Laboratories, Lot MPFOS0618			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
.LCMPFUdA_00018	05/11/23	Wellington Laboratories, Lot MPFUdA0518			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
LCMPFC_ALL_SU_00090	01/17/19	07/17/18	Methanol, Lot Fisher 168632	200 mL	LCd3-NMeFOSAA_00009	200 uL	d3-NMeFOSAA	0.05 ug/mL
					LCd5-NEtFOSAA_00009	200 uL	d5-NEtFOSAA	0.05 ug/mL
					LCM2-6:FTS_00009	200 uL	M2-6:2FTS	0.0475 ug/mL
					LCM2-8:2FTS_00011	200 uL	M2-8:2FTS	0.0479 ug/mL
					LCM2PFHxDA_00017	200 uL	13C2-PFHxDA	0.05 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCM2PFTeDA_00015	200 uL	13C2-PFTeDA	0.05 ug/mL
					LCM3HFPO-DA_00004	200 uL	13C3 HFPO-DA	0.05 ug/mL
					LCM4PFHPA_00015	200 uL	13C4-PFHpA	0.05 ug/mL
					LCM5PFPEA_00016	200 uL	13C5-PFPeA	0.05 ug/mL
					LCM8FOSA_00020	200 uL	13C8 FOSA	0.05 ug/mL
					LCMPFBA_00016	200 uL	13C4 PFBA	0.05 ug/mL
					LCMPFBS_00009	200 uL	13C3-PFBS	0.0465 ug/mL
					LCMPFDA_00021	200 uL	13C2 PFDA	0.05 ug/mL
					LCMPFDoA_00016	200 uL	13C2 PFDoA	0.05 ug/mL
					LCMPFHxA_00023	200 uL	13C2 PFHxA	0.05 ug/mL
					LCMPFHxS_00016	200 uL	18O2 PFHxS	0.0473 ug/mL
					LCMPFNA_00016	200 uL	13C5 PFNA	0.05 ug/mL
					LCMPFOA_00020	200 uL	13C4 PFOA	0.05 ug/mL
					LCMPFOS_00028	200 uL	13C4 PFOS	0.0478 ug/mL
					LCMPFUdA_00018	200 uL	13C2 PFUnA	0.05 ug/mL
.LCd3-NMeFOSAA_00009	11/08/22	WELLINGTON, Lot d3NMeFOSAA1117			(Purchased Reagent)		d3-NMeFOSAA	50 ug/mL
.LCd5-NEtFOSAA_00009	11/08/22	WELLINGTON, Lot d5NEtFOSAA1117			(Purchased Reagent)		d5-NEtFOSAA	50 ug/mL
.LCM2-6:FTS_00009	02/16/23	WELLINGTON, Lot M262FTS0218			(Purchased Reagent)		M2-6:2FTS	47.5 ug/mL
.LCM2-8:2FTS_00011	01/24/23	WELLINGTON, Lot M282FTS0118			(Purchased Reagent)		M2-8:2FTS	47.9 ug/mL
.LCM2PFHxDA_00017	07/13/22	Wellington Laboratories, Lot M2PFHxDA0717			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
.LCM2PFTeDA_00015	11/30/22	Wellington Laboratories, Lot M2PFTeDA1117			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
.LCM3HFPO-DA_00004	05/18/21	WELLINGTON, Lot M3HFPODA0518			(Purchased Reagent)		13C3 HFPO-DA	50 ug/mL
.LCM4PFHPA_00015	05/03/22	Wellington Laboratories, Lot M4PFHpA0517			(Purchased Reagent)		13C4-PFHpA	50 ug/mL
.LCM5PFPEA_00016	07/20/22	Wellington Laboratories, Lot M5PFPeA0717			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
.LCM8FOSA_00020	10/11/22	Wellington Laboratories, Lot M8FOSA1017I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
.LCMPFBA_00016	02/16/23	Wellington Laboratories, Lot MPFBA0218			(Purchased Reagent)		13C4 PFBA	50 ug/mL
.LCMPFBS_00009	02/15/23	Wellington Laboratories, Lot M3PFBS0218			(Purchased Reagent)		13C3-PFBS	46.5 ug/mL
.LCMPFDA_00021	02/16/23	Wellington Laboratories, Lot MPFDA0218			(Purchased Reagent)		13C2 PFDA	50 ug/mL
.LCMPFDoA_00016	02/16/23	Wellington Laboratories, Lot MPFDoA0218			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
.LCMPFHxA_00023	10/27/22	Wellington Laboratories, Lot MPFHxA1017			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
.LCMPFHxS_00016	03/22/23	Wellington Laboratories, Lot MPFHxS0318			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
.LCMPFNA_00016	12/14/22	Wellington Laboratories, Lot MPFNA1217			(Purchased Reagent)		13C5 PFNA	50 ug/mL
.LCMPFOA_00020	05/04/23	Wellington Laboratories, Lot MPFOA0418			(Purchased Reagent)		13C4 PFOA	50 ug/mL
.LCMPFOS_00028	06/15/23	Wellington Laboratories, Lot MPFOS0618			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
.LCMPFUdA_00018	05/11/23	Wellington Laboratories, Lot MPFUdA0518			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
LCPFC-IS_00054	12/01/18	06/01/18	Methanol, Lot 090285	200 mL	LCM2PFOA_00008	200 uL	13C2-PFOA	0.05 ug/mL
.LCM2PFOA_00008	02/12/21	Wellington Laboratories, Lot M2PFOA0216			(Purchased Reagent)		13C2-PFOA	50 ug/mL
LCPFC-IS_00075	12/25/18	07/26/18	Methanol, Lot Fisher 168632	200 mL	LCM2PFOA_00008	200 uL	13C2-PFOA	0.05 ug/mL
.LCM2PFOA_00008	02/12/21	Wellington Laboratories, Lot M2PFOA0216			(Purchased Reagent)		13C2-PFOA	50 ug/mL
LCPFC_LL0_00007	12/01/18	06/05/18	MeOH/H2O, Lot Baker 141039	200 mL	LCMPFC_ALL_SU_00075	10 mL	13C2-PFOA	2.5 ng/mL
.LCMPFC_ALL_SU_00075	12/05/18	06/05/18	Methanol, Lot Baker 141039	200 mL	LCM2PFOA_00008	200 uL	13C2-PFOA	0.05 ug/mL
..LCM2PFOA_00008	02/12/21	Wellington Laboratories, Lot M2PFOA0216			(Purchased Reagent)		13C2-PFOA	50 ug/mL
LCPFC_LL0_00007	12/01/18	06/05/18	MeOH/H2O, Lot Baker 141039	200 mL	LCMPFC_ALL_SU_00075	10 mL	d3-NMeFOSAA	2.5 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							d5-NEtFOSAA	2.5 ng/mL
							M2-6:2FTS	2.375 ng/mL
							M2-8:2FTS	2.395 ng/mL
							13C2-PFHxDA	2.5 ng/mL
							13C2-PFTeDA	2.5 ng/mL
							13C4-PFHpA	2.5 ng/mL
							13C5-PFPeA	2.5 ng/mL
							13C8 FOSA	2.5 ng/mL
							13C4 PFBA	2.5 ng/mL
							13C3-PFBS	2.325 ng/mL
							13C2 PFDA	2.5 ng/mL
							13C2 PFDoA	2.5 ng/mL
							13C2 PFHxA	2.5 ng/mL
							18O2 PFHxS	2.365 ng/mL
							13C5 PFNA	2.5 ng/mL
							13C4 PFOA	2.5 ng/mL
							13C4 PFOS	2.39 ng/mL
							13C2 PFUnA	2.5 ng/mL
.LCMPFC_ALL_SU_00075	12/05/18	06/05/18	Methanol, Lot Baker 141039	200 mL	LCd3-NMeFOSAA_00008	200 uL	d3-NMeFOSAA	0.05 ug/mL
					LCd5-NEtFOSAA_00008	200 uL	d5-NEtFOSAA	0.05 ug/mL
					LCM2-6:FTS_00008	200 uL	M2-6:2FTS	0.0475 ug/mL
					LCM2-8:2FTS_00010	200 uL	M2-8:2FTS	0.0479 ug/mL
					LCM2PFHxDA_00016	200 uL	13C2-PFHxDA	0.05 ug/mL
					LCM2PFTeDA_00014	200 uL	13C2-PFTeDA	0.05 ug/mL
					LCM4PFHPA_00014	200 uL	13C4-PFHpA	0.05 ug/mL
					LCM5PFPEA_00015	200 uL	13C5-PFPeA	0.05 ug/mL
					LCM8FOSA_00019	200 uL	13C8 FOSA	0.05 ug/mL
					LCMPFBA_00015	200 uL	13C4 PFBA	0.05 ug/mL
					LCMPFBS_00008	200 uL	13C3-PFBS	0.0465 ug/mL
					LCMPFDA_00020	200 uL	13C2 PFDA	0.05 ug/mL
					LCMPFDoA_00015	200 uL	13C2 PFDoA	0.05 ug/mL
					LCMPFHxA_00022	200 uL	13C2 PFHxA	0.05 ug/mL
					LCMPFHxS_00015	200 uL	18O2 PFHxS	0.0473 ug/mL
					LCMPFNA_00015	200 uL	13C5 PFNA	0.05 ug/mL
					LCMPFOA_00019	200 uL	13C4 PFOA	0.05 ug/mL
					LCMPFOS_00027	200 uL	13C4 PFOS	0.0478 ug/mL
					LCMPFUdA_00017	200 uL	13C2 PFUnA	0.05 ug/mL
..LCd3-NMeFOSAA_00008	11/08/22	WELLINGTON, Lot d3NMeFOSAA1117			(Purchased Reagent)		d3-NMeFOSAA	50 ug/mL
..LCd5-NEtFOSAA_00008	11/08/22	WELLINGTON, Lot d5NEtFOSAA1117			(Purchased Reagent)		d5-NEtFOSAA	50 ug/mL
..LCM2-6:FTS_00008	02/16/23	WELLINGTON, Lot M262FTS0218			(Purchased Reagent)		M2-6:2FTS	47.5 ug/mL
..LCM2-8:2FTS_00010	01/24/23	WELLINGTON, Lot M282FTS0118			(Purchased Reagent)		M2-8:2FTS	47.9 ug/mL
..LCM2PFHxDA_00016	07/13/22	Wellington Laboratories, Lot M2PFHxDA0717			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFTeDA_00014	11/30/22	Wellington Laboratories, Lot M2PFTeDA1117			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHPA_00014	05/03/22	Wellington Laboratories, Lot M4PFHpA0517			(Purchased Reagent)		13C4-PFHpA	50 ug/mL
..LCM5PFPEA_00015	07/20/22	Wellington Laboratories, Lot M5PFPeA0717			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00019	10/11/22	Wellington Laboratories, Lot M8FOSA1017I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00015	02/16/23	Wellington Laboratories, Lot MPFBA0218			(Purchased Reagent)		13C4 PFBA	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..LCMPFBS_00008	02/15/23	Wellington Laboratories, Lot M3PFBS0218			(Purchased Reagent)		13C3-PFBS	46.5 ug/mL
..LCMPFDA_00020	02/16/23	Wellington Laboratories, Lot MPFDA0218			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00015	02/16/23	Wellington Laboratories, Lot MPFDoA0218			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA_00022	10/27/22	Wellington Laboratories, Lot MPFHxA1017			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS_00015	03/22/23	Wellington Laboratories, Lot MPFHxS0318			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA_00015	12/14/22	Wellington Laboratories, Lot MPFNA1217			(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00019	05/04/23	Wellington Laboratories, Lot MPFOA0418			(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00027	02/15/23	Wellington Laboratories, Lot MPFOS0218			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUdA_00017	11/22/21	Wellington Laboratories, Lot MPFUdA1116			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
LCPFC_LL0_00008	01/25/19	07/25/18	MeOH/H2O, Lot Baker 141039	200 mL	LCMPFC_ICALSU_00001	10 mL	13C2-PFOA	2.5 ng/mL
.LCMPFC_ICALSU_00001	01/25/19	07/25/18	Methanol, Lot Fisher 168632	200 mL	LCM2PFOA_00012	200 uL	13C2-PFOA	0.05 ug/mL
..LCM2PFOA_00012	10/26/22	Wellington Laboratories, Lot M2PFOA1017			(Purchased Reagent)		13C2-PFOA	50 ug/mL
LCPFC_LL0_00008	01/25/19	07/25/18	MeOH/H2O, Lot Baker 141039	200 mL	LCMPFC_ICALSU_00001	10 mL	d3-NMeFOSAA	2.5 ng/mL
							d5-NEtFOSAA	2.5 ng/mL
							M2-6:2FTS	2.375 ng/mL
							M2-8:2FTS	2.395 ng/mL
							13C2-PFHxDA	2.5 ng/mL
							13C2-PFTeDA	2.5 ng/mL
							13C4-PFHpA	2.5 ng/mL
							13C5-PFPeA	2.5 ng/mL
							13C8 FOSA	2.5 ng/mL
							13C4 PFBA	2.5 ng/mL
							13C3-PFBS	2.325 ng/mL
							13C2 PFDA	2.5 ng/mL
							13C2 PFDoA	2.5 ng/mL
							13C2 PFHxA	2.5 ng/mL
							18O2 PFHxS	2.365 ng/mL
							13C5 PFNA	2.5 ng/mL
							13C4 PFOA	2.5 ng/mL
							13C4 PFOS	2.39 ng/mL
							13C2 PFUnA	2.5 ng/mL
.LCMPFC_ICALSU_00001	01/25/19	07/25/18	Methanol, Lot Fisher 168632	200 mL	LCd3-NMeFOSAA_00009	200 uL	d3-NMeFOSAA	0.05 ug/mL
					LCd5-NEtFOSAA_00009	200 uL	d5-NEtFOSAA	0.05 ug/mL
					LCM2-6:FTS_00009	200 uL	M2-6:2FTS	0.0475 ug/mL
					LCM2-8:2FTS_00011	200 uL	M2-8:2FTS	0.0479 ug/mL
					LCM2PFHxDA_00017	200 uL	13C2-PFHxDA	0.05 ug/mL
					LCM2PFTeDA_00015	200 uL	13C2-PFTeDA	0.05 ug/mL
					LCM4PFHPA_00015	200 uL	13C4-PFHpA	0.05 ug/mL
					LCM5PFPEA_00016	200 uL	13C5-PFPeA	0.05 ug/mL
					LCM8FOSA_00020	200 uL	13C8 FOSA	0.05 ug/mL
					LCMPFBA_00016	200 uL	13C4 PFBA	0.05 ug/mL
					LCMPFBS_00009	200 uL	13C3-PFBS	0.0465 ug/mL
					LCMPFDA_00021	200 uL	13C2 PFDA	0.05 ug/mL
					LCMPFDoA_00016	200 uL	13C2 PFDoA	0.05 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCMPFHxA_00023	200 uL	13C2 PFHxA	0.05 ug/mL
					LCMPFHxS_00016	200 uL	18O2 PFHxS	0.0473 ug/mL
					LCMPFNA_00016	200 uL	13C5 PFNA	0.05 ug/mL
					LCMPFOA_00020	200 uL	13C4 PFOA	0.05 ug/mL
					LCMPFOS_00028	200 uL	13C4 PFOS	0.0478 ug/mL
					LCMPFUdA_00018	200 uL	13C2 PFUnA	0.05 ug/mL
..LCd3-NMeFOSAA_00009	11/08/22	WELLINGTON, Lot d3NMeFOSAA1117			(Purchased Reagent)		d3-NMeFOSAA	50 ug/mL
..LCd5-NEtFOSAA_00009	11/08/22	WELLINGTON, Lot d5NEtFOSAA1117			(Purchased Reagent)		d5-NEtFOSAA	50 ug/mL
..LCM2-6:FTS_00009	02/16/23	WELLINGTON, Lot M262FTS0218			(Purchased Reagent)		M2-6:2FTS	47.5 ug/mL
..LCM2-8:2FTS_00011	01/24/23	WELLINGTON, Lot M282FTS0118			(Purchased Reagent)		M2-8:2FTS	47.9 ug/mL
..LCM2PFHxDA_00017	07/13/22	Wellington Laboratories, Lot M2PFHxDA0717			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFTeDA_00015	11/30/22	Wellington Laboratories, Lot M2PFTeDA1117			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHPA_00015	05/03/22	Wellington Laboratories, Lot M4PFHpA0517			(Purchased Reagent)		13C4-PFHpA	50 ug/mL
..LCM5PFPEA_00016	07/20/22	Wellington Laboratories, Lot M5PFPeA0717			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00020	10/11/22	Wellington Laboratories, Lot M8FOSA1017I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00016	02/16/23	Wellington Laboratories, Lot MPFBA0218			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFBS_00009	02/15/23	Wellington Laboratories, Lot M3PFBS0218			(Purchased Reagent)		13C3-PFBS	46.5 ug/mL
..LCMPFDA_00021	02/16/23	Wellington Laboratories, Lot MPFDA0218			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00016	02/16/23	Wellington Laboratories, Lot MPFDoA0218			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA_00023	10/27/22	Wellington Laboratories, Lot MPFHxA1017			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS_00016	03/22/23	Wellington Laboratories, Lot MPFHxS0318			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA_00016	12/14/22	Wellington Laboratories, Lot MPFNA1217			(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00020	05/04/23	Wellington Laboratories, Lot MPFOA0418			(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00028	06/15/23	Wellington Laboratories, Lot MPFOS0618			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUdA_00018	05/11/23	Wellington Laboratories, Lot MPFUdA0518			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
LCPFC_LL1_00006	11/18/18	06/05/18	MeOH/H2O, Lot 90285	200 mL	LCMPFC_ALL_SU_00075	10 mL	d3-NMeFOSAA	2.5 ng/mL
							d5-NEtFOSAA	2.5 ng/mL
							M2-6:2FTS	2.375 ng/mL
							M2-8:2FTS	2.395 ng/mL
							13C2-PFHxDA	2.5 ng/mL
							13C2-PFOA	2.5 ng/mL
							13C2-PFTeDA	2.5 ng/mL
							13C4-PFHpA	2.5 ng/mL
							13C5-PFPeA	2.5 ng/mL
							13C8 FOSA	2.5 ng/mL
							13C4 PFBA	2.5 ng/mL
							13C3-PFBS	2.325 ng/mL
							13C2 PFDA	2.5 ng/mL
							13C2 PFDoA	2.5 ng/mL
							13C2 PFHxA	2.5 ng/mL
							18O2 PFHxS	2.365 ng/mL
							13C5 PFNA	2.5 ng/mL
							13C4 PFOA	2.5 ng/mL
							13C4 PFOS	2.39 ng/mL
							13C2 PFUnA	2.5 ng/mL
					LCPFCSP_00151	500 uL	1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	0.02335 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	0.0237 ng/mL
							1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	0.02395 ng/mL
							N-ethyl perfluorooctane sulfonamidoacetic acid	0.025 ng/mL
							N-methyl perfluorooctane sulfonamidoacetic acid	0.025 ng/mL
							Perfluorobutyric acid	0.025 ng/mL
							Perfluorobutanesulfonic acid (PFBS)	0.0221 ng/mL
							Perfluorodecanoic acid	0.025 ng/mL
							Perfluorododecanoic acid	0.025 ng/mL
							Perfluorodecane Sulfonic acid	0.0241 ng/mL
							Perfluoroheptanoic acid (PFHpA)	0.025 ng/mL
							Perfluoroheptanesulfonic acid	0.0238 ng/mL
							Perfluorohexanoic acid	0.025 ng/mL
							Perfluorohexanesulfonic acid (PFHxS)	0.02275 ng/mL
							Perfluorononanoic acid (PFNA)	0.025 ng/mL
							Perfluorooctanoic acid (PFOA)	0.025025 ng/mL
							Perfluorononanesulfonic acid	0.024 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	0.0232 ng/mL
							Perfluorooctane Sulfonamide	0.025 ng/mL
							Perfluoropentanoic acid	0.025 ng/mL
							Perfluoropentanesulfonic acid	0.02345 ng/mL
							Perfluorotetradecanoic acid	0.025 ng/mL
							Perfluorotridecanoic acid	0.025 ng/mL
							Perfluoroundecanoic acid	0.025 ng/mL
.LCMPFC_ALL_SU_00075	12/05/18	06/05/18	Methanol, Lot Baker 141039	200 mL	LCd3-NMeFOSAA_00008	200 uL	d3-NMeFOSAA	0.05 ug/mL
					LCd5-NEtFOSAA_00008	200 uL	d5-NEtFOSAA	0.05 ug/mL
					LCM2-6:FTS_00008	200 uL	M2-6:2FTS	0.0475 ug/mL
					LCM2-8:2FTS_00010	200 uL	M2-8:2FTS	0.0479 ug/mL
					LCM2PFHxDA_00016	200 uL	13C2-PFHxDA	0.05 ug/mL
					LCM2PFOA_00008	200 uL	13C2-PFOA	0.05 ug/mL
					LCM2PFTeDA_00014	200 uL	13C2-PFTeDA	0.05 ug/mL
					LCM4PFHPA_00014	200 uL	13C4-PFHpA	0.05 ug/mL
					LCM5PFPEA_00015	200 uL	13C5-PFPeA	0.05 ug/mL
					LCM8FOSA_00019	200 uL	13C8 FOSA	0.05 ug/mL
					LCMPFBA_00015	200 uL	13C4 PFBA	0.05 ug/mL
					LCMPFBS_00008	200 uL	13C3-PFBS	0.0465 ug/mL
					LCMPFDA_00020	200 uL	13C2 PFDA	0.05 ug/mL
					LCMPFDoA_00015	200 uL	13C2 PFDoA	0.05 ug/mL
					LCMPFHxA_00022	200 uL	13C2 PFHxA	0.05 ug/mL
					LCMPFHxS_00015	200 uL	18O2 PFHxS	0.0473 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCMPFNA_00015	200 uL	13C5 PFNA	0.05 ug/mL
					LCMPFOA_00019	200 uL	13C4 PFOA	0.05 ug/mL
					LCMPFOS_00027	200 uL	13C4 PFOS	0.0478 ug/mL
					LCMPFUdA_00017	200 uL	13C2 PFUnA	0.05 ug/mL
..LCd3-NMeFOSAA_00008	11/08/22	WELLINGTON, Lot d3NMeFOSAA1117			(Purchased Reagent)		d3-NMeFOSAA	50 ug/mL
..LCd5-NEtFOSAA_00008	11/08/22	WELLINGTON, Lot d5NEtFOSAA1117			(Purchased Reagent)		d5-NEtFOSAA	50 ug/mL
..LCM2-6:FTS_00008	02/16/23	WELLINGTON, Lot M262FTS0218			(Purchased Reagent)		M2-6:2FTS	47.5 ug/mL
..LCM2-8:2FTS_00010	01/24/23	WELLINGTON, Lot M282FTS0118			(Purchased Reagent)		M2-8:2FTS	47.9 ug/mL
..LCM2PFHxDA_00016	07/13/22	Wellington Laboratories, Lot M2PFHxDA0717			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFOA_00008	02/12/21	Wellington Laboratories, Lot M2PFOA0216			(Purchased Reagent)		13C2-PFOA	50 ug/mL
..LCM2PFTeDA_00014	11/30/22	Wellington Laboratories, Lot M2PFTeDA1117			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHPA_00014	05/03/22	Wellington Laboratories, Lot M4PFHpA0517			(Purchased Reagent)		13C4-PFHpA	50 ug/mL
..LCM5PFPEA_00015	07/20/22	Wellington Laboratories, Lot M5PFPeA0717			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00019	10/11/22	Wellington Laboratories, Lot M8FOSA1017I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00015	02/16/23	Wellington Laboratories, Lot MPFBA0218			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFBS_00008	02/15/23	Wellington Laboratories, Lot M3PFBS0218			(Purchased Reagent)		13C3-PFBS	46.5 ug/mL
..LCMPFDA_00020	02/16/23	Wellington Laboratories, Lot MPFDA0218			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00015	02/16/23	Wellington Laboratories, Lot MPFDoA0218			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA_00022	10/27/22	Wellington Laboratories, Lot MPFHxA1017			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS_00015	03/22/23	Wellington Laboratories, Lot MPFHxS0318			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA_00015	12/14/22	Wellington Laboratories, Lot MPFNA1217			(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00019	05/04/23	Wellington Laboratories, Lot MPFOA0418			(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00027	02/15/23	Wellington Laboratories, Lot MPFOS0218			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUdA_00017	11/22/21	Wellington Laboratories, Lot MPFUdA1116			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
.LCPFCSP_00151	11/18/18	05/17/18	Methanol, Lot 090285	10 mL	LCPFCSP_00148	200 uL	1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	0.00934 ug/mL
							1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	0.00948 ug/mL
							1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	0.00958 ug/mL
							N-ethyl perfluorooctane sulfonamidoacetic acid	0.01 ug/mL
							N-methyl perfluorooctane sulfonamidoacetic acid	0.01 ug/mL
							Perfluorobutyric acid	0.01 ug/mL
							Perfluorobutanesulfonic acid (PFBS)	0.00884 ug/mL
							Perfluorodecanoic acid	0.01 ug/mL
							Perfluorododecanoic acid	0.01 ug/mL
							Perfluorodecane Sulfonic acid	0.00964 ug/mL
							Perfluoroheptanoic acid (PFHpA)	0.01 ug/mL
							Perfluoroheptanesulfonic acid	0.00952 ug/mL
							Perfluorohexanoic acid	0.01 ug/mL
							Perfluorohexanesulfonic acid (PFHxS)	0.0091 ug/mL
							Perfluorononanoic acid (PFNA)	0.01 ug/mL
							Perfluorooctanoic acid (PFOA)	0.01001 ug/mL
							Perfluorononanesulfonic acid	0.0096 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Perfluorooctanesulfonic acid (PFOS)	0.00928 ug/mL
							Perfluorooctane Sulfonamide	0.01 ug/mL
							Perfluoropentanoic acid	0.01 ug/mL
							Perfluoropentanesulfonic acid	0.00938 ug/mL
							Perfluorotetradecanoic acid	0.01 ug/mL
							Perfluorotridecanoic acid	0.01 ug/mL
							Perfluoroundecanoic acid	0.01 ug/mL
..LCPFCSP_00148	11/18/18	05/17/18	Methanol, Lot 090285	10 mL	LC4:2FTS_00005	100 uL	1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	0.467 ug/mL
					LC6:2FTS_00007	100 uL	1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	0.474 ug/mL
					LC8:2FTS_00007	100 uL	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	0.479 ug/mL
					LCbr-NEtFOSAA_00001	100 uL	N-ethyl perfluorooctane sulfonamidoacetic acid	0.5 ug/mL
					LCbr-NMeFOSAA_00001	100 uL	N-methyl perfluorooctane sulfonamidoacetic acid	0.5 ug/mL
					LCPFBA_00008	100 uL	Perfluorobutyric acid	0.5 ug/mL
					LCPFBS_00009	100 uL	Perfluorobutanesulfonic acid (PFBS)	0.442 ug/mL
					LCPFDA_00008	100 uL	Perfluorodecanoic acid	0.5 ug/mL
					LCPFDoA_00008	100 uL	Perfluorododecanoic acid	0.5 ug/mL
					LCPFDS_00008	100 uL	Perfluorodecane Sulfonic acid	0.482 ug/mL
					LCPFHpA_00011	100 uL	Perfluoroheptanoic acid (PFHpA)	0.5 ug/mL
					LCPFHpSA_00003	100 uL	Perfluoroheptanesulfonic acid	0.476 ug/mL
					LCPFHxA_00010	100 uL	Perfluorohexanoic acid	0.5 ug/mL
					LCPFHxS-br_00006	100 uL	Perfluorohexanesulfonic acid (PFHxS)	0.455 ug/mL
					LCPFNA_00010	100 uL	Perfluorononanoic acid (PFNA)	0.5 ug/mL
							Perfluorooctanoic acid (PFOA)	0.5005 ug/mL
					LCPFNS_00003	100 uL	Perfluorononanesulfonic acid	0.48 ug/mL
					LCPFOA_00011	100 uL	Perfluorooctanoic acid (PFOA)	0.5005 ug/mL
					LCPFOS-br_00007	100 uL	Perfluorooctanesulfonic acid (PFOS)	0.464 ug/mL
					LCPFOSA_00013	100 uL	Perfluorooctane Sulfonamide	0.5 ug/mL
					LCPFPeA_00008	100 uL	Perfluoropentanoic acid	0.5 ug/mL
					LCPFPeS_00003	100 uL	Perfluoropentanesulfonic acid	0.469 ug/mL
					LCPFTeDA_00008	100 uL	Perfluorotetradecanoic acid	0.5 ug/mL
					LCPFTrDA_00008	100 uL	Perfluorotridecanoic acid	0.5 ug/mL
					LCPFUdA_00008	100 uL	Perfluoroundecanoic acid	0.5 ug/mL
...LC4:2FTS_00005	12/12/21		WELLINGTON, Lot 42FTS1216		(Purchased Reagent)		1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	46.7 ug/mL
...LC6:2FTS_00007	04/20/22		WELLINGTON, Lot 62FTS0417		(Purchased Reagent)		1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	47.4 ug/mL
...LC8:2FTS_00007	12/12/21		WELLINGTON, Lot 82FTS1216		(Purchased Reagent)		1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	47.9 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...LCbr-NEtFOSAA_00001	01/17/23	WELLINGTON, Lot brNEtFOSAA0118			(Purchased Reagent)		N-ethyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
...LCbr-NMeFOSAA_00001	01/17/23	WELLINGTON, Lot brNMeFOSAA0118			(Purchased Reagent)		N-methyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
...LCPFBA_00008	05/29/22	Wellington Laboratories, Lot PFBA0517			(Purchased Reagent)		Perfluorobutyric acid	50 ug/mL
...LCPFBS_00009	09/21/22	Wellington Laboratories, Lot LPFBS0917			(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
...LCPFDA_00008	05/29/22	Wellington Laboratories, Lot PFDA0517			(Purchased Reagent)		Perfluorodecanoic acid	50 ug/mL
...LCPFDoA_00008	05/29/22	Wellington Laboratories, Lot PFDoA0517			(Purchased Reagent)		Perfluorododecanoic acid	50 ug/mL
...LCPFDS_00008	11/08/22	Wellington Laboratories, Lot LPFDS1117			(Purchased Reagent)		Perfluorodecane Sulfonic acid	48.2 ug/mL
...LCPFHpA_00011	09/27/22	Wellington Laboratories, Lot PFHpA0917			(Purchased Reagent)		Perfluoroheptanoic acid (PFHpA)	50 ug/mL
...LCPFHpSA_00003	09/01/22	Wellington Laboratories, Lot LPFHpS0817			(Purchased Reagent)		Perfluoroheptanesulfonic acid	47.6 ug/mL
...LCPFHxA_00010	09/27/22	Wellington Laboratories, Lot PFHxA0917			(Purchased Reagent)		Perfluorohexanoic acid	50 ug/mL
...LCPFHxS-br_00006	01/04/22	Wellington Laboratories, Lot brPFHxSK0117			(Purchased Reagent)		Perfluorohexanesulfonic acid (PFHxS)	45.5 ug/mL
...LCPFNA_00010	07/20/22	Wellington Laboratories, Lot PFNA0717			(Purchased Reagent)		Perfluorononanoic acid (PFNA)	50 ug/mL
							Perfluorooctanoic acid (PFOA)	0.05 ug/mL
...LCPFNS_00003	09/27/22	Wellington Laboratories, Lot LPFNS0917			(Purchased Reagent)		Perfluorononanesulfonic acid	48 ug/mL
...LCPFOA_00011	09/27/22	Wellington Laboratories, Lot PFOA0917			(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
...LCPFOS-br_00007	01/12/22	Wellington Laboratories, Lot brPFOSK0117			(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	46.4 ug/mL
...LCPFOSA_00013	09/01/22	Wellington Laboratories, Lot FOSA0817I			(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL
...LCPFPeA_00008	06/14/22	Wellington Laboratories, Lot PFPeA0617			(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL
...LCPFPeS_00003	01/11/22	Wellington Laboratories, Lot LPFPeS0117			(Purchased Reagent)		Perfluoropentanesulfonic acid	46.9 ug/mL
...LCPFTeDA_00008	09/30/21	Wellington Laboratories, Lot PFTeDA0916			(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL
...LCPFTrDA_00008	05/02/22	Wellington Laboratories, Lot PFTrDA0517			(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL
...LCPFUdA_00008	10/18/21	Wellington Laboratories, Lot PFUdA1016			(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL
LCPFC_LL1_00007	01/16/19	07/25/18	MeOH/H2O, Lot 90285	200 mL	LCMPFC_ICALSU_00001	10 mL	d3-NMeFOSAA	2.5 ng/mL
							d5-NEtFOSAA	2.5 ng/mL
							M2-6:2FTS	2.375 ng/mL
							M2-8:2FTS	2.395 ng/mL
							13C2-PFHxDA	2.5 ng/mL
							13C2-PFOA	2.5 ng/mL
							13C2-PFTeDA	2.5 ng/mL
							13C4-PFHpA	2.5 ng/mL
							13C5-PFPeA	2.5 ng/mL
							13C8 FOSA	2.5 ng/mL
							13C4 PFBA	2.5 ng/mL
							13C3-PFBS	2.325 ng/mL
							13C2 PFDA	2.5 ng/mL
							13C2 PFDoA	2.5 ng/mL
							13C2 PFHxA	2.5 ng/mL
							18O2 PFHxS	2.365 ng/mL
							13C5 PFNA	2.5 ng/mL
							13C4 PFOA	2.5 ng/mL
							13C4 PFOS	2.39 ng/mL
							13C2 PFUnA	2.5 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCPFCSP_00163	0.25 mL	1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	0.02335 ng/mL
							1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	0.0237 ng/mL
							1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	0.02395 ng/mL
							N-ethyl perfluorooctane sulfonamidoacetic acid	0.025 ng/mL
							N-methyl perfluorooctane sulfonamidoacetic acid	0.025 ng/mL
							Perfluorobutyric acid	0.025 ng/mL
							Perfluorobutanesulfonic acid (PFBS)	0.0221 ng/mL
							Perfluorodecanoic acid	0.025 ng/mL
							Perfluorododecanoic acid	0.025 ng/mL
							Perfluorodecane Sulfonic acid	0.0241 ng/mL
							Perfluoroheptanoic acid (PFHpA)	0.025 ng/mL
							Perfluoroheptanesulfonic acid	0.0238 ng/mL
							Perfluorohexanoic acid	0.025 ng/mL
							Perfluorohexanesulfonic acid (PFHxS)	0.02275 ng/mL
							Perfluorononanoic acid (PFNA)	0.025 ng/mL
							Perfluorooctanoic acid (PFOA)	0.025025 ng/mL
							Perfluorononanesulfonic acid	0.024 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	0.0232 ng/mL
							Perfluorooctane Sulfonamide	0.025 ng/mL
							Perfluoropentanoic acid	0.025 ng/mL
							Perfluoropentanesulfonic acid	0.02345 ng/mL
							Perfluorotetradecanoic acid	0.025 ng/mL
							Perfluorotridecanoic acid	0.025 ng/mL
							Perfluoroundecanoic acid	0.025 ng/mL
.LCMPFC_ICALSU_00001	01/25/19	07/25/18	Methanol, Lot Fisher 168632	200 mL	LCd3-NMeFOSAA_00009	200 uL	d3-NMeFOSAA	0.05 ug/mL
					LCd5-NEtFOSAA_00009	200 uL	d5-NEtFOSAA	0.05 ug/mL
					LCM2-6:FTS_00009	200 uL	M2-6:2FTS	0.0475 ug/mL
					LCM2-8:2FTS_00011	200 uL	M2-8:2FTS	0.0479 ug/mL
					LCM2PFHxDA_00017	200 uL	13C2-PFHxDA	0.05 ug/mL
					LCM2PFOA_00012	200 uL	13C2-PFOA	0.05 ug/mL
					LCM2PFTeDA_00015	200 uL	13C2-PFTeDA	0.05 ug/mL
					LCM4PFHPA_00015	200 uL	13C4-PFHpA	0.05 ug/mL
					LCM5PFPEA_00016	200 uL	13C5-PFPeA	0.05 ug/mL
					LCM8FOSA_00020	200 uL	13C8 FOSA	0.05 ug/mL
					LCMPFBA_00016	200 uL	13C4 PFBA	0.05 ug/mL
					LCMPFBS_00009	200 uL	13C3-PFBS	0.0465 ug/mL
					LCMPFDA_00021	200 uL	13C2 PFDA	0.05 ug/mL
					LCMPFDoA_00016	200 uL	13C2 PFDoA	0.05 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCMPFHxA_00023	200 uL	13C2 PFHxA	0.05 ug/mL
					LCMPFHxS_00016	200 uL	18O2 PFHxS	0.0473 ug/mL
					LCMPFNA_00016	200 uL	13C5 PFNA	0.05 ug/mL
					LCMPFOA_00020	200 uL	13C4 PFOA	0.05 ug/mL
					LCMPFOS_00028	200 uL	13C4 PFOS	0.0478 ug/mL
					LCMPFUdA_00018	200 uL	13C2 PFUnA	0.05 ug/mL
..LCd3-NMeFOSAA_00009	11/08/22	WELLINGTON, Lot d3NMeFOSAA1117			(Purchased Reagent)		d3-NMeFOSAA	50 ug/mL
..LCd5-NEtFOSAA_00009	11/08/22	WELLINGTON, Lot d5NEtFOSAA1117			(Purchased Reagent)		d5-NEtFOSAA	50 ug/mL
..LCM2-6:FTS_00009	02/16/23	WELLINGTON, Lot M262FTS0218			(Purchased Reagent)		M2-6:2FTS	47.5 ug/mL
..LCM2-8:2FTS_00011	01/24/23	WELLINGTON, Lot M282FTS0118			(Purchased Reagent)		M2-8:2FTS	47.9 ug/mL
..LCM2PFHxDA_00017	07/13/22	Wellington Laboratories, Lot M2PFHxDA0717			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFOA_00012	10/26/22	Wellington Laboratories, Lot M2PFOA1017			(Purchased Reagent)		13C2-PFOA	50 ug/mL
..LCM2PFTeDA_00015	11/30/22	Wellington Laboratories, Lot M2PFTeDA1117			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHPA_00015	05/03/22	Wellington Laboratories, Lot M4PFHpA0517			(Purchased Reagent)		13C4-PFHpA	50 ug/mL
..LCM5PFPEA_00016	07/20/22	Wellington Laboratories, Lot M5PFPeA0717			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00020	10/11/22	Wellington Laboratories, Lot M8FOSA1017I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00016	02/16/23	Wellington Laboratories, Lot MPFBA0218			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFBS_00009	02/15/23	Wellington Laboratories, Lot M3PFBS0218			(Purchased Reagent)		13C3-PFBS	46.5 ug/mL
..LCMPFDA_00021	02/16/23	Wellington Laboratories, Lot MPFDA0218			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00016	02/16/23	Wellington Laboratories, Lot MPFDoA0218			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA_00023	10/27/22	Wellington Laboratories, Lot MPFHxA1017			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS_00016	03/22/23	Wellington Laboratories, Lot MPFHxS0318			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA_00016	12/14/22	Wellington Laboratories, Lot MPFNA1217			(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00020	05/04/23	Wellington Laboratories, Lot MPFOA0418			(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00028	06/15/23	Wellington Laboratories, Lot MPFOS0618			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUdA_00018	05/11/23	Wellington Laboratories, Lot MPFUdA0518			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
.LCPFCSP_00163	01/16/19	07/20/18	Methanol, Lot 180632	250 mL	LC4:2FTS_00005	100 uL	1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	0.01868 ug/mL
					LC6:2FTS_00007	100 uL	1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	0.01896 ug/mL
					LC8:2FTS_00007	100 uL	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	0.01916 ug/mL
					LCbr-NEtFOSAA_00001	100 uL	N-ethyl perfluorooctane sulfonamidoacetic acid	0.02 ug/mL
					LCbr-NMeFOSAA_00001	100 uL	N-methyl perfluorooctane sulfonamidoacetic acid	0.02 ug/mL
					LCPFBA_00008	100 uL	Perfluorobutyric acid	0.02 ug/mL
					LCPFBS_00009	100 uL	Perfluorobutanesulfonic acid (PFBS)	0.01768 ug/mL
					LCPFDA_00008	100 uL	Perfluorodecanoic acid	0.02 ug/mL
					LCPFDoA_00010	100 uL	Perfluorododecanoic acid	0.02 ug/mL
					LCPFDS_00008	100 uL	Perfluorodecane Sulfonic acid	0.01928 ug/mL
					LCPFHpA_00011	100 uL	Perfluoroheptanoic acid (PFHpA)	0.02 ug/mL
					LCPFHpSA_00003	100 uL	Perfluoroheptanesulfonic acid	0.01904 ug/mL
					LCPFHxA_00010	100 uL	Perfluorohexanoic acid	0.02 ug/mL
					LCPFHxS-br_00006	100 uL	Perfluorohexanesulfonic acid (PFHxS)	0.0182 ug/mL
					LCPFNA_00010	100 uL	Perfluorononanoic acid (PFNA)	0.02 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Perfluorooctanoic acid (PFOA)	0.02002 ug/mL
					LCPFNS_00003	100 uL	Perfluorononanesulfonic acid	0.0192 ug/mL
					LCPFOA_00011	100 uL	Perfluorooctanoic acid (PFOA)	0.02002 ug/mL
					LCPFOS-br_00007	100 uL	Perfluorooctanesulfonic acid (PFOS)	0.01856 ug/mL
					LCPFOSA_00013	100 uL	Perfluorooctane Sulfonamide	0.02 ug/mL
					LCPFPeA_00010	100 uL	Perfluoropentanoic acid	0.02 ug/mL
					LCPFPeS_00003	100 uL	Perfluoropentanesulfonic acid	0.01876 ug/mL
					LCPFTeDA_00009	100 uL	Perfluorotetradecanoic acid	0.02 ug/mL
					LCPFTrDA_00009	100 uL	Perfluorotridecanoic acid	0.02 ug/mL
					LCPFUdA_00008	100 uL	Perfluoroundecanoic acid	0.02 ug/mL
..LC4:2FTS_00005	12/12/21	WELLINGTON, Lot 42FTS1216			(Purchased Reagent)		1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	46.7 ug/mL
..LC6:2FTS_00007	04/20/22	WELLINGTON, Lot 62FTS0417			(Purchased Reagent)		1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	47.4 ug/mL
..LC8:2FTS_00007	12/12/21	WELLINGTON, Lot 82FTS1216			(Purchased Reagent)		1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	47.9 ug/mL
..LCbr-NEtFOSAA_00001	01/17/23	WELLINGTON, Lot brNEtFOSAA0118			(Purchased Reagent)		N-ethyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
..LCbr-NMeFOSAA_00001	01/17/23	WELLINGTON, Lot brNMeFOSAA0118			(Purchased Reagent)		N-methyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
..LCPFBA_00008	05/29/22	Wellington Laboratories, Lot PFBA0517			(Purchased Reagent)		Perfluorobutyric acid	50 ug/mL
..LCPFBS_00009	09/21/22	Wellington Laboratories, Lot LPFBS0917			(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
..LCPFDA_00008	05/29/22	Wellington Laboratories, Lot PFDA0517			(Purchased Reagent)		Perfluorodecanoic acid	50 ug/mL
..LCPFDoA_00010	05/29/22	Wellington Laboratories, Lot PFDoA0517			(Purchased Reagent)		Perfluorododecanoic acid	50 ug/mL
..LCPFDS_00008	11/08/22	Wellington Laboratories, Lot LPFDS1117			(Purchased Reagent)		Perfluorodecane Sulfonic acid	48.2 ug/mL
..LCPFHpA_00011	09/27/22	Wellington Laboratories, Lot PFHpA0917			(Purchased Reagent)		Perfluoroheptanoic acid (PFHpA)	50 ug/mL
..LCPFHpSA_00003	09/01/22	Wellington Laboratories, Lot LPFHpS0817			(Purchased Reagent)		Perfluoroheptanesulfonic acid	47.6 ug/mL
..LCPFHxA_00010	09/27/22	Wellington Laboratories, Lot PFHxA0917			(Purchased Reagent)		Perfluorohexanoic acid	50 ug/mL
..LCPFHxS-br_00006	01/04/22	Wellington Laboratories, Lot brPFHxSK0117			(Purchased Reagent)		Perfluorohexanesulfonic acid (PFHxS)	45.5 ug/mL
..LCPFNA_00010	07/20/22	Wellington Laboratories, Lot PFNA0717			(Purchased Reagent)		Perfluorononanoic acid (PFNA)	50 ug/mL
							Perfluorooctanoic acid (PFOA)	0.05 ug/mL
..LCPFNS_00003	09/27/22	Wellington Laboratories, Lot LPFNS0917			(Purchased Reagent)		Perfluorononanesulfonic acid	48 ug/mL
..LCPFOA_00011	09/27/22	Wellington Laboratories, Lot PFOA0917			(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
..LCPFOS-br_00007	01/12/22	Wellington Laboratories, Lot brPFOSK0117			(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	46.4 ug/mL
..LCPFOSA_00013	09/01/22	Wellington Laboratories, Lot FOSA0817I			(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL
..LCPFPeA_00010	06/14/22	Wellington Laboratories, Lot PFPeA0617			(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL
..LCPFPeS_00003	01/11/22	Wellington Laboratories, Lot LPFPeS0117			(Purchased Reagent)		Perfluoropentanesulfonic acid	46.9 ug/mL
..LCPFTeDA_00009	09/30/21	Wellington Laboratories, Lot PFTeDA0916			(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL
..LCPFTrDA_00009	05/02/22	Wellington Laboratories, Lot PFTrDA0517			(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL
..LCPFUdA_00008	10/18/21	Wellington Laboratories, Lot PFUdA1016			(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL
LCPFC_LL2_00005	11/18/18	06/05/18	MeOH/H2O, Lot 090285	200 mL	LCMPFC_ALL_SU_00075	10 mL	d3-NMeFOSAA	2.5 ng/mL
							d5-NEtFOSAA	2.5 ng/mL
							M2-6:2FTS	2.375 ng/mL
							M2-8:2FTS	2.395 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							13C2-PFHxDA	2.5 ng/mL
							13C2-PFOA	2.5 ng/mL
							13C2-PFTeDA	2.5 ng/mL
							13C4-PFHpA	2.5 ng/mL
							13C5-PFPeA	2.5 ng/mL
							13C8 FOSA	2.5 ng/mL
							13C4 PFBA	2.5 ng/mL
							13C3-PFBS	2.325 ng/mL
							13C2 PFDA	2.5 ng/mL
							13C2 PFDoA	2.5 ng/mL
							13C2 PFHxA	2.5 ng/mL
							18O2 PFHxS	2.365 ng/mL
							13C5 PFNA	2.5 ng/mL
							13C4 PFOA	2.5 ng/mL
							13C4 PFOS	2.39 ng/mL
							13C2 PFUnA	2.5 ng/mL
					LCPFCSP_00151	1000 uL	1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	0.0467 ng/mL
							1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	0.0474 ng/mL
							1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	0.0479 ng/mL
							N-ethyl perfluorooctane sulfonamidoacetic acid	0.05 ng/mL
							N-methyl perfluorooctane sulfonamidoacetic acid	0.05 ng/mL
							Perfluorobutyric acid	0.05 ng/mL
							Perfluorobutanesulfonic acid (PFBS)	0.0442 ng/mL
							Perfluorodecanoic acid	0.05 ng/mL
							Perfluorododecanoic acid	0.05 ng/mL
							Perfluorodecane Sulfonic acid	0.0482 ng/mL
							Perfluoroheptanoic acid (PFHpA)	0.05 ng/mL
							Perfluoroheptanesulfonic acid	0.0476 ng/mL
							Perfluorohexanoic acid	0.05 ng/mL
							Perfluorohexanesulfonic acid (PFHxS)	0.0455 ng/mL
							Perfluorononanoic acid (PFNA)	0.05 ng/mL
							Perfluorooctanoic acid (PFOA)	0.05005 ng/mL
							Perfluorononanesulfonic acid	0.048 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	0.0464 ng/mL
							Perfluorooctane Sulfonamide	0.05 ng/mL
							Perfluoropentanoic acid	0.05 ng/mL
							Perfluoropentanesulfonic acid	0.0469 ng/mL
							Perfluorotetradecanoic acid	0.05 ng/mL
							Perfluorotridecanoic acid	0.05 ng/mL
							Perfluoroundecanoic acid	0.05 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.LCMPFC_ALL_SU_00075	12/05/18	06/05/18	Methanol, Lot Baker 141039	200 mL	LCd3-NMeFOSAA_00008	200 uL	d3-NMeFOSAA	0.05 ug/mL
					LCd5-NEtFOSAA_00008	200 uL	d5-NEtFOSAA	0.05 ug/mL
					LCM2-6:FTS_00008	200 uL	M2-6:2FTS	0.0475 ug/mL
					LCM2-8:2FTS_00010	200 uL	M2-8:2FTS	0.0479 ug/mL
					LCM2PFHxDA_00016	200 uL	13C2-PFHxDA	0.05 ug/mL
					LCM2PFOA_00008	200 uL	13C2-PFOA	0.05 ug/mL
					LCM2PFTeDA_00014	200 uL	13C2-PFTeDA	0.05 ug/mL
					LCM4PFHPA_00014	200 uL	13C4-PFHpA	0.05 ug/mL
					LCM5PFPEA_00015	200 uL	13C5-PFPeA	0.05 ug/mL
					LCM8FOSA_00019	200 uL	13C8 FOSA	0.05 ug/mL
					LCMPFBA_00015	200 uL	13C4 PFBA	0.05 ug/mL
					LCMPFBS_00008	200 uL	13C3-PFBS	0.0465 ug/mL
					LCMPFDA_00020	200 uL	13C2 PFDA	0.05 ug/mL
					LCMPFDoA_00015	200 uL	13C2 PFDoA	0.05 ug/mL
					LCMPFHxA_00022	200 uL	13C2 PFHxA	0.05 ug/mL
					LCMPFHxS_00015	200 uL	18O2 PFHxS	0.0473 ug/mL
					LCMPFNA_00015	200 uL	13C5 PFNA	0.05 ug/mL
					LCMPFOA_00019	200 uL	13C4 PFOA	0.05 ug/mL
					LCMPFOS_00027	200 uL	13C4 PFOS	0.0478 ug/mL
					LCMPFUdA_00017	200 uL	13C2 PFUnA	0.05 ug/mL
..LCd3-NMeFOSAA_00008	11/08/22	WELLINGTON, Lot d3NMeFOSAA1117			(Purchased Reagent)		d3-NMeFOSAA	50 ug/mL
..LCd5-NEtFOSAA_00008	11/08/22	WELLINGTON, Lot d5NEtFOSAA1117			(Purchased Reagent)		d5-NEtFOSAA	50 ug/mL
..LCM2-6:FTS_00008	02/16/23	WELLINGTON, Lot M262FTS0218			(Purchased Reagent)		M2-6:2FTS	47.5 ug/mL
..LCM2-8:2FTS_00010	01/24/23	WELLINGTON, Lot M282FTS0118			(Purchased Reagent)		M2-8:2FTS	47.9 ug/mL
..LCM2PFHxDA_00016	07/13/22	Wellington Laboratories, Lot M2PFHxDA0717			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFOA_00008	02/12/21	Wellington Laboratories, Lot M2PFOA0216			(Purchased Reagent)		13C2-PFOA	50 ug/mL
..LCM2PFTeDA_00014	11/30/22	Wellington Laboratories, Lot M2PFTeDA1117			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHPA_00014	05/03/22	Wellington Laboratories, Lot M4PFHpA0517			(Purchased Reagent)		13C4-PFHpA	50 ug/mL
..LCM5PFPEA_00015	07/20/22	Wellington Laboratories, Lot M5PFPeA0717			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00019	10/11/22	Wellington Laboratories, Lot M8FOSA1017I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00015	02/16/23	Wellington Laboratories, Lot MPFBA0218			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFBS_00008	02/15/23	Wellington Laboratories, Lot M3PFBS0218			(Purchased Reagent)		13C3-PFBS	46.5 ug/mL
..LCMPFDA_00020	02/16/23	Wellington Laboratories, Lot MPFDA0218			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00015	02/16/23	Wellington Laboratories, Lot MPFDoA0218			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA_00022	10/27/22	Wellington Laboratories, Lot MPFHxA1017			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS_00015	03/22/23	Wellington Laboratories, Lot MPFHxS0318			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA_00015	12/14/22	Wellington Laboratories, Lot MPFNA1217			(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00019	05/04/23	Wellington Laboratories, Lot MPFOA0418			(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00027	02/15/23	Wellington Laboratories, Lot MPFOS0218			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUdA_00017	11/22/21	Wellington Laboratories, Lot MPFUdA1116			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
.LCPFCSP_00151	11/18/18	05/17/18	Methanol, Lot 090285	10 mL	LCPFCSP_00148	200 uL	1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	0.00934 ug/mL
							1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	0.00948 ug/mL
							1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	0.00958 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-ethyl perfluorooctane sulfonamidoacetic acid	0.01 ug/mL
							N-methyl perfluorooctane sulfonamidoacetic acid	0.01 ug/mL
							Perfluorobutyric acid	0.01 ug/mL
							Perfluorobutanesulfonic acid (PFBS)	0.00884 ug/mL
							Perfluorodecanoic acid	0.01 ug/mL
							Perfluorododecanoic acid	0.01 ug/mL
							Perfluorodecane Sulfonic acid	0.00964 ug/mL
							Perfluoroheptanoic acid (PFHpA)	0.01 ug/mL
							Perfluoroheptanesulfonic acid	0.00952 ug/mL
							Perfluorohexanoic acid	0.01 ug/mL
							Perfluorohexanesulfonic acid (PFHxS)	0.0091 ug/mL
							Perfluorononanoic acid (PFNA)	0.01 ug/mL
							Perfluorooctanoic acid (PFOA)	0.01001 ug/mL
							Perfluorononanesulfonic acid	0.0096 ug/mL
							Perfluorooctanesulfonic acid (PFOS)	0.00928 ug/mL
							Perfluorooctane Sulfonamide	0.01 ug/mL
							Perfluoropentanoic acid	0.01 ug/mL
							Perfluoropentanesulfonic acid	0.00938 ug/mL
							Perfluorotetradecanoic acid	0.01 ug/mL
							Perfluorotridecanoic acid	0.01 ug/mL
							Perfluoroundecanoic acid	0.01 ug/mL
..LCPFCSP_00148	11/18/18	05/17/18	Methanol, Lot 090285	10 mL	LC4:2FTS_00005	100 uL	1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	0.467 ug/mL
					LC6:2FTS_00007	100 uL	1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	0.474 ug/mL
					LC8:2FTS_00007	100 uL	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	0.479 ug/mL
					LCbr-NEtFOSAA_00001	100 uL	N-ethyl perfluorooctane sulfonamidoacetic acid	0.5 ug/mL
					LCbr-NMeFOSAA_00001	100 uL	N-methyl perfluorooctane sulfonamidoacetic acid	0.5 ug/mL
					LCPFBA_00008	100 uL	Perfluorobutyric acid	0.5 ug/mL
					LCPFBS_00009	100 uL	Perfluorobutanesulfonic acid (PFBS)	0.442 ug/mL
					LCPFDA_00008	100 uL	Perfluorodecanoic acid	0.5 ug/mL
					LCPFDoA_00008	100 uL	Perfluorododecanoic acid	0.5 ug/mL
					LCPFDS_00008	100 uL	Perfluorodecane Sulfonic acid	0.482 ug/mL
					LCPFHpA_00011	100 uL	Perfluoroheptanoic acid (PFHpA)	0.5 ug/mL
					LCPFHpSA_00003	100 uL	Perfluoroheptanesulfonic acid	0.476 ug/mL
					LCPFHxA_00010	100 uL	Perfluorohexanoic acid	0.5 ug/mL
					LCPFHxS-br_00006	100 uL	Perfluorohexanesulfonic acid (PFHxS)	0.455 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCPFNA_00010	100 uL	Perfluorononanoic acid (PFNA)	0.5 ug/mL
							Perfluorooctanoic acid (PFOA)	0.5005 ug/mL
					LCPFNS_00003	100 uL	Perfluorononanesulfonic acid	0.48 ug/mL
					LCPFOA_00011	100 uL	Perfluorooctanoic acid (PFOA)	0.5005 ug/mL
					LCPFOS-br_00007	100 uL	Perfluorooctanesulfonic acid (PFOS)	0.464 ug/mL
					LCPFOSA_00013	100 uL	Perfluorooctane Sulfonamide	0.5 ug/mL
					LCPFPeA_00008	100 uL	Perfluoropentanoic acid	0.5 ug/mL
					LCPFPeS_00003	100 uL	Perfluoropentanesulfonic acid	0.469 ug/mL
					LCPFTeDA_00008	100 uL	Perfluorotetradecanoic acid	0.5 ug/mL
					LCPFTrDA_00008	100 uL	Perfluorotridecanoic acid	0.5 ug/mL
					LCPFUdA_00008	100 uL	Perfluoroundecanoic acid	0.5 ug/mL
...LC4:2FTS_00005	12/12/21	WELLINGTON, Lot 42FTS1216			(Purchased Reagent)		1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	46.7 ug/mL
...LC6:2FTS_00007	04/20/22	WELLINGTON, Lot 62FTS0417			(Purchased Reagent)		1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	47.4 ug/mL
...LC8:2FTS_00007	12/12/21	WELLINGTON, Lot 82FTS1216			(Purchased Reagent)		1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	47.9 ug/mL
...LCbr-NEtFOSAA_00001	01/17/23	WELLINGTON, Lot brNEtFOSAA0118			(Purchased Reagent)		N-ethyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
...LCbr-NMeFOSAA_00001	01/17/23	WELLINGTON, Lot brNMeFOSAA0118			(Purchased Reagent)		N-methyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
...LCPFBA_00008	05/29/22	Wellington Laboratories, Lot PFBA0517			(Purchased Reagent)		Perfluorobutyric acid	50 ug/mL
...LCPFBS_00009	09/21/22	Wellington Laboratories, Lot LPFBS0917			(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
...LCPFDA_00008	05/29/22	Wellington Laboratories, Lot PFDA0517			(Purchased Reagent)		Perfluorodecanoic acid	50 ug/mL
...LCPFDoA_00008	05/29/22	Wellington Laboratories, Lot PFDoA0517			(Purchased Reagent)		Perfluorododecanoic acid	50 ug/mL
...LCPFDS_00008	11/08/22	Wellington Laboratories, Lot LPFDS1117			(Purchased Reagent)		Perfluorodecane Sulfonic acid	48.2 ug/mL
...LCPFHpA_00011	09/27/22	Wellington Laboratories, Lot PFHpA0917			(Purchased Reagent)		Perfluoroheptanoic acid (PFHpA)	50 ug/mL
...LCPFHpSA_00003	09/01/22	Wellington Laboratories, Lot LPFHpS0817			(Purchased Reagent)		Perfluoroheptanesulfonic acid	47.6 ug/mL
...LCPFHxA_00010	09/27/22	Wellington Laboratories, Lot PFHxA0917			(Purchased Reagent)		Perfluorohexanoic acid	50 ug/mL
...LCPFHxS-br_00006	01/04/22	Wellington Laboratories, Lot brPFHxSK0117			(Purchased Reagent)		Perfluorohexanesulfonic acid (PFHxS)	45.5 ug/mL
...LCPFNA_00010	07/20/22	Wellington Laboratories, Lot PFNA0717			(Purchased Reagent)		Perfluorononanoic acid (PFNA)	50 ug/mL
							Perfluorooctanoic acid (PFOA)	0.05 ug/mL
...LCPFNS_00003	09/27/22	Wellington Laboratories, Lot LPFNS0917			(Purchased Reagent)		Perfluorononanesulfonic acid	48 ug/mL
...LCPFOA_00011	09/27/22	Wellington Laboratories, Lot PFOA0917			(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
...LCPFOS-br_00007	01/12/22	Wellington Laboratories, Lot brPFOSK0117			(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	46.4 ug/mL
...LCPFOSA_00013	09/01/22	Wellington Laboratories, Lot FOSA0817I			(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL
...LCPFPeA_00008	06/14/22	Wellington Laboratories, Lot PFPeA0617			(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL
...LCPFPeS_00003	01/11/22	Wellington Laboratories, Lot LPFPeS0117			(Purchased Reagent)		Perfluoropentanesulfonic acid	46.9 ug/mL
...LCPFTeDA_00008	09/30/21	Wellington Laboratories, Lot PFTeDA0916			(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL
...LCPFTrDA_00008	05/02/22	Wellington Laboratories, Lot PFTrDA0517			(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL
...LCPFUdA_00008	10/18/21	Wellington Laboratories, Lot PFUdA1016			(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL
LCPFC_LL2_00006	01/16/19	07/25/18	MeOH/H2O, Lot 090285	200 mL	LCMPFC_ICALSU_00001	10 mL	d3-NMeFOSAA	2.5 ng/mL
							d5-NEtFOSAA	2.5 ng/mL
							M2-6:2FTS	2.375 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							M2-8:2FTS	2.395 ng/mL
							13C2-PFHxDA	2.5 ng/mL
							13C2-PFOA	2.5 ng/mL
							13C2-PFTeDA	2.5 ng/mL
							13C4-PFHpA	2.5 ng/mL
							13C5-PFPeA	2.5 ng/mL
							13C8 FOSA	2.5 ng/mL
							13C4 PFBA	2.5 ng/mL
							13C3-PFBS	2.325 ng/mL
							13C2 PFDA	2.5 ng/mL
							13C2 PFDoA	2.5 ng/mL
							13C2 PFHxA	2.5 ng/mL
							18O2 PFHxS	2.365 ng/mL
							13C5 PFNA	2.5 ng/mL
							13C4 PFOA	2.5 ng/mL
							13C4 PFOS	2.39 ng/mL
							13C2 PFUnA	2.5 ng/mL
					LCPFCSP_00163	0.5 mL	1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	0.0467 ng/mL
							1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	0.0474 ng/mL
							1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	0.0479 ng/mL
							N-ethyl perfluorooctane sulfonamidoacetic acid	0.05 ng/mL
							N-methyl perfluorooctane sulfonamidoacetic acid	0.05 ng/mL
							Perfluorobutyric acid	0.05 ng/mL
							Perfluorobutanesulfonic acid (PFBS)	0.0442 ng/mL
							Perfluorodecanoic acid	0.05 ng/mL
							Perfluorododecanoic acid	0.05 ng/mL
							Perfluorodecane Sulfonic acid	0.0482 ng/mL
							Perfluoroheptanoic acid (PFHpA)	0.05 ng/mL
							Perfluoroheptanesulfonic acid	0.0476 ng/mL
							Perfluorohexanoic acid	0.05 ng/mL
							Perfluorohexanesulfonic acid (PFHxS)	0.0455 ng/mL
							Perfluorononanoic acid (PFNA)	0.05 ng/mL
							Perfluorooctanoic acid (PFOA)	0.05005 ng/mL
							Perfluorononanesulfonic acid	0.048 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	0.0464 ng/mL
							Perfluorooctane Sulfonamide	0.05 ng/mL
							Perfluoropentanoic acid	0.05 ng/mL
							Perfluoropentanesulfonic acid	0.0469 ng/mL
							Perfluorotetradecanoic acid	0.05 ng/mL
							Perfluorotridecanoic acid	0.05 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Perfluoroundecanoic acid	0.05 ng/mL
.LCMPFC_ICALSU_00001	01/25/19	07/25/18	Methanol, Lot Fisher 168632	200 mL	LCd3-NMeFOSAA_00009	200 uL	d3-NMeFOSAA	0.05 ug/mL
					LCd5-NEtFOSAA_00009	200 uL	d5-NEtFOSAA	0.05 ug/mL
					LCM2-6:FTS_00009	200 uL	M2-6:2FTS	0.0475 ug/mL
					LCM2-8:2FTS_00011	200 uL	M2-8:2FTS	0.0479 ug/mL
					LCM2PFHxDA_00017	200 uL	13C2-PFHxDA	0.05 ug/mL
					LCM2PFOA_00012	200 uL	13C2-PFOA	0.05 ug/mL
					LCM2PFTeDA_00015	200 uL	13C2-PFTeDA	0.05 ug/mL
					LCM4PFHPA_00015	200 uL	13C4-PFHpA	0.05 ug/mL
					LCM5PFPEA_00016	200 uL	13C5-PFPeA	0.05 ug/mL
					LCM8FOSA_00020	200 uL	13C8 FOSA	0.05 ug/mL
					LCMPFBA_00016	200 uL	13C4 PFBA	0.05 ug/mL
					LCMPFBS_00009	200 uL	13C3-PFBS	0.0465 ug/mL
					LCMPFDA_00021	200 uL	13C2 PFDA	0.05 ug/mL
					LCMPFDoA_00016	200 uL	13C2 PFDoA	0.05 ug/mL
					LCMPFHxA_00023	200 uL	13C2 PFHxA	0.05 ug/mL
					LCMPFHxS_00016	200 uL	18O2 PFHxS	0.0473 ug/mL
					LCMPFNA_00016	200 uL	13C5 PFNA	0.05 ug/mL
					LCMPFOA_00020	200 uL	13C4 PFOA	0.05 ug/mL
					LCMPFOS_00028	200 uL	13C4 PFOS	0.0478 ug/mL
					LCMPFUdA_00018	200 uL	13C2 PFUnA	0.05 ug/mL
..LCd3-NMeFOSAA_00009	11/08/22	WELLINGTON, Lot d3NMeFOSAA1117			(Purchased Reagent)		d3-NMeFOSAA	50 ug/mL
..LCd5-NEtFOSAA_00009	11/08/22	WELLINGTON, Lot d5NEtFOSAA1117			(Purchased Reagent)		d5-NEtFOSAA	50 ug/mL
..LCM2-6:FTS_00009	02/16/23	WELLINGTON, Lot M262FTS0218			(Purchased Reagent)		M2-6:2FTS	47.5 ug/mL
..LCM2-8:2FTS_00011	01/24/23	WELLINGTON, Lot M282FTS0118			(Purchased Reagent)		M2-8:2FTS	47.9 ug/mL
..LCM2PFHxDA_00017	07/13/22	Wellington Laboratories, Lot M2PFHxDA0717			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFOA_00012	10/26/22	Wellington Laboratories, Lot M2PFOA1017			(Purchased Reagent)		13C2-PFOA	50 ug/mL
..LCM2PFTeDA_00015	11/30/22	Wellington Laboratories, Lot M2PFTeDA1117			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHPA_00015	05/03/22	Wellington Laboratories, Lot M4PFHpA0517			(Purchased Reagent)		13C4-PFHpA	50 ug/mL
..LCM5PFPEA_00016	07/20/22	Wellington Laboratories, Lot M5PFPeA0717			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00020	10/11/22	Wellington Laboratories, Lot M8FOSA1017I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00016	02/16/23	Wellington Laboratories, Lot MPFBA0218			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFBS_00009	02/15/23	Wellington Laboratories, Lot M3PFBS0218			(Purchased Reagent)		13C3-PFBS	46.5 ug/mL
..LCMPFDA_00021	02/16/23	Wellington Laboratories, Lot MPFDA0218			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00016	02/16/23	Wellington Laboratories, Lot MPFDoA0218			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA_00023	10/27/22	Wellington Laboratories, Lot MPFHxA1017			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS_00016	03/22/23	Wellington Laboratories, Lot MPFHxS0318			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA_00016	12/14/22	Wellington Laboratories, Lot MPFNA1217			(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00020	05/04/23	Wellington Laboratories, Lot MPFOA0418			(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00028	06/15/23	Wellington Laboratories, Lot MPFOS0618			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUdA_00018	05/11/23	Wellington Laboratories, Lot MPFUdA0518			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
.LCPFCSP_00163	01/16/19	07/20/18	Methanol, Lot 180632	250 mL	LC4:2FTS_00005	100 uL	1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	0.01868 ug/mL
					LC6:2FTS_00007	100 uL	1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	0.01896 ug/mL
					LC8:2FTS_00007	100 uL	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	0.01916 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCbr-NEtFOSAA_00001	100 uL	N-ethyl perfluorooctane sulfonamidoacetic acid	0.02 ug/mL
					LCbr-NMeFOSAA_00001	100 uL	N-methyl perfluorooctane sulfonamidoacetic acid	0.02 ug/mL
					LCPFBA_00008	100 uL	Perfluorobutyric acid	0.02 ug/mL
					LCPFBS_00009	100 uL	Perfluorobutanesulfonic acid (PFBS)	0.01768 ug/mL
					LCPFDA_00008	100 uL	Perfluorodecanoic acid	0.02 ug/mL
					LCPFDoA_00010	100 uL	Perfluorododecanoic acid	0.02 ug/mL
					LCPFDS_00008	100 uL	Perfluorodecane Sulfonic acid	0.01928 ug/mL
					LCPFHpA_00011	100 uL	Perfluoroheptanoic acid (PFHpA)	0.02 ug/mL
					LCPFHpSA_00003	100 uL	Perfluoroheptanesulfonic acid	0.01904 ug/mL
					LCPFHxA_00010	100 uL	Perfluorohexanoic acid	0.02 ug/mL
					LCPFHxS-br_00006	100 uL	Perfluorohexanesulfonic acid (PFHxS)	0.0182 ug/mL
					LCPFNA_00010	100 uL	Perfluorononanoic acid (PFNA)	0.02 ug/mL
							Perfluorooctanoic acid (PFOA)	0.02002 ug/mL
					LCPFNS_00003	100 uL	Perfluorononanesulfonic acid	0.0192 ug/mL
					LCPFOA_00011	100 uL	Perfluorooctanoic acid (PFOA)	0.02002 ug/mL
					LCPFOS-br_00007	100 uL	Perfluorooctanesulfonic acid (PFOS)	0.01856 ug/mL
					LCPFOSA_00013	100 uL	Perfluorooctane Sulfonamide	0.02 ug/mL
					LCPFPeA_00010	100 uL	Perfluoropentanoic acid	0.02 ug/mL
					LCPFPeS_00003	100 uL	Perfluoropentanesulfonic acid	0.01876 ug/mL
					LCPFTeDA_00009	100 uL	Perfluorotetradecanoic acid	0.02 ug/mL
					LCPFTrDA_00009	100 uL	Perfluorotridecanoic acid	0.02 ug/mL
					LCPFUdA_00008	100 uL	Perfluoroundecanoic acid	0.02 ug/mL
..LC4:2FTS_00005	12/12/21	WELLINGTON, Lot 42FTS1216			(Purchased Reagent)		1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	46.7 ug/mL
..LC6:2FTS_00007	04/20/22	WELLINGTON, Lot 62FTS0417			(Purchased Reagent)		1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	47.4 ug/mL
..LC8:2FTS_00007	12/12/21	WELLINGTON, Lot 82FTS1216			(Purchased Reagent)		1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	47.9 ug/mL
..LCbr-NEtFOSAA_00001	01/17/23	WELLINGTON, Lot brNEtFOSAA0118			(Purchased Reagent)		N-ethyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
..LCbr-NMeFOSAA_00001	01/17/23	WELLINGTON, Lot brNMeFOSAA0118			(Purchased Reagent)		N-methyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
..LCPFBA_00008	05/29/22	Wellington Laboratories, Lot PFBA0517			(Purchased Reagent)		Perfluorobutyric acid	50 ug/mL
..LCPFBS_00009	09/21/22	Wellington Laboratories, Lot LPFBS0917			(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
..LCPFDA_00008	05/29/22	Wellington Laboratories, Lot PFDA0517			(Purchased Reagent)		Perfluorodecanoic acid	50 ug/mL
..LCPFDoA_00010	05/29/22	Wellington Laboratories, Lot PFDoA0517			(Purchased Reagent)		Perfluorododecanoic acid	50 ug/mL
..LCPFDS_00008	11/08/22	Wellington Laboratories, Lot LPFDS1117			(Purchased Reagent)		Perfluorodecane Sulfonic acid	48.2 ug/mL
..LCPFHpA_00011	09/27/22	Wellington Laboratories, Lot PFHpA0917			(Purchased Reagent)		Perfluoroheptanoic acid (PFHpA)	50 ug/mL
..LCPFHpSA_00003	09/01/22	Wellington Laboratories, Lot LPFHpS0817			(Purchased Reagent)		Perfluoroheptanesulfonic acid	47.6 ug/mL
..LCPFHxA_00010	09/27/22	Wellington Laboratories, Lot PFHxA0917			(Purchased Reagent)		Perfluorohexanoic acid	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..LCPFHxS-br_00006	01/04/22	Wellington Laboratories, Lot brPFHxSK0117			(Purchased Reagent)		Perfluorohexanesulfonic acid (PFHxS)	45.5 ug/mL
..LCPFNA_00010	07/20/22	Wellington Laboratories, Lot PFNA0717			(Purchased Reagent)		Perfluorononanoic acid (PFNA)	50 ug/mL
							Perfluorooctanoic acid (PFOA)	0.05 ug/mL
..LCPFNS_00003	09/27/22	Wellington Laboratories, Lot LPFNS0917			(Purchased Reagent)		Perfluorononanesulfonic acid	48 ug/mL
..LCPFOA_00011	09/27/22	Wellington Laboratories, Lot PFOA0917			(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
..LCPFOS-br_00007	01/12/22	Wellington Laboratories, Lot brPFOSK0117			(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	46.4 ug/mL
..LCPFOSA_00013	09/01/22	Wellington Laboratories, Lot FOSA0817I			(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL
..LCPFPeA_00010	06/14/22	Wellington Laboratories, Lot PFPeA0617			(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL
..LCPFPeS_00003	01/11/22	Wellington Laboratories, Lot LPFPeS0117			(Purchased Reagent)		Perfluoropentanesulfonic acid	46.9 ug/mL
..LCPFTeDA_00009	09/30/21	Wellington Laboratories, Lot PFTeDA0916			(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL
..LCPFTrDA_00009	05/02/22	Wellington Laboratories, Lot PFTrDA0517			(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL
..LCPFUdA_00008	10/18/21	Wellington Laboratories, Lot PFUdA1016			(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL
LCPFC_LL3_00005	11/18/18	06/05/18	MeOH/H2O, Lot 090285	200 mL	LCMPFC_ALL_SU_00075	10 mL	d3-NMeFOSAA	2.5 ng/mL
							d5-NEtFOSAA	2.5 ng/mL
							M2-6:2FTS	2.375 ng/mL
							M2-8:2FTS	2.395 ng/mL
							13C2-PFHxDA	2.5 ng/mL
							13C2-PFOA	2.5 ng/mL
							13C2-PFTeDA	2.5 ng/mL
							13C4-PFHpA	2.5 ng/mL
							13C5-PFPeA	2.5 ng/mL
							13C8 FOSA	2.5 ng/mL
							13C4 PFBA	2.5 ng/mL
							13C3-PFBS	2.325 ng/mL
							13C2 PFDA	2.5 ng/mL
							13C2 PFDoA	2.5 ng/mL
							13C2 PFHxA	2.5 ng/mL
							18O2 PFHxS	2.365 ng/mL
							13C5 PFNA	2.5 ng/mL
							13C4 PFOA	2.5 ng/mL
							13C4 PFOS	2.39 ng/mL
							13C2 PFUnA	2.5 ng/mL
					LCPFCSP_00148	100 uL	1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	0.2335 ng/mL
							1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	0.237 ng/mL
							1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	0.2395 ng/mL
							N-ethyl perfluorooctane sulfonamidoacetic acid	0.25 ng/mL
							N-methyl perfluorooctane sulfonamidoacetic acid	0.25 ng/mL
							Perfluorobutyric acid	0.25 ng/mL
							Perfluorobutanesulfonic acid (PFBS)	0.221 ng/mL
							Perfluorodecanoic acid	0.25 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Perfluorododecanoic acid	0.25 ng/mL
							Perfluorodecane Sulfonic acid	0.241 ng/mL
							Perfluoroheptanoic acid (PFHpA)	0.25 ng/mL
							Perfluoroheptanesulfonic acid	0.238 ng/mL
							Perfluorohexanoic acid	0.25 ng/mL
							Perfluorohexanesulfonic acid (PFHxS)	0.2275 ng/mL
							Perfluorononanoic acid (PFNA)	0.25 ng/mL
							Perfluorooctanoic acid (PFOA)	0.25025 ng/mL
							Perfluorononanesulfonic acid	0.24 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	0.232 ng/mL
							Perfluorooctane Sulfonamide	0.25 ng/mL
							Perfluoropentanoic acid	0.25 ng/mL
							Perfluoropentanesulfonic acid	0.2345 ng/mL
							Perfluorotetradecanoic acid	0.25 ng/mL
							Perfluorotridecanoic acid	0.25 ng/mL
							Perfluoroundecanoic acid	0.25 ng/mL
.LCMPFC_ALL_SU_00075	12/05/18	06/05/18	Methanol, Lot Baker 141039	200 mL	LCd3-NMeFOSAA_00008	200 uL	d3-NMeFOSAA	0.05 ug/mL
					LCd5-NEtFOSAA_00008	200 uL	d5-NEtFOSAA	0.05 ug/mL
					LCM2-6:FTS_00008	200 uL	M2-6:2FTS	0.0475 ug/mL
					LCM2-8:2FTS_00010	200 uL	M2-8:2FTS	0.0479 ug/mL
					LCM2PFHxDA_00016	200 uL	13C2-PFHxDA	0.05 ug/mL
					LCM2PFOA_00008	200 uL	13C2-PFOA	0.05 ug/mL
					LCM2PFTeDA_00014	200 uL	13C2-PFTeDA	0.05 ug/mL
					LCM4PFHPA_00014	200 uL	13C4-PFHpA	0.05 ug/mL
					LCM5PFPEA_00015	200 uL	13C5-PFPeA	0.05 ug/mL
					LCM8FOSA_00019	200 uL	13C8 FOSA	0.05 ug/mL
					LCMPFBA_00015	200 uL	13C4 PFBA	0.05 ug/mL
					LCMPFBS_00008	200 uL	13C3-PFBS	0.0465 ug/mL
					LCMPFDA_00020	200 uL	13C2 PFDA	0.05 ug/mL
					LCMPFDoA_00015	200 uL	13C2 PFDoA	0.05 ug/mL
					LCMPFHxA_00022	200 uL	13C2 PFHxA	0.05 ug/mL
					LCMPFHxS_00015	200 uL	18O2 PFHxS	0.0473 ug/mL
					LCMPFNA_00015	200 uL	13C5 PFNA	0.05 ug/mL
					LCMPFOA_00019	200 uL	13C4 PFOA	0.05 ug/mL
					LCMPFOS_00027	200 uL	13C4 PFOS	0.0478 ug/mL
					LCMPFUdA_00017	200 uL	13C2 PFUnA	0.05 ug/mL
..LCd3-NMeFOSAA_00008	11/08/22	WELLINGTON, Lot d3NMeFOSAA1117			(Purchased Reagent)		d3-NMeFOSAA	50 ug/mL
..LCd5-NEtFOSAA_00008	11/08/22	WELLINGTON, Lot d5NEtFOSAA1117			(Purchased Reagent)		d5-NEtFOSAA	50 ug/mL
..LCM2-6:FTS_00008	02/16/23	WELLINGTON, Lot M262FTS0218			(Purchased Reagent)		M2-6:2FTS	47.5 ug/mL
..LCM2-8:2FTS_00010	01/24/23	WELLINGTON, Lot M282FTS0118			(Purchased Reagent)		M2-8:2FTS	47.9 ug/mL
..LCM2PFHxDA_00016	07/13/22	Wellington Laboratories, Lot M2PFHxDA0717			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFOA_00008	02/12/21	Wellington Laboratories, Lot M2PFOA0216			(Purchased Reagent)		13C2-PFOA	50 ug/mL
..LCM2PFTeDA_00014	11/30/22	Wellington Laboratories, Lot M2PFTeDA1117			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHPA_00014	05/03/22	Wellington Laboratories, Lot M4PFHpA0517			(Purchased Reagent)		13C4-PFHpA	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..LCM5PFPEA_00015	07/20/22	Wellington Laboratories, Lot M5PFPeA0717			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00019	10/11/22	Wellington Laboratories, Lot M8FOSA1017I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00015	02/16/23	Wellington Laboratories, Lot MPFBA0218			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFBS_00008	02/15/23	Wellington Laboratories, Lot M3PFBS0218			(Purchased Reagent)		13C3-PFBS	46.5 ug/mL
..LCMPFDA_00020	02/16/23	Wellington Laboratories, Lot MPFDA0218			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00015	02/16/23	Wellington Laboratories, Lot MPFDoA0218			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA_00022	10/27/22	Wellington Laboratories, Lot MPFHxA1017			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS_00015	03/22/23	Wellington Laboratories, Lot MPFHxS0318			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA_00015	12/14/22	Wellington Laboratories, Lot MPFNA1217			(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00019	05/04/23	Wellington Laboratories, Lot MPFOA0418			(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00027	02/15/23	Wellington Laboratories, Lot MPFOS0218			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUdA_00017	11/22/21	Wellington Laboratories, Lot MPFUdA1116			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
.LCPFCSP_00148	11/18/18	05/17/18	Methanol, Lot 090285	10 mL	LC4:2FTS_00005	100 uL	1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	0.467 ug/mL
					LC6:2FTS_00007	100 uL	1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	0.474 ug/mL
					LC8:2FTS_00007	100 uL	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	0.479 ug/mL
					LCbr-NEtFOSAA_00001	100 uL	N-ethyl perfluorooctane sulfonamidoacetic acid	0.5 ug/mL
					LCbr-NMeFOSAA_00001	100 uL	N-methyl perfluorooctane sulfonamidoacetic acid	0.5 ug/mL
					LCPFBA_00008	100 uL	Perfluorobutyric acid	0.5 ug/mL
					LCPFBS_00009	100 uL	Perfluorobutanesulfonic acid (PFBS)	0.442 ug/mL
					LCPFDA_00008	100 uL	Perfluorodecanoic acid	0.5 ug/mL
					LCPFDoA_00008	100 uL	Perfluorododecanoic acid	0.5 ug/mL
					LCPFDS_00008	100 uL	Perfluorodecane Sulfonic acid	0.482 ug/mL
					LCPFHpA_00011	100 uL	Perfluoroheptanoic acid (PFHpA)	0.5 ug/mL
					LCPFHpSA_00003	100 uL	Perfluoroheptanesulfonic acid	0.476 ug/mL
					LCPFHxA_00010	100 uL	Perfluorohexanoic acid	0.5 ug/mL
					LCPFHxS-br_00006	100 uL	Perfluorohexanesulfonic acid (PFHxS)	0.455 ug/mL
					LCPFNA_00010	100 uL	Perfluorononanoic acid (PFNA)	0.5 ug/mL
							Perfluorooctanoic acid (PFOA)	0.5005 ug/mL
					LCPFNS_00003	100 uL	Perfluorononanesulfonic acid	0.48 ug/mL
					LCPFOA_00011	100 uL	Perfluorooctanoic acid (PFOA)	0.5005 ug/mL
					LCPFOS-br_00007	100 uL	Perfluorooctanesulfonic acid (PFOS)	0.464 ug/mL
					LCPFOSA_00013	100 uL	Perfluorooctane Sulfonamide	0.5 ug/mL
					LCPFPeA_00008	100 uL	Perfluoropentanoic acid	0.5 ug/mL
					LCPFPeS_00003	100 uL	Perfluoropentanesulfonic acid	0.469 ug/mL
					LCPFTeDA_00008	100 uL	Perfluorotetradecanoic acid	0.5 ug/mL
					LCPFTrDA_00008	100 uL	Perfluorotridecanoic acid	0.5 ug/mL
					LCPFUdA_00008	100 uL	Perfluoroundecanoic acid	0.5 ug/mL
..LC4:2FTS_00005	12/12/21	WELLINGTON, Lot 42FTS1216			(Purchased Reagent)		1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	46.7 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..LC6:2FTS_00007	04/20/22	WELLINGTON, Lot 62FTS0417			(Purchased Reagent)		1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	47.4 ug/mL
..LC8:2FTS_00007	12/12/21	WELLINGTON, Lot 82FTS1216			(Purchased Reagent)		1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	47.9 ug/mL
..LCbr-NEtFOSAA_00001	01/17/23	WELLINGTON, Lot brNEtFOSAA0118			(Purchased Reagent)		N-ethyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
..LCbr-NMeFOSAA_00001	01/17/23	WELLINGTON, Lot brNMeFOSAA0118			(Purchased Reagent)		N-methyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
..LCPFBA_00008	05/29/22	Wellington Laboratories, Lot PFBA0517			(Purchased Reagent)		Perfluorobutyric acid	50 ug/mL
..LCPFBS_00009	09/21/22	Wellington Laboratories, Lot LPFBS0917			(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
..LCPFDA_00008	05/29/22	Wellington Laboratories, Lot PFDA0517			(Purchased Reagent)		Perfluorodecanoic acid	50 ug/mL
..LCPFDoA_00008	05/29/22	Wellington Laboratories, Lot PFDoA0517			(Purchased Reagent)		Perfluorododecanoic acid	50 ug/mL
..LCPFDS_00008	11/08/22	Wellington Laboratories, Lot LPFDS1117			(Purchased Reagent)		Perfluorodecane Sulfonic acid	48.2 ug/mL
..LCPFHpA_00011	09/27/22	Wellington Laboratories, Lot PFHpA0917			(Purchased Reagent)		Perfluoroheptanoic acid (PFHpA)	50 ug/mL
..LCPFHpSA_00003	09/01/22	Wellington Laboratories, Lot LPFHpS0817			(Purchased Reagent)		Perfluoroheptanesulfonic acid	47.6 ug/mL
..LCPFHxA_00010	09/27/22	Wellington Laboratories, Lot PFHxA0917			(Purchased Reagent)		Perfluorohexanoic acid	50 ug/mL
..LCPFHxS-br_00006	01/04/22	Wellington Laboratories, Lot brPFHxSK0117			(Purchased Reagent)		Perfluorohexanesulfonic acid (PFHxS)	45.5 ug/mL
..LCPFNA_00010	07/20/22	Wellington Laboratories, Lot PFNA0717			(Purchased Reagent)		Perfluorononanoic acid (PFNA)	50 ug/mL
							Perfluorooctanoic acid (PFOA)	0.05 ug/mL
..LCPFNS_00003	09/27/22	Wellington Laboratories, Lot LPFNS0917			(Purchased Reagent)		Perfluorononanesulfonic acid	48 ug/mL
..LCPFOA_00011	09/27/22	Wellington Laboratories, Lot PFOA0917			(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
..LCPFOS-br_00007	01/12/22	Wellington Laboratories, Lot brPFOSK0117			(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	46.4 ug/mL
..LCPFOSA_00013	09/01/22	Wellington Laboratories, Lot FOSA0817I			(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL
..LCPFPeA_00008	06/14/22	Wellington Laboratories, Lot PFPeA0617			(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL
..LCPFPeS_00003	01/11/22	Wellington Laboratories, Lot LPFPeS0117			(Purchased Reagent)		Perfluoropentanesulfonic acid	46.9 ug/mL
..LCPFTeDA_00008	09/30/21	Wellington Laboratories, Lot PFTeDA0916			(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL
..LCPFTrDA_00008	05/02/22	Wellington Laboratories, Lot PFTrDA0517			(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL
..LCPFUdA_00008	10/18/21	Wellington Laboratories, Lot PFUdA1016			(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL
LCPFC_LL3_00006	01/16/19	07/25/18	MeOH/H2O, Lot 090285	200 mL	LCMPFC_ICALSU_00001	10 mL	d3-NMeFOSAA	2.5 ng/mL
							d5-NEtFOSAA	2.5 ng/mL
							M2-6:2FTS	2.375 ng/mL
							M2-8:2FTS	2.395 ng/mL
							13C2-PFHxDA	2.5 ng/mL
							13C2-PFOA	2.5 ng/mL
							13C2-PFTeDA	2.5 ng/mL
							13C4-PFHpA	2.5 ng/mL
							13C5-PFPeA	2.5 ng/mL
							13C8 FOSA	2.5 ng/mL
							13C4 PFBA	2.5 ng/mL
							13C3-PFBS	2.325 ng/mL
							13C2 PFDA	2.5 ng/mL
							13C2 PFDoA	2.5 ng/mL
							13C2 PFHxA	2.5 ng/mL
							18O2 PFHxS	2.365 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							13C5 PFNA	2.5 ng/mL
							13C4 PFOA	2.5 ng/mL
							13C4 PFOS	2.39 ng/mL
							13C2 PFUnA	2.5 ng/mL
					LCPFCSP_00163	2.5 mL	1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	0.2335 ng/mL
							1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	0.237 ng/mL
							1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	0.2395 ng/mL
							N-ethyl perfluorooctane sulfonamidoacetic acid	0.25 ng/mL
							N-methyl perfluorooctane sulfonamidoacetic acid	0.25 ng/mL
							Perfluorobutyric acid	0.25 ng/mL
							Perfluorobutanesulfonic acid (PFBS)	0.221 ng/mL
							Perfluorodecanoic acid	0.25 ng/mL
							Perfluorododecanoic acid	0.25 ng/mL
							Perfluorodecane Sulfonic acid	0.241 ng/mL
							Perfluoroheptanoic acid (PFHpA)	0.25 ng/mL
							Perfluoroheptanesulfonic acid	0.238 ng/mL
							Perfluorohexanoic acid	0.25 ng/mL
							Perfluorohexanesulfonic acid (PFHxS)	0.2275 ng/mL
							Perfluorononanoic acid (PFNA)	0.25 ng/mL
							Perfluorooctanoic acid (PFOA)	0.25025 ng/mL
							Perfluorononanesulfonic acid	0.24 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	0.232 ng/mL
							Perfluorooctane Sulfonamide	0.25 ng/mL
							Perfluoropentanoic acid	0.25 ng/mL
							Perfluoropentanesulfonic acid	0.2345 ng/mL
							Perfluorotetradecanoic acid	0.25 ng/mL
							Perfluorotridecanoic acid	0.25 ng/mL
							Perfluoroundecanoic acid	0.25 ng/mL
.LCMPFC_ICALSU_00001	01/25/19	07/25/18	Methanol, Lot Fisher 168632	200 mL	LCd3-NMeFOSAA_00009	200 uL	d3-NMeFOSAA	0.05 ug/mL
					LCd5-NEtFOSAA_00009	200 uL	d5-NEtFOSAA	0.05 ug/mL
					LCM2-6:FTS_00009	200 uL	M2-6:2FTS	0.0475 ug/mL
					LCM2-8:2FTS_00011	200 uL	M2-8:2FTS	0.0479 ug/mL
					LCM2PFHxDA_00017	200 uL	13C2-PFHxDA	0.05 ug/mL
					LCM2PFOA_00012	200 uL	13C2-PFOA	0.05 ug/mL
					LCM2PFTeDA_00015	200 uL	13C2-PFTeDA	0.05 ug/mL
					LCM4PFHPA_00015	200 uL	13C4-PFHpA	0.05 ug/mL
					LCM5PFPEA_00016	200 uL	13C5-PFPeA	0.05 ug/mL
					LCM8FOSA_00020	200 uL	13C8 FOSA	0.05 ug/mL
					LCMPFBA_00016	200 uL	13C4 PFBA	0.05 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCMPFBS_00009	200 uL	13C3-PFBS	0.0465 ug/mL
					LCMPFDA_00021	200 uL	13C2 PFDA	0.05 ug/mL
					LCMPFDoA_00016	200 uL	13C2 PFDoA	0.05 ug/mL
					LCMPFHxA_00023	200 uL	13C2 PFHxA	0.05 ug/mL
					LCMPFHxS_00016	200 uL	18O2 PFHxS	0.0473 ug/mL
					LCMPFNA_00016	200 uL	13C5 PFNA	0.05 ug/mL
					LCMPFOA_00020	200 uL	13C4 PFOA	0.05 ug/mL
					LCMPFOS_00028	200 uL	13C4 PFOS	0.0478 ug/mL
					LCMPFUdA_00018	200 uL	13C2 PFUnA	0.05 ug/mL
..LCd3-NMeFOSAA_00009	11/08/22	WELLINGTON, Lot d3NMeFOSAA1117			(Purchased Reagent)		d3-NMeFOSAA	50 ug/mL
..LCd5-NEtFOSAA_00009	11/08/22	WELLINGTON, Lot d5NEtFOSAA1117			(Purchased Reagent)		d5-NEtFOSAA	50 ug/mL
..LCM2-6:FTS_00009	02/16/23	WELLINGTON, Lot M262FTS0218			(Purchased Reagent)		M2-6:2FTS	47.5 ug/mL
..LCM2-8:2FTS_00011	01/24/23	WELLINGTON, Lot M282FTS0118			(Purchased Reagent)		M2-8:2FTS	47.9 ug/mL
..LCM2PFHxDA_00017	07/13/22	Wellington Laboratories, Lot M2PFHxDA0717			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFOA_00012	10/26/22	Wellington Laboratories, Lot M2PFOA1017			(Purchased Reagent)		13C2-PFOA	50 ug/mL
..LCM2PFTeDA_00015	11/30/22	Wellington Laboratories, Lot M2PFTeDA1117			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHPA_00015	05/03/22	Wellington Laboratories, Lot M4PFHpA0517			(Purchased Reagent)		13C4-PFHpA	50 ug/mL
..LCM5PFPEA_00016	07/20/22	Wellington Laboratories, Lot M5PFPeA0717			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00020	10/11/22	Wellington Laboratories, Lot M8FOSA1017I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00016	02/16/23	Wellington Laboratories, Lot MPFBA0218			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFBS_00009	02/15/23	Wellington Laboratories, Lot M3PFBS0218			(Purchased Reagent)		13C3-PFBS	46.5 ug/mL
..LCMPFDA_00021	02/16/23	Wellington Laboratories, Lot MPFDA0218			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00016	02/16/23	Wellington Laboratories, Lot MPFDoA0218			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA_00023	10/27/22	Wellington Laboratories, Lot MPFHxA1017			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS_00016	03/22/23	Wellington Laboratories, Lot MPFHxS0318			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA_00016	12/14/22	Wellington Laboratories, Lot MPFNA1217			(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00020	05/04/23	Wellington Laboratories, Lot MPFOA0418			(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00028	06/15/23	Wellington Laboratories, Lot MPFOS0618			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUdA_00018	05/11/23	Wellington Laboratories, Lot MPFUdA0518			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
.LCPFCSP_00163	01/16/19	07/20/18	Methanol, Lot 180632	250 mL	LC4:2FTS_00005	100 uL	1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	0.01868 ug/mL
					LC6:2FTS_00007	100 uL	1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	0.01896 ug/mL
					LC8:2FTS_00007	100 uL	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	0.01916 ug/mL
					LCbr-NEtFOSAA_00001	100 uL	N-ethyl perfluorooctane sulfonamidoacetic acid	0.02 ug/mL
					LCbr-NMeFOSAA_00001	100 uL	N-methyl perfluorooctane sulfonamidoacetic acid	0.02 ug/mL
					LCPFBA_00008	100 uL	Perfluorobutyric acid	0.02 ug/mL
					LCPFBS_00009	100 uL	Perfluorobutanesulfonic acid (PFBS)	0.01768 ug/mL
					LCPFDA_00008	100 uL	Perfluorodecanoic acid	0.02 ug/mL
					LCPFDoA_00010	100 uL	Perfluorododecanoic acid	0.02 ug/mL
					LCPFDS_00008	100 uL	Perfluorodecane Sulfonic acid	0.01928 ug/mL
					LCPFHpA_00011	100 uL	Perfluoroheptanoic acid (PFHpA)	0.02 ug/mL
					LCPFHpSA_00003	100 uL	Perfluoroheptanesulfonic acid	0.01904 ug/mL
					LCPFHxA_00010	100 uL	Perfluorohexanoic acid	0.02 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCPFHxS-br_00006	100 uL	Perfluorohexanesulfonic acid (PFHxS)	0.0182 ug/mL
					LCPFNA_00010	100 uL	Perfluorononanoic acid (PFNA)	0.02 ug/mL
							Perfluorooctanoic acid (PFOA)	0.02002 ug/mL
					LCPFNS_00003	100 uL	Perfluorononanesulfonic acid	0.0192 ug/mL
					LCPFOA_00011	100 uL	Perfluorooctanoic acid (PFOA)	0.02002 ug/mL
					LCPFOS-br_00007	100 uL	Perfluorooctanesulfonic acid (PFOS)	0.01856 ug/mL
					LCPFOSA_00013	100 uL	Perfluorooctane Sulfonamide	0.02 ug/mL
					LCPFPeA_00010	100 uL	Perfluoropentanoic acid	0.02 ug/mL
					LCPFPeS_00003	100 uL	Perfluoropentanesulfonic acid	0.01876 ug/mL
					LCPFTeDA_00009	100 uL	Perfluorotetradecanoic acid	0.02 ug/mL
					LCPFTrDA_00009	100 uL	Perfluorotridecanoic acid	0.02 ug/mL
					LCPFUdA_00008	100 uL	Perfluoroundecanoic acid	0.02 ug/mL
..LC4:2FTS_00005	12/12/21	WELLINGTON, Lot 42FTS1216			(Purchased Reagent)		1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	46.7 ug/mL
..LC6:2FTS_00007	04/20/22	WELLINGTON, Lot 62FTS0417			(Purchased Reagent)		1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	47.4 ug/mL
..LC8:2FTS_00007	12/12/21	WELLINGTON, Lot 82FTS1216			(Purchased Reagent)		1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	47.9 ug/mL
..LCbr-NEtFOSAA_00001	01/17/23	WELLINGTON, Lot brNEtFOSAA0118			(Purchased Reagent)		N-ethyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
..LCbr-NMeFOSAA_00001	01/17/23	WELLINGTON, Lot brNMeFOSAA0118			(Purchased Reagent)		N-methyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
..LCPFBA_00008	05/29/22	Wellington Laboratories, Lot PFBA0517			(Purchased Reagent)		Perfluorobutyric acid	50 ug/mL
..LCPFBS_00009	09/21/22	Wellington Laboratories, Lot LPFBS0917			(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
..LCPFDA_00008	05/29/22	Wellington Laboratories, Lot PFDA0517			(Purchased Reagent)		Perfluorodecanoic acid	50 ug/mL
..LCPFDoA_00010	05/29/22	Wellington Laboratories, Lot PFDoA0517			(Purchased Reagent)		Perfluorododecanoic acid	50 ug/mL
..LCPFDS_00008	11/08/22	Wellington Laboratories, Lot LPFDS1117			(Purchased Reagent)		Perfluorodecane Sulfonic acid	48.2 ug/mL
..LCPFHpA_00011	09/27/22	Wellington Laboratories, Lot PFHpA0917			(Purchased Reagent)		Perfluoroheptanoic acid (PFHpA)	50 ug/mL
..LCPFHpSA_00003	09/01/22	Wellington Laboratories, Lot LPFHpS0817			(Purchased Reagent)		Perfluoroheptanesulfonic acid	47.6 ug/mL
..LCPFHxA_00010	09/27/22	Wellington Laboratories, Lot PFHxA0917			(Purchased Reagent)		Perfluorohexanoic acid	50 ug/mL
..LCPFHxS-br_00006	01/04/22	Wellington Laboratories, Lot brPFHxSK0117			(Purchased Reagent)		Perfluorohexanesulfonic acid (PFHxS)	45.5 ug/mL
..LCPFNA_00010	07/20/22	Wellington Laboratories, Lot PFNA0717			(Purchased Reagent)		Perfluorononanoic acid (PFNA)	50 ug/mL
							Perfluorooctanoic acid (PFOA)	0.05 ug/mL
..LCPFNS_00003	09/27/22	Wellington Laboratories, Lot LPFNS0917			(Purchased Reagent)		Perfluorononanesulfonic acid	48 ug/mL
..LCPFOA_00011	09/27/22	Wellington Laboratories, Lot PFOA0917			(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
..LCPFOS-br_00007	01/12/22	Wellington Laboratories, Lot brPFOSK0117			(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	46.4 ug/mL
..LCPFOSA_00013	09/01/22	Wellington Laboratories, Lot FOSA0817I			(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL
..LCPFPeA_00010	06/14/22	Wellington Laboratories, Lot PFPeA0617			(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL
..LCPFPeS_00003	01/11/22	Wellington Laboratories, Lot LPFPeS0117			(Purchased Reagent)		Perfluoropentanesulfonic acid	46.9 ug/mL
..LCPFTeDA_00009	09/30/21	Wellington Laboratories, Lot PFTeDA0916			(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL
..LCPFTrDA_00009	05/02/22	Wellington Laboratories, Lot PFTrDA0517			(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL
..LCPFUdA_00008	10/18/21	Wellington Laboratories, Lot PFUdA1016			(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL
LCPFC_LL4_00005	11/18/18	06/05/18	MeOH/H2O, Lot 090285	200 mL	LCMPFC_ALL_SU_00075	10 mL	d3-NMeFOSAA	2.5 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							d5-NEtFOSAA	2.5 ng/mL
							M2-6:2FTS	2.375 ng/mL
							M2-8:2FTS	2.395 ng/mL
							13C2-PFHxDA	2.5 ng/mL
							13C2-PFOA	2.5 ng/mL
							13C2-PFTeDA	2.5 ng/mL
							13C4-PFHpA	2.5 ng/mL
							13C5-PFPeA	2.5 ng/mL
							13C8 FOSA	2.5 ng/mL
							13C4 PFBA	2.5 ng/mL
							13C3-PFBS	2.325 ng/mL
							13C2 PFDA	2.5 ng/mL
							13C2 PFDoA	2.5 ng/mL
							13C2 PFHxA	2.5 ng/mL
							18O2 PFHxS	2.365 ng/mL
							13C5 PFNA	2.5 ng/mL
							13C4 PFOA	2.5 ng/mL
							13C4 PFOS	2.39 ng/mL
							13C2 PFUnA	2.5 ng/mL
					LCPFCSP_00148	400 uL	1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	0.934 ng/mL
							1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	0.948 ng/mL
							1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	0.958 ng/mL
							N-ethyl perfluorooctane sulfonamidoacetic acid	1 ng/mL
							N-methyl perfluorooctane sulfonamidoacetic acid	1 ng/mL
							Perfluorobutyric acid	1 ng/mL
							Perfluorobutanesulfonic acid (PFBS)	0.884 ng/mL
							Perfluorodecanoic acid	1 ng/mL
							Perfluorododecanoic acid	1 ng/mL
							Perfluorodecane Sulfonic acid	0.964 ng/mL
							Perfluoroheptanoic acid (PFHpA)	1 ng/mL
							Perfluoroheptanesulfonic acid	0.952 ng/mL
							Perfluorohexanoic acid	1 ng/mL
							Perfluorohexanesulfonic acid (PFHxS)	0.91 ng/mL
							Perfluorononanoic acid (PFNA)	1 ng/mL
							Perfluorooctanoic acid (PFOA)	1.001 ng/mL
							Perfluorononanesulfonic acid	0.96 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	0.928 ng/mL
							Perfluorooctane Sulfonamide	1 ng/mL
							Perfluoropentanoic acid	1 ng/mL
							Perfluoropentanesulfonic acid	0.938 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Perfluorotetradecanoic acid	1 ng/mL
							Perfluorotridecanoic acid	1 ng/mL
							Perfluoroundecanoic acid	1 ng/mL
.LCMPFC_ALL_SU_00075	12/05/18	06/05/18	Methanol, Lot Baker 141039	200 mL	LCd3-NMeFOSAA_00008	200 uL	d3-NMeFOSAA	0.05 ug/mL
					LCd5-NEtFOSAA_00008	200 uL	d5-NEtFOSAA	0.05 ug/mL
					LCM2-6:FTS_00008	200 uL	M2-6:2FTS	0.0475 ug/mL
					LCM2-8:2FTS_00010	200 uL	M2-8:2FTS	0.0479 ug/mL
					LCM2PFHxDA_00016	200 uL	13C2-PFHxDA	0.05 ug/mL
					LCM2PFOA_00008	200 uL	13C2-PFOA	0.05 ug/mL
					LCM2PFTeDA_00014	200 uL	13C2-PFTeDA	0.05 ug/mL
					LCM4PFHPA_00014	200 uL	13C4-PFHpA	0.05 ug/mL
					LCM5PFPEA_00015	200 uL	13C5-PFPeA	0.05 ug/mL
					LCM8FOSA_00019	200 uL	13C8 FOSA	0.05 ug/mL
					LCMPFBA_00015	200 uL	13C4 PFBA	0.05 ug/mL
					LCMPFBS_00008	200 uL	13C3-PFBS	0.0465 ug/mL
					LCMPFDA_00020	200 uL	13C2 PFDA	0.05 ug/mL
					LCMPFDoA_00015	200 uL	13C2 PFDoA	0.05 ug/mL
					LCMPFHxA_00022	200 uL	13C2 PFHxA	0.05 ug/mL
					LCMPFHxS_00015	200 uL	18O2 PFHxS	0.0473 ug/mL
					LCMPFNA_00015	200 uL	13C5 PFNA	0.05 ug/mL
					LCMPFOA_00019	200 uL	13C4 PFOA	0.05 ug/mL
					LCMPFOS_00027	200 uL	13C4 PFOS	0.0478 ug/mL
					LCMPFUdA_00017	200 uL	13C2 PFUnA	0.05 ug/mL
..LCd3-NMeFOSAA_00008	11/08/22	WELLINGTON, Lot d3NMeFOSAA1117			(Purchased Reagent)		d3-NMeFOSAA	50 ug/mL
..LCd5-NEtFOSAA_00008	11/08/22	WELLINGTON, Lot d5NEtFOSAA1117			(Purchased Reagent)		d5-NEtFOSAA	50 ug/mL
..LCM2-6:FTS_00008	02/16/23	WELLINGTON, Lot M262FTS0218			(Purchased Reagent)		M2-6:2FTS	47.5 ug/mL
..LCM2-8:2FTS_00010	01/24/23	WELLINGTON, Lot M282FTS0118			(Purchased Reagent)		M2-8:2FTS	47.9 ug/mL
..LCM2PFHxDA_00016	07/13/22	Wellington Laboratories, Lot M2PFHxDA0717			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFOA_00008	02/12/21	Wellington Laboratories, Lot M2PFOA0216			(Purchased Reagent)		13C2-PFOA	50 ug/mL
..LCM2PFTeDA_00014	11/30/22	Wellington Laboratories, Lot M2PFTeDA1117			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHPA_00014	05/03/22	Wellington Laboratories, Lot M4PFHpA0517			(Purchased Reagent)		13C4-PFHpA	50 ug/mL
..LCM5PFPEA_00015	07/20/22	Wellington Laboratories, Lot M5PFPeA0717			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00019	10/11/22	Wellington Laboratories, Lot M8FOSA1017I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00015	02/16/23	Wellington Laboratories, Lot MPFBA0218			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFBS_00008	02/15/23	Wellington Laboratories, Lot M3PFBS0218			(Purchased Reagent)		13C3-PFBS	46.5 ug/mL
..LCMPFDA_00020	02/16/23	Wellington Laboratories, Lot MPFDA0218			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00015	02/16/23	Wellington Laboratories, Lot MPFDoA0218			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA_00022	10/27/22	Wellington Laboratories, Lot MPFHxA1017			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS_00015	03/22/23	Wellington Laboratories, Lot MPFHxS0318			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA_00015	12/14/22	Wellington Laboratories, Lot MPFNA1217			(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00019	05/04/23	Wellington Laboratories, Lot MPFOA0418			(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00027	02/15/23	Wellington Laboratories, Lot MPFOS0218			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUdA_00017	11/22/21	Wellington Laboratories, Lot MPFUdA1116			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
.LCPFCSP_00148	11/18/18	05/17/18	Methanol, Lot 090285	10 mL	LC4:2FTS_00005	100 uL	1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	0.467 ug/mL
					LC6:2FTS_00007	100 uL	1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	0.474 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LC8:2FTS_00007	100 uL	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	0.479 ug/mL
					LCbr-NEtFOSAA_00001	100 uL	N-ethyl perfluorooctane sulfonamidoacetic acid	0.5 ug/mL
					LCbr-NMeFOSAA_00001	100 uL	N-methyl perfluorooctane sulfonamidoacetic acid	0.5 ug/mL
					LCPFBA_00008	100 uL	Perfluorobutyric acid	0.5 ug/mL
					LCPFBS_00009	100 uL	Perfluorobutanesulfonic acid (PFBS)	0.442 ug/mL
					LCPFDA_00008	100 uL	Perfluorodecanoic acid	0.5 ug/mL
					LCPFDoA_00008	100 uL	Perfluorododecanoic acid	0.5 ug/mL
					LCPFDS_00008	100 uL	Perfluorodecane Sulfonic acid	0.482 ug/mL
					LCPFHpA_00011	100 uL	Perfluoroheptanoic acid (PFHpA)	0.5 ug/mL
					LCPFHpSA_00003	100 uL	Perfluoroheptanesulfonic acid	0.476 ug/mL
					LCPFHxA_00010	100 uL	Perfluorohexanoic acid	0.5 ug/mL
					LCPFHxS-br_00006	100 uL	Perfluorohexanesulfonic acid (PFHxS)	0.455 ug/mL
					LCPFNA_00010	100 uL	Perfluorononanoic acid (PFNA)	0.5 ug/mL
							Perfluorooctanoic acid (PFOA)	0.5005 ug/mL
					LCPFNS_00003	100 uL	Perfluorononanesulfonic acid	0.48 ug/mL
					LCPFOA_00011	100 uL	Perfluorooctanoic acid (PFOA)	0.5005 ug/mL
					LCPFOS-br_00007	100 uL	Perfluorooctanesulfonic acid (PFOS)	0.464 ug/mL
					LCPFOSA_00013	100 uL	Perfluorooctane Sulfonamide	0.5 ug/mL
					LCPFPeA_00008	100 uL	Perfluoropentanoic acid	0.5 ug/mL
					LCPFPeS_00003	100 uL	Perfluoropentanesulfonic acid	0.469 ug/mL
					LCPFTeDA_00008	100 uL	Perfluorotetradecanoic acid	0.5 ug/mL
					LCPFTrDA_00008	100 uL	Perfluorotridecanoic acid	0.5 ug/mL
					LCPFUdA_00008	100 uL	Perfluoroundecanoic acid	0.5 ug/mL
..LC4:2FTS_00005	12/12/21	WELLINGTON, Lot 42FTS1216			(Purchased Reagent)		1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	46.7 ug/mL
..LC6:2FTS_00007	04/20/22	WELLINGTON, Lot 62FTS0417			(Purchased Reagent)		1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	47.4 ug/mL
..LC8:2FTS_00007	12/12/21	WELLINGTON, Lot 82FTS1216			(Purchased Reagent)		1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	47.9 ug/mL
..LCbr-NEtFOSAA_00001	01/17/23	WELLINGTON, Lot brNEtFOSAA0118			(Purchased Reagent)		N-ethyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
..LCbr-NMeFOSAA_00001	01/17/23	WELLINGTON, Lot brNMeFOSAA0118			(Purchased Reagent)		N-methyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
..LCPFBA_00008	05/29/22	Wellington Laboratories, Lot PFBA0517			(Purchased Reagent)		Perfluorobutyric acid	50 ug/mL
..LCPFBS_00009	09/21/22	Wellington Laboratories, Lot LPFBS0917			(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
..LCPFDA_00008	05/29/22	Wellington Laboratories, Lot PFDA0517			(Purchased Reagent)		Perfluorodecanoic acid	50 ug/mL
..LCPFDoA_00008	05/29/22	Wellington Laboratories, Lot PFDoA0517			(Purchased Reagent)		Perfluorododecanoic acid	50 ug/mL
..LCPFDS_00008	11/08/22	Wellington Laboratories, Lot LPFDS1117			(Purchased Reagent)		Perfluorodecane Sulfonic acid	48.2 ug/mL
..LCPFHpA_00011	09/27/22	Wellington Laboratories, Lot PFHpA0917			(Purchased Reagent)		Perfluoroheptanoic acid (PFHpA)	50 ug/mL
..LCPFHpSA_00003	09/01/22	Wellington Laboratories, Lot LPFHpS0817			(Purchased Reagent)		Perfluoroheptanesulfonic acid	47.6 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..LCPFHxA_00010	09/27/22	Wellington Laboratories, Lot PFHxA0917			(Purchased Reagent)		Perfluorohexanoic acid	50 ug/mL
..LCPFHxS-br_00006	01/04/22	Wellington Laboratories, Lot brPFHxSK0117			(Purchased Reagent)		Perfluorohexanesulfonic acid (PFHxS)	45.5 ug/mL
..LCPFNA_00010	07/20/22	Wellington Laboratories, Lot PFNA0717			(Purchased Reagent)		Perfluorononanoic acid (PFNA)	50 ug/mL
							Perfluorooctanoic acid (PFOA)	0.05 ug/mL
..LCPFNS_00003	09/27/22	Wellington Laboratories, Lot LPFNS0917			(Purchased Reagent)		Perfluorononanesulfonic acid	48 ug/mL
..LCPFOA_00011	09/27/22	Wellington Laboratories, Lot PFOA0917			(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
..LCPFOS-br_00007	01/12/22	Wellington Laboratories, Lot brPFOSK0117			(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	46.4 ug/mL
..LCPFOSA_00013	09/01/22	Wellington Laboratories, Lot FOSA0817I			(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL
..LCPFPeA_00008	06/14/22	Wellington Laboratories, Lot PFPeA0617			(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL
..LCPFPeS_00003	01/11/22	Wellington Laboratories, Lot LPFPeS0117			(Purchased Reagent)		Perfluoropentanesulfonic acid	46.9 ug/mL
..LCPFTeDA_00008	09/30/21	Wellington Laboratories, Lot PFTeDA0916			(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL
..LCPFTrDA_00008	05/02/22	Wellington Laboratories, Lot PFTrDA0517			(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL
..LCPFUdA_00008	10/18/21	Wellington Laboratories, Lot PFUdA1016			(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL
LCPFC_LL4_00006	01/16/19	07/25/18	MeOH/H2O, Lot 090285	200 mL	LCMPFC_ICALSU_00001	10 mL	d3-NMeFOSAA	2.5 ng/mL
							d5-NEtFOSAA	2.5 ng/mL
							M2-6:2FTS	2.375 ng/mL
							M2-8:2FTS	2.395 ng/mL
							13C2-PFHxDA	2.5 ng/mL
							13C2-PFOA	2.5 ng/mL
							13C2-PFTeDA	2.5 ng/mL
							13C4-PFHpA	2.5 ng/mL
							13C5-PFPeA	2.5 ng/mL
							13C8 FOSA	2.5 ng/mL
							13C4 PFBA	2.5 ng/mL
							13C3-PFBS	2.325 ng/mL
							13C2 PFDA	2.5 ng/mL
							13C2 PFDoA	2.5 ng/mL
							13C2 PFHxA	2.5 ng/mL
							18O2 PFHxS	2.365 ng/mL
							13C5 PFNA	2.5 ng/mL
							13C4 PFOA	2.5 ng/mL
							13C4 PFOS	2.39 ng/mL
							13C2 PFUnA	2.5 ng/mL
					LCPFCSP_00163	10 mL	1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	0.934 ng/mL
							1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	0.948 ng/mL
							1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	0.958 ng/mL
							N-ethyl perfluorooctane sulfonamidoacetic acid	1 ng/mL
							N-methyl perfluorooctane sulfonamidoacetic acid	1 ng/mL
							Perfluorobutyric acid	1 ng/mL
							Perfluorobutanesulfonic acid (PFBS)	0.884 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Perfluorodecanoic acid	1 ng/mL
							Perfluorododecanoic acid	1 ng/mL
							Perfluorodecane Sulfonic acid	0.964 ng/mL
							Perfluoroheptanoic acid (PFHpA)	1 ng/mL
							Perfluoroheptanesulfonic acid	0.952 ng/mL
							Perfluorohexanoic acid	1 ng/mL
							Perfluorohexanesulfonic acid (PFHxS)	0.91 ng/mL
							Perfluorononanoic acid (PFNA)	1 ng/mL
							Perfluorooctanoic acid (PFOA)	1.001 ng/mL
							Perfluorononanesulfonic acid	0.96 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	0.928 ng/mL
							Perfluorooctane Sulfonamide	1 ng/mL
							Perfluoropentanoic acid	1 ng/mL
							Perfluoropentanesulfonic acid	0.938 ng/mL
							Perfluorotetradecanoic acid	1 ng/mL
							Perfluorotridecanoic acid	1 ng/mL
							Perfluoroundecanoic acid	1 ng/mL
.LCMPFC_ICALSU_00001	01/25/19	07/25/18	Methanol, Lot Fisher 168632	200 mL	LCd3-NMeFOSAA_00009	200 uL	d3-NMeFOSAA	0.05 ug/mL
					LCd5-NEtFOSAA_00009	200 uL	d5-NEtFOSAA	0.05 ug/mL
					LCM2-6:FTS_00009	200 uL	M2-6:2FTS	0.0475 ug/mL
					LCM2-8:2FTS_00011	200 uL	M2-8:2FTS	0.0479 ug/mL
					LCM2PFHxDA_00017	200 uL	13C2-PFHxDA	0.05 ug/mL
					LCM2PFOA_00012	200 uL	13C2-PFOA	0.05 ug/mL
					LCM2PFTeDA_00015	200 uL	13C2-PFTeDA	0.05 ug/mL
					LCM4PFHPA_00015	200 uL	13C4-PFHpA	0.05 ug/mL
					LCM5PFPEA_00016	200 uL	13C5-PFPeA	0.05 ug/mL
					LCM8FOSA_00020	200 uL	13C8 FOSA	0.05 ug/mL
					LCMPFBA_00016	200 uL	13C4 PFBA	0.05 ug/mL
					LCMPFBS_00009	200 uL	13C3-PFBS	0.0465 ug/mL
					LCMPFDA_00021	200 uL	13C2 PFDA	0.05 ug/mL
					LCMPFDoA_00016	200 uL	13C2 PFDoA	0.05 ug/mL
					LCMPFHxA_00023	200 uL	13C2 PFHxA	0.05 ug/mL
					LCMPFHxS_00016	200 uL	18O2 PFHxS	0.0473 ug/mL
					LCMPFNA_00016	200 uL	13C5 PFNA	0.05 ug/mL
					LCMPFOA_00020	200 uL	13C4 PFOA	0.05 ug/mL
					LCMPFOS_00028	200 uL	13C4 PFOS	0.0478 ug/mL
					LCMPFUdA_00018	200 uL	13C2 PFUnA	0.05 ug/mL
..LCd3-NMeFOSAA_00009	11/08/22	WELLINGTON, Lot d3NMeFOSAA1117			(Purchased Reagent)		d3-NMeFOSAA	50 ug/mL
..LCd5-NEtFOSAA_00009	11/08/22	WELLINGTON, Lot d5NEtFOSAA1117			(Purchased Reagent)		d5-NEtFOSAA	50 ug/mL
..LCM2-6:FTS_00009	02/16/23	WELLINGTON, Lot M262FTS0218			(Purchased Reagent)		M2-6:2FTS	47.5 ug/mL
..LCM2-8:2FTS_00011	01/24/23	WELLINGTON, Lot M282FTS0118			(Purchased Reagent)		M2-8:2FTS	47.9 ug/mL
..LCM2PFHxDA_00017	07/13/22	Wellington Laboratories, Lot M2PFHxDA0717			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFOA_00012	10/26/22	Wellington Laboratories, Lot M2PFOA1017			(Purchased Reagent)		13C2-PFOA	50 ug/mL
..LCM2PFTeDA_00015	11/30/22	Wellington Laboratories, Lot M2PFTeDA1117			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..LCM4PFHPA_00015	05/03/22	Wellington Laboratories, Lot M4PFHpA0517			(Purchased Reagent)		13C4-PFHpA	50 ug/mL
..LCM5PFPEA_00016	07/20/22	Wellington Laboratories, Lot M5PFPeA0717			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00020	10/11/22	Wellington Laboratories, Lot M8FOSA1017I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00016	02/16/23	Wellington Laboratories, Lot MPFBA0218			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFBS_00009	02/15/23	Wellington Laboratories, Lot M3PFBS0218			(Purchased Reagent)		13C3-PFBS	46.5 ug/mL
..LCMPFDA_00021	02/16/23	Wellington Laboratories, Lot MPFDA0218			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00016	02/16/23	Wellington Laboratories, Lot MPFDoA0218			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA_00023	10/27/22	Wellington Laboratories, Lot MPFHxA1017			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS_00016	03/22/23	Wellington Laboratories, Lot MPFHxS0318			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA_00016	12/14/22	Wellington Laboratories, Lot MPFNA1217			(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00020	05/04/23	Wellington Laboratories, Lot MPFOA0418			(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00028	06/15/23	Wellington Laboratories, Lot MPFOS0618			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUdA_00018	05/11/23	Wellington Laboratories, Lot MPFUdA0518			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
.LCPFCSP_00163	01/16/19	07/20/18	Methanol, Lot 180632	250 mL	LC4:2FTS_00005	100 uL	1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	0.01868 ug/mL
					LC6:2FTS_00007	100 uL	1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	0.01896 ug/mL
					LC8:2FTS_00007	100 uL	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	0.01916 ug/mL
					LCbr-NEtFOSAA_00001	100 uL	N-ethyl perfluorooctane sulfonamidoacetic acid	0.02 ug/mL
					LCbr-NMeFOSAA_00001	100 uL	N-methyl perfluorooctane sulfonamidoacetic acid	0.02 ug/mL
					LCPFBA_00008	100 uL	Perfluorobutyric acid	0.02 ug/mL
					LCPFBS_00009	100 uL	Perfluorobutanesulfonic acid (PFBS)	0.01768 ug/mL
					LCPFDA_00008	100 uL	Perfluorodecanoic acid	0.02 ug/mL
					LCPFDoA_00010	100 uL	Perfluorododecanoic acid	0.02 ug/mL
					LCPFDS_00008	100 uL	Perfluorodecane Sulfonic acid	0.01928 ug/mL
					LCPFHpA_00011	100 uL	Perfluoroheptanoic acid (PFHpA)	0.02 ug/mL
					LCPFHpSA_00003	100 uL	Perfluoroheptanesulfonic acid	0.01904 ug/mL
					LCPFHxA_00010	100 uL	Perfluorohexanoic acid	0.02 ug/mL
					LCPFHxS-br_00006	100 uL	Perfluorohexanesulfonic acid (PFHxS)	0.0182 ug/mL
					LCPFNA_00010	100 uL	Perfluorononanoic acid (PFNA)	0.02 ug/mL
							Perfluorooctanoic acid (PFOA)	0.02002 ug/mL
					LCPFNS_00003	100 uL	Perfluorononanesulfonic acid	0.0192 ug/mL
					LCPFOA_00011	100 uL	Perfluorooctanoic acid (PFOA)	0.02002 ug/mL
					LCPFOS-br_00007	100 uL	Perfluorooctanesulfonic acid (PFOS)	0.01856 ug/mL
					LCPFOSA_00013	100 uL	Perfluorooctane Sulfonamide	0.02 ug/mL
					LCPFPeA_00010	100 uL	Perfluoropentanoic acid	0.02 ug/mL
					LCPFPeS_00003	100 uL	Perfluoropentanesulfonic acid	0.01876 ug/mL
					LCPFTeDA_00009	100 uL	Perfluorotetradecanoic acid	0.02 ug/mL
					LCPFTrDA_00009	100 uL	Perfluorotridecanoic acid	0.02 ug/mL
					LCPFUdA_00008	100 uL	Perfluoroundecanoic acid	0.02 ug/mL
..LC4:2FTS_00005	12/12/21	WELLINGTON, Lot 42FTS1216			(Purchased Reagent)		1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	46.7 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..LC6:2FTS_00007	04/20/22	WELLINGTON, Lot 62FTS0417			(Purchased Reagent)		1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	47.4 ug/mL
..LC8:2FTS_00007	12/12/21	WELLINGTON, Lot 82FTS1216			(Purchased Reagent)		1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	47.9 ug/mL
..LCbr-NEtFOSAA_00001	01/17/23	WELLINGTON, Lot brNEtFOSAA0118			(Purchased Reagent)		N-ethyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
..LCbr-NMeFOSAA_00001	01/17/23	WELLINGTON, Lot brNMeFOSAA0118			(Purchased Reagent)		N-methyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
..LCPFBA_00008	05/29/22	Wellington Laboratories, Lot PFBA0517			(Purchased Reagent)		Perfluorobutyric acid	50 ug/mL
..LCPFBS_00009	09/21/22	Wellington Laboratories, Lot LPFBS0917			(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
..LCPFDA_00008	05/29/22	Wellington Laboratories, Lot PFDA0517			(Purchased Reagent)		Perfluorodecanoic acid	50 ug/mL
..LCPFDoA_00010	05/29/22	Wellington Laboratories, Lot PFDoA0517			(Purchased Reagent)		Perfluorododecanoic acid	50 ug/mL
..LCPFDS_00008	11/08/22	Wellington Laboratories, Lot LPFDS1117			(Purchased Reagent)		Perfluorodecane Sulfonic acid	48.2 ug/mL
..LCPFHpA_00011	09/27/22	Wellington Laboratories, Lot PFHpA0917			(Purchased Reagent)		Perfluoroheptanoic acid (PFHpA)	50 ug/mL
..LCPFHpSA_00003	09/01/22	Wellington Laboratories, Lot LPFHpS0817			(Purchased Reagent)		Perfluoroheptanesulfonic acid	47.6 ug/mL
..LCPFHxA_00010	09/27/22	Wellington Laboratories, Lot PFHxA0917			(Purchased Reagent)		Perfluorohexanoic acid	50 ug/mL
..LCPFHxS-br_00006	01/04/22	Wellington Laboratories, Lot brPFHxSK0117			(Purchased Reagent)		Perfluorohexanesulfonic acid (PFHxS)	45.5 ug/mL
..LCPFNA_00010	07/20/22	Wellington Laboratories, Lot PFNA0717			(Purchased Reagent)		Perfluorononanoic acid (PFNA)	50 ug/mL
							Perfluorooctanoic acid (PFOA)	0.05 ug/mL
..LCPFNS_00003	09/27/22	Wellington Laboratories, Lot LPFNS0917			(Purchased Reagent)		Perfluorononanesulfonic acid	48 ug/mL
..LCPFOA_00011	09/27/22	Wellington Laboratories, Lot PFOA0917			(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
..LCPFOS-br_00007	01/12/22	Wellington Laboratories, Lot brPFOSK0117			(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	46.4 ug/mL
..LCPFOSA_00013	09/01/22	Wellington Laboratories, Lot FOSA0817I			(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL
..LCPFPeA_00010	06/14/22	Wellington Laboratories, Lot PFPeA0617			(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL
..LCPFPeS_00003	01/11/22	Wellington Laboratories, Lot LPFPeS0117			(Purchased Reagent)		Perfluoropentanesulfonic acid	46.9 ug/mL
..LCPFTeDA_00009	09/30/21	Wellington Laboratories, Lot PFTeDA0916			(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL
..LCPFTrDA_00009	05/02/22	Wellington Laboratories, Lot PFTrDA0517			(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL
..LCPFUdA_00008	10/18/21	Wellington Laboratories, Lot PFUdA1016			(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL
LCPFC_LL5_00005	11/18/18	06/05/18	MeOH/H2O, Lot 090285	200 mL	LCMPFC_ALL_SU_00075	10 mL	d3-NMeFOSAA	2.5 ng/mL
							d5-NEtFOSAA	2.5 ng/mL
							M2-6:2FTS	2.375 ng/mL
							M2-8:2FTS	2.395 ng/mL
							13C2-PFHxDA	2.5 ng/mL
							13C2-PFOA	2.5 ng/mL
							13C2-PFTeDA	2.5 ng/mL
							13C4-PFHpA	2.5 ng/mL
							13C5-PFPeA	2.5 ng/mL
							13C8 FOSA	2.5 ng/mL
							13C4 PFBA	2.5 ng/mL
							13C3-PFBS	2.325 ng/mL
							13C2 PFDA	2.5 ng/mL
							13C2 PFDoA	2.5 ng/mL
							13C2 PFHxA	2.5 ng/mL
							18O2 PFHxS	2.365 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							13C5 PFNA	2.5 ng/mL
							13C4 PFOA	2.5 ng/mL
							13C4 PFOS	2.39 ng/mL
							13C2 PFUnA	2.5 ng/mL
					LCPFCSP_00148	1000 uL	1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	2.335 ng/mL
							1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	2.37 ng/mL
							1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	2.395 ng/mL
							N-ethyl perfluorooctane sulfonamidoacetic acid	2.5 ng/mL
							N-methyl perfluorooctane sulfonamidoacetic acid	2.5 ng/mL
							Perfluorobutyric acid	2.5 ng/mL
							Perfluorobutanesulfonic acid (PFBS)	2.21 ng/mL
							Perfluorodecanoic acid	2.5 ng/mL
							Perfluorododecanoic acid	2.5 ng/mL
							Perfluorodecane Sulfonic acid	2.41 ng/mL
							Perfluoroheptanoic acid (PFHpA)	2.5 ng/mL
							Perfluoroheptanesulfonic acid	2.38 ng/mL
							Perfluorohexanoic acid	2.5 ng/mL
							Perfluorohexanesulfonic acid (PFHxS)	2.275 ng/mL
							Perfluorononanoic acid (PFNA)	2.5 ng/mL
							Perfluorooctanoic acid (PFOA)	2.5025 ng/mL
							Perfluorononanesulfonic acid	2.4 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	2.32 ng/mL
							Perfluorooctane Sulfonamide	2.5 ng/mL
							Perfluoropentanoic acid	2.5 ng/mL
							Perfluoropentanesulfonic acid	2.345 ng/mL
							Perfluorotetradecanoic acid	2.5 ng/mL
							Perfluorotridecanoic acid	2.5 ng/mL
							Perfluoroundecanoic acid	2.5 ng/mL
.LCMPFC_ALL_SU_00075	12/05/18	06/05/18	Methanol, Lot Baker 141039	200 mL	LCd3-NMeFOSAA_00008	200 uL	d3-NMeFOSAA	0.05 ug/mL
					LCd5-NEtFOSAA_00008	200 uL	d5-NEtFOSAA	0.05 ug/mL
					LCM2-6:FTS_00008	200 uL	M2-6:2FTS	0.0475 ug/mL
					LCM2-8:2FTS_00010	200 uL	M2-8:2FTS	0.0479 ug/mL
					LCM2PFHxDA_00016	200 uL	13C2-PFHxDA	0.05 ug/mL
					LCM2PFOA_00008	200 uL	13C2-PFOA	0.05 ug/mL
					LCM2PFTeDA_00014	200 uL	13C2-PFTeDA	0.05 ug/mL
					LCM4PFHPA_00014	200 uL	13C4-PFHpA	0.05 ug/mL
					LCM5PFPEA_00015	200 uL	13C5-PFPeA	0.05 ug/mL
					LCM8FOSA_00019	200 uL	13C8 FOSA	0.05 ug/mL
					LCMPFBA_00015	200 uL	13C4 PFBA	0.05 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCMPFBS_00008	200 uL	13C3-PFBS	0.0465 ug/mL
					LCMPFDA_00020	200 uL	13C2 PFDA	0.05 ug/mL
					LCMPFDoA_00015	200 uL	13C2 PFDoA	0.05 ug/mL
					LCMPFHxA_00022	200 uL	13C2 PFHxA	0.05 ug/mL
					LCMPFHxS_00015	200 uL	18O2 PFHxS	0.0473 ug/mL
					LCMPFNA_00015	200 uL	13C5 PFNA	0.05 ug/mL
					LCMPFOA_00019	200 uL	13C4 PFOA	0.05 ug/mL
					LCMPFOS_00027	200 uL	13C4 PFOS	0.0478 ug/mL
					LCMPFUdA_00017	200 uL	13C2 PFUnA	0.05 ug/mL
..LCd3-NMeFOSAA_00008	11/08/22	WELLINGTON, Lot d3NMeFOSAA1117			(Purchased Reagent)		d3-NMeFOSAA	50 ug/mL
..LCd5-NEtFOSAA_00008	11/08/22	WELLINGTON, Lot d5NEtFOSAA1117			(Purchased Reagent)		d5-NEtFOSAA	50 ug/mL
..LCM2-6:FTS_00008	02/16/23	WELLINGTON, Lot M262FTS0218			(Purchased Reagent)		M2-6:2FTS	47.5 ug/mL
..LCM2-8:2FTS_00010	01/24/23	WELLINGTON, Lot M282FTS0118			(Purchased Reagent)		M2-8:2FTS	47.9 ug/mL
..LCM2PFHxDA_00016	07/13/22	Wellington Laboratories, Lot M2PFHxDA0717			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFOA_00008	02/12/21	Wellington Laboratories, Lot M2PFOA0216			(Purchased Reagent)		13C2-PFOA	50 ug/mL
..LCM2PFTeDA_00014	11/30/22	Wellington Laboratories, Lot M2PFTeDA1117			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHPA_00014	05/03/22	Wellington Laboratories, Lot M4PFHpA0517			(Purchased Reagent)		13C4-PFHpA	50 ug/mL
..LCM5PFPEA_00015	07/20/22	Wellington Laboratories, Lot M5PFPeA0717			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00019	10/11/22	Wellington Laboratories, Lot M8FOSA1017I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00015	02/16/23	Wellington Laboratories, Lot MPFBA0218			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFBS_00008	02/15/23	Wellington Laboratories, Lot M3PFBS0218			(Purchased Reagent)		13C3-PFBS	46.5 ug/mL
..LCMPFDA_00020	02/16/23	Wellington Laboratories, Lot MPFDA0218			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00015	02/16/23	Wellington Laboratories, Lot MPFDoA0218			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA_00022	10/27/22	Wellington Laboratories, Lot MPFHxA1017			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS_00015	03/22/23	Wellington Laboratories, Lot MPFHxS0318			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA_00015	12/14/22	Wellington Laboratories, Lot MPFNA1217			(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00019	05/04/23	Wellington Laboratories, Lot MPFOA0418			(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00027	02/15/23	Wellington Laboratories, Lot MPFOS0218			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUdA_00017	11/22/21	Wellington Laboratories, Lot MPFUdA1116			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
.LCPFCSP_00148	11/18/18	05/17/18	Methanol, Lot 090285	10 mL	LC4:2FTS_00005	100 uL	1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	0.467 ug/mL
					LC6:2FTS_00007	100 uL	1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	0.474 ug/mL
					LC8:2FTS_00007	100 uL	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	0.479 ug/mL
					LCbr-NEtFOSAA_00001	100 uL	N-ethyl perfluorooctane sulfonamidoacetic acid	0.5 ug/mL
					LCbr-NMeFOSAA_00001	100 uL	N-methyl perfluorooctane sulfonamidoacetic acid	0.5 ug/mL
					LCPFBA_00008	100 uL	Perfluorobutyric acid	0.5 ug/mL
					LCPFBS_00009	100 uL	Perfluorobutanesulfonic acid (PFBS)	0.442 ug/mL
					LCPFDA_00008	100 uL	Perfluorodecanoic acid	0.5 ug/mL
					LCPFDoA_00008	100 uL	Perfluorododecanoic acid	0.5 ug/mL
					LCPFDS_00008	100 uL	Perfluorodecane Sulfonic acid	0.482 ug/mL
					LCPFHpA_00011	100 uL	Perfluoroheptanoic acid (PFHpA)	0.5 ug/mL
					LCPFHpSA_00003	100 uL	Perfluoroheptanesulfonic acid	0.476 ug/mL
					LCPFHxA_00010	100 uL	Perfluorohexanoic acid	0.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCPFHxS-br_00006	100 uL	Perfluorohexanesulfonic acid (PFHxS)	0.455 ug/mL
					LCPFNA_00010	100 uL	Perfluorononanoic acid (PFNA)	0.5 ug/mL
							Perfluorooctanoic acid (PFOA)	0.5005 ug/mL
					LCPFNS_00003	100 uL	Perfluorononanesulfonic acid	0.48 ug/mL
					LCPFOA_00011	100 uL	Perfluorooctanoic acid (PFOA)	0.5005 ug/mL
					LCPFOS-br_00007	100 uL	Perfluorooctanesulfonic acid (PFOS)	0.464 ug/mL
					LCPFOSA_00013	100 uL	Perfluorooctane Sulfonamide	0.5 ug/mL
					LCPFPeA_00008	100 uL	Perfluoropentanoic acid	0.5 ug/mL
					LCPFPeS_00003	100 uL	Perfluoropentanesulfonic acid	0.469 ug/mL
					LCPFTeDA_00008	100 uL	Perfluorotetradecanoic acid	0.5 ug/mL
					LCPFTrDA_00008	100 uL	Perfluorotridecanoic acid	0.5 ug/mL
					LCPFUdA_00008	100 uL	Perfluoroundecanoic acid	0.5 ug/mL
..LC4:2FTS_00005	12/12/21	WELLINGTON, Lot 42FTS1216			(Purchased Reagent)		1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	46.7 ug/mL
..LC6:2FTS_00007	04/20/22	WELLINGTON, Lot 62FTS0417			(Purchased Reagent)		1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	47.4 ug/mL
..LC8:2FTS_00007	12/12/21	WELLINGTON, Lot 82FTS1216			(Purchased Reagent)		1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	47.9 ug/mL
..LCbr-NEtFOSAA_00001	01/17/23	WELLINGTON, Lot brNEtFOSAA0118			(Purchased Reagent)		N-ethyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
..LCbr-NMeFOSAA_00001	01/17/23	WELLINGTON, Lot brNMeFOSAA0118			(Purchased Reagent)		N-methyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
..LCPFBA_00008	05/29/22	Wellington Laboratories, Lot PFBA0517			(Purchased Reagent)		Perfluorobutyric acid	50 ug/mL
..LCPFBS_00009	09/21/22	Wellington Laboratories, Lot LPFBS0917			(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
..LCPFDA_00008	05/29/22	Wellington Laboratories, Lot PFDA0517			(Purchased Reagent)		Perfluorodecanoic acid	50 ug/mL
..LCPFDoA_00008	05/29/22	Wellington Laboratories, Lot PFDoA0517			(Purchased Reagent)		Perfluorododecanoic acid	50 ug/mL
..LCPFDS_00008	11/08/22	Wellington Laboratories, Lot LPFDS1117			(Purchased Reagent)		Perfluorodecane Sulfonic acid	48.2 ug/mL
..LCPFHpA_00011	09/27/22	Wellington Laboratories, Lot PFHpA0917			(Purchased Reagent)		Perfluoroheptanoic acid (PFHpA)	50 ug/mL
..LCPFHpSA_00003	09/01/22	Wellington Laboratories, Lot LPFHpS0817			(Purchased Reagent)		Perfluoroheptanesulfonic acid	47.6 ug/mL
..LCPFHxA_00010	09/27/22	Wellington Laboratories, Lot PFHxA0917			(Purchased Reagent)		Perfluorohexanoic acid	50 ug/mL
..LCPFHxS-br_00006	01/04/22	Wellington Laboratories, Lot brPFHxSK0117			(Purchased Reagent)		Perfluorohexanesulfonic acid (PFHxS)	45.5 ug/mL
..LCPFNA_00010	07/20/22	Wellington Laboratories, Lot PFNA0717			(Purchased Reagent)		Perfluorononanoic acid (PFNA)	50 ug/mL
							Perfluorooctanoic acid (PFOA)	0.05 ug/mL
..LCPFNS_00003	09/27/22	Wellington Laboratories, Lot LPFNS0917			(Purchased Reagent)		Perfluorononanesulfonic acid	48 ug/mL
..LCPFOA_00011	09/27/22	Wellington Laboratories, Lot PFOA0917			(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
..LCPFOS-br_00007	01/12/22	Wellington Laboratories, Lot brPFOSK0117			(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	46.4 ug/mL
..LCPFOSA_00013	09/01/22	Wellington Laboratories, Lot FOSA0817I			(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL
..LCPFPeA_00008	06/14/22	Wellington Laboratories, Lot PFPeA0617			(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL
..LCPFPeS_00003	01/11/22	Wellington Laboratories, Lot LPFPeS0117			(Purchased Reagent)		Perfluoropentanesulfonic acid	46.9 ug/mL
..LCPFTeDA_00008	09/30/21	Wellington Laboratories, Lot PFTeDA0916			(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL
..LCPFTrDA_00008	05/02/22	Wellington Laboratories, Lot PFTrDA0517			(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL
..LCPFUdA_00008	10/18/21	Wellington Laboratories, Lot PFUdA1016			(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL
LCPFC_LL5_00006	01/16/19	07/25/18	MeOH/H2O, Lot 090285	200 mL	LCMPFC_ICALSU_00001	10 mL	d3-NMeFOSAA	2.5 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							d5-NEtFOSAA	2.5 ng/mL
							M2-6:2FTS	2.375 ng/mL
							M2-8:2FTS	2.395 ng/mL
							13C2-PFHxDA	2.5 ng/mL
							13C2-PFOA	2.5 ng/mL
							13C2-PFTeDA	2.5 ng/mL
							13C4-PFHpA	2.5 ng/mL
							13C5-PFPeA	2.5 ng/mL
							13C8 FOSA	2.5 ng/mL
							13C4 PFBA	2.5 ng/mL
							13C3-PFBS	2.325 ng/mL
							13C2 PFDA	2.5 ng/mL
							13C2 PFDoA	2.5 ng/mL
							13C2 PFHxA	2.5 ng/mL
							18O2 PFHxS	2.365 ng/mL
							13C5 PFNA	2.5 ng/mL
							13C4 PFOA	2.5 ng/mL
							13C4 PFOS	2.39 ng/mL
							13C2 PFUnA	2.5 ng/mL
					LCPFCSP_00163	25 mL	1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	2.335 ng/mL
							1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	2.37 ng/mL
							1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	2.395 ng/mL
							N-ethyl perfluorooctane sulfonamidoacetic acid	2.5 ng/mL
							N-methyl perfluorooctane sulfonamidoacetic acid	2.5 ng/mL
							Perfluorobutyric acid	2.5 ng/mL
							Perfluorobutanesulfonic acid (PFBS)	2.21 ng/mL
							Perfluorodecanoic acid	2.5 ng/mL
							Perfluorododecanoic acid	2.5 ng/mL
							Perfluorodecane Sulfonic acid	2.41 ng/mL
							Perfluoroheptanoic acid (PFHpA)	2.5 ng/mL
							Perfluoroheptanesulfonic acid	2.38 ng/mL
							Perfluorohexanoic acid	2.5 ng/mL
							Perfluorohexanesulfonic acid (PFHxS)	2.275 ng/mL
							Perfluorononanoic acid (PFNA)	2.5 ng/mL
							Perfluorooctanoic acid (PFOA)	2.5025 ng/mL
							Perfluorononanesulfonic acid	2.4 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	2.32 ng/mL
							Perfluorooctane Sulfonamide	2.5 ng/mL
							Perfluoropentanoic acid	2.5 ng/mL
							Perfluoropentanesulfonic acid	2.345 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Perfluorotetradecanoic acid	2.5 ng/mL
							Perfluorotridecanoic acid	2.5 ng/mL
							Perfluoroundecanoic acid	2.5 ng/mL
.LCMPFC_ICALSU_00001	01/25/19	07/25/18	Methanol, Lot Fisher 168632	200 mL	LCd3-NMeFOSAA_00009	200 uL	d3-NMeFOSAA	0.05 ug/mL
					LCd5-NEtFOSAA_00009	200 uL	d5-NEtFOSAA	0.05 ug/mL
					LCM2-6:FTS_00009	200 uL	M2-6:2FTS	0.0475 ug/mL
					LCM2-8:2FTS_00011	200 uL	M2-8:2FTS	0.0479 ug/mL
					LCM2PFHxDA_00017	200 uL	13C2-PFHxDA	0.05 ug/mL
					LCM2PFOA_00012	200 uL	13C2-PFOA	0.05 ug/mL
					LCM2PFTeDA_00015	200 uL	13C2-PFTeDA	0.05 ug/mL
					LCM4PFHPA_00015	200 uL	13C4-PFHpA	0.05 ug/mL
					LCM5PFPEA_00016	200 uL	13C5-PFPeA	0.05 ug/mL
					LCM8FOSA_00020	200 uL	13C8 FOSA	0.05 ug/mL
					LCMPFBA_00016	200 uL	13C4 PFBA	0.05 ug/mL
					LCMPFBS_00009	200 uL	13C3-PFBS	0.0465 ug/mL
					LCMPFDA_00021	200 uL	13C2 PFDA	0.05 ug/mL
					LCMPFDoA_00016	200 uL	13C2 PFDoA	0.05 ug/mL
					LCMPFHxA_00023	200 uL	13C2 PFHxA	0.05 ug/mL
					LCMPFHxS_00016	200 uL	18O2 PFHxS	0.0473 ug/mL
					LCMPFNA_00016	200 uL	13C5 PFNA	0.05 ug/mL
					LCMPFOA_00020	200 uL	13C4 PFOA	0.05 ug/mL
					LCMPFOS_00028	200 uL	13C4 PFOS	0.0478 ug/mL
					LCMPFUdA_00018	200 uL	13C2 PFUnA	0.05 ug/mL
..LCd3-NMeFOSAA_00009	11/08/22	WELLINGTON, Lot d3NMeFOSAA1117			(Purchased Reagent)		d3-NMeFOSAA	50 ug/mL
..LCd5-NEtFOSAA_00009	11/08/22	WELLINGTON, Lot d5NEtFOSAA1117			(Purchased Reagent)		d5-NEtFOSAA	50 ug/mL
..LCM2-6:FTS_00009	02/16/23	WELLINGTON, Lot M262FTS0218			(Purchased Reagent)		M2-6:2FTS	47.5 ug/mL
..LCM2-8:2FTS_00011	01/24/23	WELLINGTON, Lot M282FTS0118			(Purchased Reagent)		M2-8:2FTS	47.9 ug/mL
..LCM2PFHxDA_00017	07/13/22	Wellington Laboratories, Lot M2PFHxDA0717			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFOA_00012	10/26/22	Wellington Laboratories, Lot M2PFOA1017			(Purchased Reagent)		13C2-PFOA	50 ug/mL
..LCM2PFTeDA_00015	11/30/22	Wellington Laboratories, Lot M2PFTeDA1117			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHPA_00015	05/03/22	Wellington Laboratories, Lot M4PFHpA0517			(Purchased Reagent)		13C4-PFHpA	50 ug/mL
..LCM5PFPEA_00016	07/20/22	Wellington Laboratories, Lot M5PFPeA0717			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00020	10/11/22	Wellington Laboratories, Lot M8FOSA1017I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00016	02/16/23	Wellington Laboratories, Lot MPFBA0218			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFBS_00009	02/15/23	Wellington Laboratories, Lot M3PFBS0218			(Purchased Reagent)		13C3-PFBS	46.5 ug/mL
..LCMPFDA_00021	02/16/23	Wellington Laboratories, Lot MPFDA0218			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00016	02/16/23	Wellington Laboratories, Lot MPFDoA0218			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA_00023	10/27/22	Wellington Laboratories, Lot MPFHxA1017			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS_00016	03/22/23	Wellington Laboratories, Lot MPFHxS0318			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA_00016	12/14/22	Wellington Laboratories, Lot MPFNA1217			(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00020	05/04/23	Wellington Laboratories, Lot MPFOA0418			(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00028	06/15/23	Wellington Laboratories, Lot MPFOS0618			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUdA_00018	05/11/23	Wellington Laboratories, Lot MPFUdA0518			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
.LCPFCSP_00163	01/16/19	07/20/18	Methanol, Lot 180632	250 mL	LC4:2FTS_00005	100 uL	1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	0.01868 ug/mL
					LC6:2FTS_00007	100 uL	1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	0.01896 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LC8:2FTS_00007	100 uL	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	0.01916 ug/mL
					LCbr-NEtFOSAA_00001	100 uL	N-ethyl perfluorooctane sulfonamidoacetic acid	0.02 ug/mL
					LCbr-NMeFOSAA_00001	100 uL	N-methyl perfluorooctane sulfonamidoacetic acid	0.02 ug/mL
					LCPFBA_00008	100 uL	Perfluorobutyric acid	0.02 ug/mL
					LCPFBS_00009	100 uL	Perfluorobutanesulfonic acid (PFBS)	0.01768 ug/mL
					LCPFDA_00008	100 uL	Perfluorodecanoic acid	0.02 ug/mL
					LCPFDoA_00010	100 uL	Perfluorododecanoic acid	0.02 ug/mL
					LCPFDS_00008	100 uL	Perfluorodecane Sulfonic acid	0.01928 ug/mL
					LCPFHpA_00011	100 uL	Perfluoroheptanoic acid (PFHpA)	0.02 ug/mL
					LCPFHpSA_00003	100 uL	Perfluoroheptanesulfonic acid	0.01904 ug/mL
					LCPFHxA_00010	100 uL	Perfluorohexanoic acid	0.02 ug/mL
					LCPFHxS-br_00006	100 uL	Perfluorohexanesulfonic acid (PFHxS)	0.0182 ug/mL
					LCPFNA_00010	100 uL	Perfluorononanoic acid (PFNA)	0.02 ug/mL
							Perfluorooctanoic acid (PFOA)	0.02002 ug/mL
					LCPFNS_00003	100 uL	Perfluorononanesulfonic acid	0.0192 ug/mL
					LCPFOA_00011	100 uL	Perfluorooctanoic acid (PFOA)	0.02002 ug/mL
					LCPFOS-br_00007	100 uL	Perfluorooctanesulfonic acid (PFOS)	0.01856 ug/mL
					LCPFOSA_00013	100 uL	Perfluorooctane Sulfonamide	0.02 ug/mL
					LCPFPeA_00010	100 uL	Perfluoropentanoic acid	0.02 ug/mL
					LCPFPeS_00003	100 uL	Perfluoropentanesulfonic acid	0.01876 ug/mL
					LCPFTeDA_00009	100 uL	Perfluorotetradecanoic acid	0.02 ug/mL
					LCPFTrDA_00009	100 uL	Perfluorotridecanoic acid	0.02 ug/mL
					LCPFUdA_00008	100 uL	Perfluoroundecanoic acid	0.02 ug/mL
..LC4:2FTS_00005	12/12/21	WELLINGTON, Lot 42FTS1216			(Purchased Reagent)		1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	46.7 ug/mL
..LC6:2FTS_00007	04/20/22	WELLINGTON, Lot 62FTS0417			(Purchased Reagent)		1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	47.4 ug/mL
..LC8:2FTS_00007	12/12/21	WELLINGTON, Lot 82FTS1216			(Purchased Reagent)		1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	47.9 ug/mL
..LCbr-NEtFOSAA_00001	01/17/23	WELLINGTON, Lot brNEtFOSAA0118			(Purchased Reagent)		N-ethyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
..LCbr-NMeFOSAA_00001	01/17/23	WELLINGTON, Lot brNMeFOSAA0118			(Purchased Reagent)		N-methyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
..LCPFBA_00008	05/29/22	Wellington Laboratories, Lot PFBA0517			(Purchased Reagent)		Perfluorobutyric acid	50 ug/mL
..LCPFBS_00009	09/21/22	Wellington Laboratories, Lot LPFBS0917			(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
..LCPFDA_00008	05/29/22	Wellington Laboratories, Lot PFDA0517			(Purchased Reagent)		Perfluorodecanoic acid	50 ug/mL
..LCPFDoA_00010	05/29/22	Wellington Laboratories, Lot PFDoA0517			(Purchased Reagent)		Perfluorododecanoic acid	50 ug/mL
..LCPFDS_00008	11/08/22	Wellington Laboratories, Lot LPFDS1117			(Purchased Reagent)		Perfluorodecane Sulfonic acid	48.2 ug/mL
..LCPFHpA_00011	09/27/22	Wellington Laboratories, Lot PFHpA0917			(Purchased Reagent)		Perfluoroheptanoic acid (PFHpA)	50 ug/mL
..LCPFHpSA_00003	09/01/22	Wellington Laboratories, Lot LPFHpS0817			(Purchased Reagent)		Perfluoroheptanesulfonic acid	47.6 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..LCPFHxA_00010	09/27/22	Wellington Laboratories, Lot PFHxA0917			(Purchased Reagent)		Perfluorohexanoic acid	50 ug/mL
..LCPFHxS-br_00006	01/04/22	Wellington Laboratories, Lot brPFHxSK0117			(Purchased Reagent)		Perfluorohexanesulfonic acid (PFHxS)	45.5 ug/mL
..LCPFNA_00010	07/20/22	Wellington Laboratories, Lot PFNA0717			(Purchased Reagent)		Perfluorononanoic acid (PFNA)	50 ug/mL
							Perfluorooctanoic acid (PFOA)	0.05 ug/mL
..LCPFNS_00003	09/27/22	Wellington Laboratories, Lot LPFNS0917			(Purchased Reagent)		Perfluorononanesulfonic acid	48 ug/mL
..LCPFOA_00011	09/27/22	Wellington Laboratories, Lot PFOA0917			(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
..LCPFOS-br_00007	01/12/22	Wellington Laboratories, Lot brPFOSK0117			(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	46.4 ug/mL
..LCPFOSA_00013	09/01/22	Wellington Laboratories, Lot FOSA0817I			(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL
..LCPFPeA_00010	06/14/22	Wellington Laboratories, Lot PFPeA0617			(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL
..LCPFPeS_00003	01/11/22	Wellington Laboratories, Lot LPFPeS0117			(Purchased Reagent)		Perfluoropentanesulfonic acid	46.9 ug/mL
..LCPFTeDA_00009	09/30/21	Wellington Laboratories, Lot PFTeDA0916			(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL
..LCPFTrDA_00009	05/02/22	Wellington Laboratories, Lot PFTrDA0517			(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL
..LCPFUdA_00008	10/18/21	Wellington Laboratories, Lot PFUdA1016			(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL
LCPFC_LL6_00006	11/18/18	06/05/18	MeOH/H2O, Lot 090285	200 mL	LCMPFC_ALL_SU_00075	10 mL	d3-NMeFOSAA	2.5 ng/mL
							d5-NEtFOSAA	2.5 ng/mL
							M2-6:2FTS	2.375 ng/mL
							M2-8:2FTS	2.395 ng/mL
							13C2-PFHxDA	2.5 ng/mL
							13C2-PFOA	2.5 ng/mL
							13C2-PFTeDA	2.5 ng/mL
							13C4-PFHpA	2.5 ng/mL
							13C5-PFPeA	2.5 ng/mL
							13C8 FOSA	2.5 ng/mL
							13C4 PFBA	2.5 ng/mL
							13C3-PFBS	2.325 ng/mL
							13C2 PFDA	2.5 ng/mL
							13C2 PFDoA	2.5 ng/mL
							13C2 PFHxA	2.5 ng/mL
							18O2 PFHxS	2.365 ng/mL
							13C5 PFNA	2.5 ng/mL
							13C4 PFOA	2.5 ng/mL
							13C4 PFOS	2.39 ng/mL
							13C2 PFUnA	2.5 ng/mL
					LCPFCSP_00148	2 mL	1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	4.67 ng/mL
							1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	4.74 ng/mL
							1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	4.79 ng/mL
							N-ethyl perfluorooctane sulfonamidoacetic acid	5 ng/mL
							N-methyl perfluorooctane sulfonamidoacetic acid	5 ng/mL
							Perfluorobutyric acid	5 ng/mL
							Perfluorobutanesulfonic acid (PFBS)	4.42 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Perfluorodecanoic acid	5 ng/mL
							Perfluorododecanoic acid	5 ng/mL
							Perfluorodecane Sulfonic acid	4.82 ng/mL
							Perfluoroheptanoic acid (PFHpA)	5 ng/mL
							Perfluoroheptanesulfonic acid	4.76 ng/mL
							Perfluorohexanoic acid	5 ng/mL
							Perfluorohexanesulfonic acid (PFHxS)	4.55 ng/mL
							Perfluorononanoic acid (PFNA)	5 ng/mL
							Perfluorooctanoic acid (PFOA)	5.005 ng/mL
							Perfluorononanesulfonic acid	4.8 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	4.64 ng/mL
							Perfluorooctane Sulfonamide	5 ng/mL
							Perfluoropentanoic acid	5 ng/mL
							Perfluoropentanesulfonic acid	4.69 ng/mL
							Perfluorotetradecanoic acid	5 ng/mL
							Perfluorotridecanoic acid	5 ng/mL
							Perfluoroundecanoic acid	5 ng/mL
.LCMPFC_ALL_SU_00075	12/05/18	06/05/18	Methanol, Lot Baker 141039	200 mL	LCd3-NMeFOSAA_00008	200 uL	d3-NMeFOSAA	0.05 ug/mL
					LCd5-NEtFOSAA_00008	200 uL	d5-NEtFOSAA	0.05 ug/mL
					LCM2-6:FTS_00008	200 uL	M2-6:2FTS	0.0475 ug/mL
					LCM2-8:2FTS_00010	200 uL	M2-8:2FTS	0.0479 ug/mL
					LCM2PFHxDA_00016	200 uL	13C2-PFHxDA	0.05 ug/mL
					LCM2PFOA_00008	200 uL	13C2-PFOA	0.05 ug/mL
					LCM2PFTeDA_00014	200 uL	13C2-PFTeDA	0.05 ug/mL
					LCM4PFHPA_00014	200 uL	13C4-PFHpA	0.05 ug/mL
					LCM5PFPEA_00015	200 uL	13C5-PFPeA	0.05 ug/mL
					LCM8FOSA_00019	200 uL	13C8 FOSA	0.05 ug/mL
					LCMPFBA_00015	200 uL	13C4 PFBA	0.05 ug/mL
					LCMPFBS_00008	200 uL	13C3-PFBS	0.0465 ug/mL
					LCMPFDA_00020	200 uL	13C2 PFDA	0.05 ug/mL
					LCMPFDoA_00015	200 uL	13C2 PFDoA	0.05 ug/mL
					LCMPFHxA_00022	200 uL	13C2 PFHxA	0.05 ug/mL
					LCMPFHxS_00015	200 uL	18O2 PFHxS	0.0473 ug/mL
					LCMPFNA_00015	200 uL	13C5 PFNA	0.05 ug/mL
					LCMPFOA_00019	200 uL	13C4 PFOA	0.05 ug/mL
					LCMPFOS_00027	200 uL	13C4 PFOS	0.0478 ug/mL
					LCMPFUdA_00017	200 uL	13C2 PFUnA	0.05 ug/mL
..LCd3-NMeFOSAA_00008	11/08/22	WELLINGTON, Lot d3NMeFOSAA1117			(Purchased Reagent)		d3-NMeFOSAA	50 ug/mL
..LCd5-NEtFOSAA_00008	11/08/22	WELLINGTON, Lot d5NEtFOSAA1117			(Purchased Reagent)		d5-NEtFOSAA	50 ug/mL
..LCM2-6:FTS_00008	02/16/23	WELLINGTON, Lot M262FTS0218			(Purchased Reagent)		M2-6:2FTS	47.5 ug/mL
..LCM2-8:2FTS_00010	01/24/23	WELLINGTON, Lot M282FTS0118			(Purchased Reagent)		M2-8:2FTS	47.9 ug/mL
..LCM2PFHxDA_00016	07/13/22	Wellington Laboratories, Lot M2PFHxDA0717			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFOA_00008	02/12/21	Wellington Laboratories, Lot M2PFOA0216			(Purchased Reagent)		13C2-PFOA	50 ug/mL
..LCM2PFTeDA_00014	11/30/22	Wellington Laboratories, Lot M2PFTeDA1117			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..LCM4PFHPA_00014	05/03/22	Wellington Laboratories, Lot M4PFHpA0517			(Purchased Reagent)		13C4-PFHpA	50 ug/mL
..LCM5PFPEA_00015	07/20/22	Wellington Laboratories, Lot M5PFPeA0717			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00019	10/11/22	Wellington Laboratories, Lot M8FOSA1017I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00015	02/16/23	Wellington Laboratories, Lot MPFBA0218			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFBS_00008	02/15/23	Wellington Laboratories, Lot M3PFBS0218			(Purchased Reagent)		13C3-PFBS	46.5 ug/mL
..LCMPFDA_00020	02/16/23	Wellington Laboratories, Lot MPFDA0218			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00015	02/16/23	Wellington Laboratories, Lot MPFDoA0218			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA_00022	10/27/22	Wellington Laboratories, Lot MPFHxA1017			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS_00015	03/22/23	Wellington Laboratories, Lot MPFHxS0318			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA_00015	12/14/22	Wellington Laboratories, Lot MPFNA1217			(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00019	05/04/23	Wellington Laboratories, Lot MPFOA0418			(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00027	02/15/23	Wellington Laboratories, Lot MPFOS0218			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUdA_00017	11/22/21	Wellington Laboratories, Lot MPFUdA1116			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
.LCPFCSP_00148	11/18/18	05/17/18	Methanol, Lot 090285	10 mL	LC4:2FTS_00005	100 uL	1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	0.467 ug/mL
					LC6:2FTS_00007	100 uL	1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	0.474 ug/mL
					LC8:2FTS_00007	100 uL	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	0.479 ug/mL
					LCbr-NEtFOSAA_00001	100 uL	N-ethyl perfluorooctane sulfonamidoacetic acid	0.5 ug/mL
					LCbr-NMeFOSAA_00001	100 uL	N-methyl perfluorooctane sulfonamidoacetic acid	0.5 ug/mL
					LCPFBA_00008	100 uL	Perfluorobutyric acid	0.5 ug/mL
					LCPFBS_00009	100 uL	Perfluorobutanesulfonic acid (PFBS)	0.442 ug/mL
					LCPFDA_00008	100 uL	Perfluorodecanoic acid	0.5 ug/mL
					LCPFDoA_00008	100 uL	Perfluorododecanoic acid	0.5 ug/mL
					LCPFDS_00008	100 uL	Perfluorodecane Sulfonic acid	0.482 ug/mL
					LCPFHpA_00011	100 uL	Perfluoroheptanoic acid (PFHpA)	0.5 ug/mL
					LCPFHpSA_00003	100 uL	Perfluoroheptanesulfonic acid	0.476 ug/mL
					LCPFHxA_00010	100 uL	Perfluorohexanoic acid	0.5 ug/mL
					LCPFHxS-br_00006	100 uL	Perfluorohexanesulfonic acid (PFHxS)	0.455 ug/mL
					LCPFNA_00010	100 uL	Perfluorononanoic acid (PFNA)	0.5 ug/mL
							Perfluorooctanoic acid (PFOA)	0.5005 ug/mL
					LCPFNS_00003	100 uL	Perfluorononanesulfonic acid	0.48 ug/mL
					LCPFOA_00011	100 uL	Perfluorooctanoic acid (PFOA)	0.5005 ug/mL
					LCPFOS-br_00007	100 uL	Perfluorooctanesulfonic acid (PFOS)	0.464 ug/mL
					LCPFOSA_00013	100 uL	Perfluorooctane Sulfonamide	0.5 ug/mL
					LCPFPeA_00008	100 uL	Perfluoropentanoic acid	0.5 ug/mL
					LCPFPeS_00003	100 uL	Perfluoropentanesulfonic acid	0.469 ug/mL
					LCPFTeDA_00008	100 uL	Perfluorotetradecanoic acid	0.5 ug/mL
					LCPFTrDA_00008	100 uL	Perfluorotridecanoic acid	0.5 ug/mL
					LCPFUdA_00008	100 uL	Perfluoroundecanoic acid	0.5 ug/mL
..LC4:2FTS_00005	12/12/21	WELLINGTON, Lot 42FTS1216			(Purchased Reagent)		1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	46.7 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..LC6:2FTS_00007	04/20/22	WELLINGTON, Lot 62FTS0417			(Purchased Reagent)		1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	47.4 ug/mL
..LC8:2FTS_00007	12/12/21	WELLINGTON, Lot 82FTS1216			(Purchased Reagent)		1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	47.9 ug/mL
..LCbr-NEtFOSAA_00001	01/17/23	WELLINGTON, Lot brNEtFOSAA0118			(Purchased Reagent)		N-ethyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
..LCbr-NMeFOSAA_00001	01/17/23	WELLINGTON, Lot brNMeFOSAA0118			(Purchased Reagent)		N-methyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
..LCPFBA_00008	05/29/22	Wellington Laboratories, Lot PFBA0517			(Purchased Reagent)		Perfluorobutyric acid	50 ug/mL
..LCPFBS_00009	09/21/22	Wellington Laboratories, Lot LPFBS0917			(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
..LCPFDA_00008	05/29/22	Wellington Laboratories, Lot PFDA0517			(Purchased Reagent)		Perfluorodecanoic acid	50 ug/mL
..LCPFDoA_00008	05/29/22	Wellington Laboratories, Lot PFDoA0517			(Purchased Reagent)		Perfluorododecanoic acid	50 ug/mL
..LCPFDS_00008	11/08/22	Wellington Laboratories, Lot LPFDS1117			(Purchased Reagent)		Perfluorodecane Sulfonic acid	48.2 ug/mL
..LCPFHpA_00011	09/27/22	Wellington Laboratories, Lot PFHpA0917			(Purchased Reagent)		Perfluoroheptanoic acid (PFHpA)	50 ug/mL
..LCPFHpSA_00003	09/01/22	Wellington Laboratories, Lot LPFHpS0817			(Purchased Reagent)		Perfluoroheptanesulfonic acid	47.6 ug/mL
..LCPFHxA_00010	09/27/22	Wellington Laboratories, Lot PFHxA0917			(Purchased Reagent)		Perfluorohexanoic acid	50 ug/mL
..LCPFHxS-br_00006	01/04/22	Wellington Laboratories, Lot brPFHxSK0117			(Purchased Reagent)		Perfluorohexanesulfonic acid (PFHxS)	45.5 ug/mL
..LCPFNA_00010	07/20/22	Wellington Laboratories, Lot PFNA0717			(Purchased Reagent)		Perfluorononanoic acid (PFNA)	50 ug/mL
							Perfluorooctanoic acid (PFOA)	0.05 ug/mL
..LCPFNS_00003	09/27/22	Wellington Laboratories, Lot LPFNS0917			(Purchased Reagent)		Perfluorononanesulfonic acid	48 ug/mL
..LCPFOA_00011	09/27/22	Wellington Laboratories, Lot PFOA0917			(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
..LCPFOS-br_00007	01/12/22	Wellington Laboratories, Lot brPFOSK0117			(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	46.4 ug/mL
..LCPFOSA_00013	09/01/22	Wellington Laboratories, Lot FOSA0817I			(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL
..LCPFPeA_00008	06/14/22	Wellington Laboratories, Lot PFPeA0617			(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL
..LCPFPeS_00003	01/11/22	Wellington Laboratories, Lot LPFPeS0117			(Purchased Reagent)		Perfluoropentanesulfonic acid	46.9 ug/mL
..LCPFTeDA_00008	09/30/21	Wellington Laboratories, Lot PFTeDA0916			(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL
..LCPFTrDA_00008	05/02/22	Wellington Laboratories, Lot PFTrDA0517			(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL
..LCPFUdA_00008	10/18/21	Wellington Laboratories, Lot PFUdA1016			(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL
LCPFC_LL6_00007	01/16/19	07/25/18	MeOH/H2O, Lot 090285	30 mL	LCMPFC_ICALSU_00001	1.5 mL	d3-NMeFOSAA	2.5 ng/mL
							d5-NEtFOSAA	2.5 ng/mL
							M2-6:2FTS	2.375 ng/mL
							M2-8:2FTS	2.395 ng/mL
							13C2-PFHxDA	2.5 ng/mL
							13C2-PFOA	2.5 ng/mL
							13C2-PFTeDA	2.5 ng/mL
							13C4-PFHpA	2.5 ng/mL
							13C5-PFPeA	2.5 ng/mL
							13C8 FOSA	2.5 ng/mL
							13C4 PFBA	2.5 ng/mL
							13C3-PFBS	2.325 ng/mL
							13C2 PFDA	2.5 ng/mL
							13C2 PFDoA	2.5 ng/mL
							13C2 PFHxA	2.5 ng/mL
							18O2 PFHxS	2.365 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							13C5 PFNA	2.5 ng/mL
							13C4 PFOA	2.5 ng/mL
							13C4 PFOS	2.39 ng/mL
							13C2 PFUnA	2.5 ng/mL
					LCPFCSP_00163	7.5 mL	1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	4.67 ng/mL
							1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	4.74 ng/mL
							1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	4.79 ng/mL
							N-ethyl perfluorooctane sulfonamidoacetic acid	5 ng/mL
							N-methyl perfluorooctane sulfonamidoacetic acid	5 ng/mL
							Perfluorobutyric acid	5 ng/mL
							Perfluorobutanesulfonic acid (PFBS)	4.42 ng/mL
							Perfluorodecanoic acid	5 ng/mL
							Perfluorododecanoic acid	5 ng/mL
							Perfluorodecane Sulfonic acid	4.82 ng/mL
							Perfluoroheptanoic acid (PFHpA)	5 ng/mL
							Perfluoroheptanesulfonic acid	4.76 ng/mL
							Perfluorohexanoic acid	5 ng/mL
							Perfluorohexanesulfonic acid (PFHxS)	4.55 ng/mL
							Perfluorononanoic acid (PFNA)	5 ng/mL
							Perfluorooctanoic acid (PFOA)	5.005 ng/mL
							Perfluorononanesulfonic acid	4.8 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	4.64 ng/mL
							Perfluorooctane Sulfonamide	5 ng/mL
							Perfluoropentanoic acid	5 ng/mL
							Perfluoropentanesulfonic acid	4.69 ng/mL
							Perfluorotetradecanoic acid	5 ng/mL
							Perfluorotridecanoic acid	5 ng/mL
							Perfluoroundecanoic acid	5 ng/mL
.LCMPFC_ICALSU_00001	01/25/19	07/25/18	Methanol, Lot Fisher 168632	200 mL	LCd3-NMeFOSAA_00009	200 uL	d3-NMeFOSAA	0.05 ug/mL
					LCd5-NEtFOSAA_00009	200 uL	d5-NEtFOSAA	0.05 ug/mL
					LCM2-6:FTS_00009	200 uL	M2-6:2FTS	0.0475 ug/mL
					LCM2-8:2FTS_00011	200 uL	M2-8:2FTS	0.0479 ug/mL
					LCM2PFHxDA_00017	200 uL	13C2-PFHxDA	0.05 ug/mL
					LCM2PFOA_00012	200 uL	13C2-PFOA	0.05 ug/mL
					LCM2PFTeDA_00015	200 uL	13C2-PFTeDA	0.05 ug/mL
					LCM4PFHPA_00015	200 uL	13C4-PFHpA	0.05 ug/mL
					LCM5PFPEA_00016	200 uL	13C5-PFPeA	0.05 ug/mL
					LCM8FOSA_00020	200 uL	13C8 FOSA	0.05 ug/mL
					LCMPFBA_00016	200 uL	13C4 PFBA	0.05 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCMPFBS_00009	200 uL	13C3-PFBS	0.0465 ug/mL
					LCMPFDA_00021	200 uL	13C2 PFDA	0.05 ug/mL
					LCMPFDoA_00016	200 uL	13C2 PFDoA	0.05 ug/mL
					LCMPFHxA_00023	200 uL	13C2 PFHxA	0.05 ug/mL
					LCMPFHxS_00016	200 uL	18O2 PFHxS	0.0473 ug/mL
					LCMPFNA_00016	200 uL	13C5 PFNA	0.05 ug/mL
					LCMPFOA_00020	200 uL	13C4 PFOA	0.05 ug/mL
					LCMPFOS_00028	200 uL	13C4 PFOS	0.0478 ug/mL
					LCMPFUdA_00018	200 uL	13C2 PFUnA	0.05 ug/mL
..LCd3-NMeFOSAA_00009	11/08/22	WELLINGTON, Lot d3NMeFOSAA1117			(Purchased Reagent)		d3-NMeFOSAA	50 ug/mL
..LCd5-NEtFOSAA_00009	11/08/22	WELLINGTON, Lot d5NEtFOSAA1117			(Purchased Reagent)		d5-NEtFOSAA	50 ug/mL
..LCM2-6:FTS_00009	02/16/23	WELLINGTON, Lot M262FTS0218			(Purchased Reagent)		M2-6:2FTS	47.5 ug/mL
..LCM2-8:2FTS_00011	01/24/23	WELLINGTON, Lot M282FTS0118			(Purchased Reagent)		M2-8:2FTS	47.9 ug/mL
..LCM2PFHxDA_00017	07/13/22	Wellington Laboratories, Lot M2PFHxDA0717			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFOA_00012	10/26/22	Wellington Laboratories, Lot M2PFOA1017			(Purchased Reagent)		13C2-PFOA	50 ug/mL
..LCM2PFTeDA_00015	11/30/22	Wellington Laboratories, Lot M2PFTeDA1117			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHPA_00015	05/03/22	Wellington Laboratories, Lot M4PFHpA0517			(Purchased Reagent)		13C4-PFHpA	50 ug/mL
..LCM5PFPEA_00016	07/20/22	Wellington Laboratories, Lot M5PFPeA0717			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00020	10/11/22	Wellington Laboratories, Lot M8FOSA1017I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00016	02/16/23	Wellington Laboratories, Lot MPFBA0218			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFBS_00009	02/15/23	Wellington Laboratories, Lot M3PFBS0218			(Purchased Reagent)		13C3-PFBS	46.5 ug/mL
..LCMPFDA_00021	02/16/23	Wellington Laboratories, Lot MPFDA0218			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00016	02/16/23	Wellington Laboratories, Lot MPFDoA0218			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA_00023	10/27/22	Wellington Laboratories, Lot MPFHxA1017			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS_00016	03/22/23	Wellington Laboratories, Lot MPFHxS0318			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA_00016	12/14/22	Wellington Laboratories, Lot MPFNA1217			(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00020	05/04/23	Wellington Laboratories, Lot MPFOA0418			(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00028	06/15/23	Wellington Laboratories, Lot MPFOS0618			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUdA_00018	05/11/23	Wellington Laboratories, Lot MPFUdA0518			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
.LCPFCSP_00163	01/16/19	07/20/18	Methanol, Lot 180632	250 mL	LC4:2FTS_00005	100 uL	1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	0.01868 ug/mL
					LC6:2FTS_00007	100 uL	1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	0.01896 ug/mL
					LC8:2FTS_00007	100 uL	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	0.01916 ug/mL
					LCbr-NEtFOSAA_00001	100 uL	N-ethyl perfluorooctane sulfonamidoacetic acid	0.02 ug/mL
					LCbr-NMeFOSAA_00001	100 uL	N-methyl perfluorooctane sulfonamidoacetic acid	0.02 ug/mL
					LCPFBA_00008	100 uL	Perfluorobutyric acid	0.02 ug/mL
					LCPFBS_00009	100 uL	Perfluorobutanesulfonic acid (PFBS)	0.01768 ug/mL
					LCPFDA_00008	100 uL	Perfluorodecanoic acid	0.02 ug/mL
					LCPFDoA_00010	100 uL	Perfluorododecanoic acid	0.02 ug/mL
					LCPFDS_00008	100 uL	Perfluorodecane Sulfonic acid	0.01928 ug/mL
					LCPFHpA_00011	100 uL	Perfluoroheptanoic acid (PFHpA)	0.02 ug/mL
					LCPFHpSA_00003	100 uL	Perfluoroheptanesulfonic acid	0.01904 ug/mL
					LCPFHxA_00010	100 uL	Perfluorohexanoic acid	0.02 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCPFHxS-br_00006	100 uL	Perfluorohexanesulfonic acid (PFHxS)	0.0182 ug/mL
					LCPFNA_00010	100 uL	Perfluorononanoic acid (PFNA)	0.02 ug/mL
							Perfluorooctanoic acid (PFOA)	0.02002 ug/mL
					LCPFNS_00003	100 uL	Perfluorononanesulfonic acid	0.0192 ug/mL
					LCPFOA_00011	100 uL	Perfluorooctanoic acid (PFOA)	0.02002 ug/mL
					LCPFOS-br_00007	100 uL	Perfluorooctanesulfonic acid (PFOS)	0.01856 ug/mL
					LCPFOSA_00013	100 uL	Perfluorooctane Sulfonamide	0.02 ug/mL
					LCPFPeA_00010	100 uL	Perfluoropentanoic acid	0.02 ug/mL
					LCPFPeS_00003	100 uL	Perfluoropentanesulfonic acid	0.01876 ug/mL
					LCPFTeDA_00009	100 uL	Perfluorotetradecanoic acid	0.02 ug/mL
					LCPFTrDA_00009	100 uL	Perfluorotridecanoic acid	0.02 ug/mL
					LCPFUdA_00008	100 uL	Perfluoroundecanoic acid	0.02 ug/mL
..LC4:2FTS_00005	12/12/21	WELLINGTON, Lot 42FTS1216			(Purchased Reagent)		1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	46.7 ug/mL
..LC6:2FTS_00007	04/20/22	WELLINGTON, Lot 62FTS0417			(Purchased Reagent)		1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	47.4 ug/mL
..LC8:2FTS_00007	12/12/21	WELLINGTON, Lot 82FTS1216			(Purchased Reagent)		1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	47.9 ug/mL
..LCbr-NEtFOSAA_00001	01/17/23	WELLINGTON, Lot brNEtFOSAA0118			(Purchased Reagent)		N-ethyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
..LCbr-NMeFOSAA_00001	01/17/23	WELLINGTON, Lot brNMeFOSAA0118			(Purchased Reagent)		N-methyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
..LCPFBA_00008	05/29/22	Wellington Laboratories, Lot PFBA0517			(Purchased Reagent)		Perfluorobutyric acid	50 ug/mL
..LCPFBS_00009	09/21/22	Wellington Laboratories, Lot LPFBS0917			(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
..LCPFDA_00008	05/29/22	Wellington Laboratories, Lot PFDA0517			(Purchased Reagent)		Perfluorodecanoic acid	50 ug/mL
..LCPFDoA_00010	05/29/22	Wellington Laboratories, Lot PFDoA0517			(Purchased Reagent)		Perfluorododecanoic acid	50 ug/mL
..LCPFDS_00008	11/08/22	Wellington Laboratories, Lot LPFDS1117			(Purchased Reagent)		Perfluorodecane Sulfonic acid	48.2 ug/mL
..LCPFHpA_00011	09/27/22	Wellington Laboratories, Lot PFHpA0917			(Purchased Reagent)		Perfluoroheptanoic acid (PFHpA)	50 ug/mL
..LCPFHpSA_00003	09/01/22	Wellington Laboratories, Lot LPFHpS0817			(Purchased Reagent)		Perfluoroheptanesulfonic acid	47.6 ug/mL
..LCPFHxA_00010	09/27/22	Wellington Laboratories, Lot PFHxA0917			(Purchased Reagent)		Perfluorohexanoic acid	50 ug/mL
..LCPFHxS-br_00006	01/04/22	Wellington Laboratories, Lot brPFHxSK0117			(Purchased Reagent)		Perfluorohexanesulfonic acid (PFHxS)	45.5 ug/mL
..LCPFNA_00010	07/20/22	Wellington Laboratories, Lot PFNA0717			(Purchased Reagent)		Perfluorononanoic acid (PFNA)	50 ug/mL
							Perfluorooctanoic acid (PFOA)	0.05 ug/mL
..LCPFNS_00003	09/27/22	Wellington Laboratories, Lot LPFNS0917			(Purchased Reagent)		Perfluorononanesulfonic acid	48 ug/mL
..LCPFOA_00011	09/27/22	Wellington Laboratories, Lot PFOA0917			(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
..LCPFOS-br_00007	01/12/22	Wellington Laboratories, Lot brPFOSK0117			(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	46.4 ug/mL
..LCPFOSA_00013	09/01/22	Wellington Laboratories, Lot FOSA0817I			(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL
..LCPFPeA_00010	06/14/22	Wellington Laboratories, Lot PFPeA0617			(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL
..LCPFPeS_00003	01/11/22	Wellington Laboratories, Lot LPFPeS0117			(Purchased Reagent)		Perfluoropentanesulfonic acid	46.9 ug/mL
..LCPFTeDA_00009	09/30/21	Wellington Laboratories, Lot PFTeDA0916			(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL
..LCPFTrDA_00009	05/02/22	Wellington Laboratories, Lot PFTrDA0517			(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL
..LCPFUdA_00008	10/18/21	Wellington Laboratories, Lot PFUdA1016			(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL
LCPFC_LL7_00005	11/18/18	06/05/18	MeOH/H2O, Lot 090285	200 mL	LCMPFC_ALL_SU_00075	10 mL	d3-NMeFOSAA	2.5 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							d5-NEtFOSAA	2.5 ng/mL
							M2-6:2FTS	2.375 ng/mL
							M2-8:2FTS	2.395 ng/mL
							13C2-PFHxDA	2.5 ng/mL
							13C2-PFOA	2.5 ng/mL
							13C2-PFTeDA	2.5 ng/mL
							13C4-PFHpA	2.5 ng/mL
							13C5-PFPeA	2.5 ng/mL
							13C8 FOSA	2.5 ng/mL
							13C4 PFBA	2.5 ng/mL
							13C3-PFBS	2.325 ng/mL
							13C2 PFDA	2.5 ng/mL
							13C2 PFDoA	2.5 ng/mL
							13C2 PFHxA	2.5 ng/mL
							18O2 PFHxS	2.365 ng/mL
							13C5 PFNA	2.5 ng/mL
							13C4 PFOA	2.5 ng/mL
							13C4 PFOS	2.39 ng/mL
							13C2 PFUnA	2.5 ng/mL
					LCPFCSP_00148	4 mL	1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	9.34 ng/mL
							1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	9.48 ng/mL
							1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	9.58 ng/mL
							N-ethyl perfluorooctane sulfonamidoacetic acid	10 ng/mL
							N-methyl perfluorooctane sulfonamidoacetic acid	10 ng/mL
							Perfluorobutyric acid	10 ng/mL
							Perfluorobutanesulfonic acid (PFBS)	8.84 ng/mL
							Perfluorodecanoic acid	10 ng/mL
							Perfluorododecanoic acid	10 ng/mL
							Perfluorodecane Sulfonic acid	9.64 ng/mL
							Perfluoroheptanoic acid (PFHpA)	10 ng/mL
							Perfluoroheptanesulfonic acid	9.52 ng/mL
							Perfluorohexanoic acid	10 ng/mL
							Perfluorohexanesulfonic acid (PFHxS)	9.1 ng/mL
							Perfluorononanoic acid (PFNA)	10 ng/mL
							Perfluorooctanoic acid (PFOA)	10.01 ng/mL
							Perfluorononanesulfonic acid	9.6 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	9.28 ng/mL
							Perfluorooctane Sulfonamide	10 ng/mL
							Perfluoropentanoic acid	10 ng/mL
							Perfluoropentanesulfonic acid	9.38 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Perfluorotetradecanoic acid	10 ng/mL
							Perfluorotridecanoic acid	10 ng/mL
							Perfluoroundecanoic acid	10 ng/mL
.LCMPFC_ALL_SU_00075	12/05/18	06/05/18	Methanol, Lot Baker 141039	200 mL	LCd3-NMeFOSAA_00008	200 uL	d3-NMeFOSAA	0.05 ug/mL
					LCd5-NEtFOSAA_00008	200 uL	d5-NEtFOSAA	0.05 ug/mL
					LCM2-6:FTS_00008	200 uL	M2-6:2FTS	0.0475 ug/mL
					LCM2-8:2FTS_00010	200 uL	M2-8:2FTS	0.0479 ug/mL
					LCM2PFHxDA_00016	200 uL	13C2-PFHxDA	0.05 ug/mL
					LCM2PFOA_00008	200 uL	13C2-PFOA	0.05 ug/mL
					LCM2PFTeDA_00014	200 uL	13C2-PFTeDA	0.05 ug/mL
					LCM4PFHPA_00014	200 uL	13C4-PFHpA	0.05 ug/mL
					LCM5PFPEA_00015	200 uL	13C5-PFPeA	0.05 ug/mL
					LCM8FOSA_00019	200 uL	13C8 FOSA	0.05 ug/mL
					LCMPFBA_00015	200 uL	13C4 PFBA	0.05 ug/mL
					LCMPFBS_00008	200 uL	13C3-PFBS	0.0465 ug/mL
					LCMPFDA_00020	200 uL	13C2 PFDA	0.05 ug/mL
					LCMPFDoA_00015	200 uL	13C2 PFDoA	0.05 ug/mL
					LCMPFHxA_00022	200 uL	13C2 PFHxA	0.05 ug/mL
					LCMPFHxS_00015	200 uL	18O2 PFHxS	0.0473 ug/mL
					LCMPFNA_00015	200 uL	13C5 PFNA	0.05 ug/mL
					LCMPFOA_00019	200 uL	13C4 PFOA	0.05 ug/mL
					LCMPFOS_00027	200 uL	13C4 PFOS	0.0478 ug/mL
					LCMPFUdA_00017	200 uL	13C2 PFUnA	0.05 ug/mL
..LCd3-NMeFOSAA_00008	11/08/22	WELLINGTON, Lot d3NMeFOSAA1117			(Purchased Reagent)		d3-NMeFOSAA	50 ug/mL
..LCd5-NEtFOSAA_00008	11/08/22	WELLINGTON, Lot d5NEtFOSAA1117			(Purchased Reagent)		d5-NEtFOSAA	50 ug/mL
..LCM2-6:FTS_00008	02/16/23	WELLINGTON, Lot M262FTS0218			(Purchased Reagent)		M2-6:2FTS	47.5 ug/mL
..LCM2-8:2FTS_00010	01/24/23	WELLINGTON, Lot M282FTS0118			(Purchased Reagent)		M2-8:2FTS	47.9 ug/mL
..LCM2PFHxDA_00016	07/13/22	Wellington Laboratories, Lot M2PFHxDA0717			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFOA_00008	02/12/21	Wellington Laboratories, Lot M2PFOA0216			(Purchased Reagent)		13C2-PFOA	50 ug/mL
..LCM2PFTeDA_00014	11/30/22	Wellington Laboratories, Lot M2PFTeDA1117			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHPA_00014	05/03/22	Wellington Laboratories, Lot M4PFHpA0517			(Purchased Reagent)		13C4-PFHpA	50 ug/mL
..LCM5PFPEA_00015	07/20/22	Wellington Laboratories, Lot M5PFPeA0717			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00019	10/11/22	Wellington Laboratories, Lot M8FOSA1017I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00015	02/16/23	Wellington Laboratories, Lot MPFBA0218			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFBS_00008	02/15/23	Wellington Laboratories, Lot M3PFBS0218			(Purchased Reagent)		13C3-PFBS	46.5 ug/mL
..LCMPFDA_00020	02/16/23	Wellington Laboratories, Lot MPFDA0218			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00015	02/16/23	Wellington Laboratories, Lot MPFDoA0218			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA_00022	10/27/22	Wellington Laboratories, Lot MPFHxA1017			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS_00015	03/22/23	Wellington Laboratories, Lot MPFHxS0318			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA_00015	12/14/22	Wellington Laboratories, Lot MPFNA1217			(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00019	05/04/23	Wellington Laboratories, Lot MPFOA0418			(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00027	02/15/23	Wellington Laboratories, Lot MPFOS0218			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUdA_00017	11/22/21	Wellington Laboratories, Lot MPFUdA1116			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
.LCPFCSP_00148	11/18/18	05/17/18	Methanol, Lot 090285	10 mL	LC4:2FTS_00005	100 uL	1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	0.467 ug/mL
					LC6:2FTS_00007	100 uL	1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	0.474 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LC8:2FTS_00007	100 uL	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	0.479 ug/mL
					LCbr-NEtFOSAA_00001	100 uL	N-ethyl perfluorooctane sulfonamidoacetic acid	0.5 ug/mL
					LCbr-NMeFOSAA_00001	100 uL	N-methyl perfluorooctane sulfonamidoacetic acid	0.5 ug/mL
					LCPFBA_00008	100 uL	Perfluorobutyric acid	0.5 ug/mL
					LCPFBS_00009	100 uL	Perfluorobutanesulfonic acid (PFBS)	0.442 ug/mL
					LCPFDA_00008	100 uL	Perfluorodecanoic acid	0.5 ug/mL
					LCPFDoA_00008	100 uL	Perfluorododecanoic acid	0.5 ug/mL
					LCPFDS_00008	100 uL	Perfluorodecane Sulfonic acid	0.482 ug/mL
					LCPFHpA_00011	100 uL	Perfluoroheptanoic acid (PFHpA)	0.5 ug/mL
					LCPFHpSA_00003	100 uL	Perfluoroheptanesulfonic acid	0.476 ug/mL
					LCPFHxA_00010	100 uL	Perfluorohexanoic acid	0.5 ug/mL
					LCPFHxS-br_00006	100 uL	Perfluorohexanesulfonic acid (PFHxS)	0.455 ug/mL
					LCPFNA_00010	100 uL	Perfluorononanoic acid (PFNA)	0.5 ug/mL
							Perfluorooctanoic acid (PFOA)	0.5005 ug/mL
					LCPFNS_00003	100 uL	Perfluorononanesulfonic acid	0.48 ug/mL
					LCPFOA_00011	100 uL	Perfluorooctanoic acid (PFOA)	0.5005 ug/mL
					LCPFOS-br_00007	100 uL	Perfluorooctanesulfonic acid (PFOS)	0.464 ug/mL
					LCPFOSA_00013	100 uL	Perfluorooctane Sulfonamide	0.5 ug/mL
					LCPFPeA_00008	100 uL	Perfluoropentanoic acid	0.5 ug/mL
					LCPFPeS_00003	100 uL	Perfluoropentanesulfonic acid	0.469 ug/mL
					LCPFTeDA_00008	100 uL	Perfluorotetradecanoic acid	0.5 ug/mL
					LCPFTrDA_00008	100 uL	Perfluorotridecanoic acid	0.5 ug/mL
					LCPFUdA_00008	100 uL	Perfluoroundecanoic acid	0.5 ug/mL
..LC4:2FTS_00005	12/12/21	WELLINGTON, Lot 42FTS1216			(Purchased Reagent)		1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	46.7 ug/mL
..LC6:2FTS_00007	04/20/22	WELLINGTON, Lot 62FTS0417			(Purchased Reagent)		1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	47.4 ug/mL
..LC8:2FTS_00007	12/12/21	WELLINGTON, Lot 82FTS1216			(Purchased Reagent)		1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	47.9 ug/mL
..LCbr-NEtFOSAA_00001	01/17/23	WELLINGTON, Lot brNEtFOSAA0118			(Purchased Reagent)		N-ethyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
..LCbr-NMeFOSAA_00001	01/17/23	WELLINGTON, Lot brNMeFOSAA0118			(Purchased Reagent)		N-methyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
..LCPFBA_00008	05/29/22	Wellington Laboratories, Lot PFBA0517			(Purchased Reagent)		Perfluorobutyric acid	50 ug/mL
..LCPFBS_00009	09/21/22	Wellington Laboratories, Lot LPFBS0917			(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
..LCPFDA_00008	05/29/22	Wellington Laboratories, Lot PFDA0517			(Purchased Reagent)		Perfluorodecanoic acid	50 ug/mL
..LCPFDoA_00008	05/29/22	Wellington Laboratories, Lot PFDoA0517			(Purchased Reagent)		Perfluorododecanoic acid	50 ug/mL
..LCPFDS_00008	11/08/22	Wellington Laboratories, Lot LPFDS1117			(Purchased Reagent)		Perfluorodecane Sulfonic acid	48.2 ug/mL
..LCPFHpA_00011	09/27/22	Wellington Laboratories, Lot PFHpA0917			(Purchased Reagent)		Perfluoroheptanoic acid (PFHpA)	50 ug/mL
..LCPFHpSA_00003	09/01/22	Wellington Laboratories, Lot LPFHpS0817			(Purchased Reagent)		Perfluoroheptanesulfonic acid	47.6 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..LCPFHxA_00010	09/27/22	Wellington Laboratories, Lot PFHxA0917			(Purchased Reagent)		Perfluorohexanoic acid	50 ug/mL
..LCPFHxS-br_00006	01/04/22	Wellington Laboratories, Lot brPFHxSK0117			(Purchased Reagent)		Perfluorohexanesulfonic acid (PFHxS)	45.5 ug/mL
..LCPFNA_00010	07/20/22	Wellington Laboratories, Lot PFNA0717			(Purchased Reagent)		Perfluorononanoic acid (PFNA)	50 ug/mL
							Perfluorooctanoic acid (PFOA)	0.05 ug/mL
..LCPFNS_00003	09/27/22	Wellington Laboratories, Lot LPFNS0917			(Purchased Reagent)		Perfluorononanesulfonic acid	48 ug/mL
..LCPFOA_00011	09/27/22	Wellington Laboratories, Lot PFOA0917			(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
..LCPFOS-br_00007	01/12/22	Wellington Laboratories, Lot brPFOSK0117			(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	46.4 ug/mL
..LCPFOSA_00013	09/01/22	Wellington Laboratories, Lot FOSA0817I			(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL
..LCPFPeA_00008	06/14/22	Wellington Laboratories, Lot PFPeA0617			(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL
..LCPFPeS_00003	01/11/22	Wellington Laboratories, Lot LPFPeS0117			(Purchased Reagent)		Perfluoropentanesulfonic acid	46.9 ug/mL
..LCPFTeDA_00008	09/30/21	Wellington Laboratories, Lot PFTeDA0916			(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL
..LCPFTrDA_00008	05/02/22	Wellington Laboratories, Lot PFTrDA0517			(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL
..LCPFUdA_00008	10/18/21	Wellington Laboratories, Lot PFUdA1016			(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL
LCPFC_LL7_00006	01/16/19	07/25/18	MeOH/H2O, Lot 090285	30 mL	LCMPFC_ICALSU_00001	1.5 mL	d3-NMeFOSAA	2.5 ng/mL
							d5-NEtFOSAA	2.5 ng/mL
							M2-6:2FTS	2.375 ng/mL
							M2-8:2FTS	2.395 ng/mL
							13C2-PFHxDA	2.5 ng/mL
							13C2-PFOA	2.5 ng/mL
							13C2-PFTeDA	2.5 ng/mL
							13C4-PFHpA	2.5 ng/mL
							13C5-PFPeA	2.5 ng/mL
							13C8 FOSA	2.5 ng/mL
							13C4 PFBA	2.5 ng/mL
							13C3-PFBS	2.325 ng/mL
							13C2 PFDA	2.5 ng/mL
							13C2 PFDoA	2.5 ng/mL
							13C2 PFHxA	2.5 ng/mL
							18O2 PFHxS	2.365 ng/mL
							13C5 PFNA	2.5 ng/mL
							13C4 PFOA	2.5 ng/mL
							13C4 PFOS	2.39 ng/mL
							13C2 PFUnA	2.5 ng/mL
					LCPFCSP_00163	15 mL	1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	9.34 ng/mL
							1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	9.48 ng/mL
							1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	9.58 ng/mL
							N-ethyl perfluorooctane sulfonamidoacetic acid	10 ng/mL
							N-methyl perfluorooctane sulfonamidoacetic acid	10 ng/mL
							Perfluorobutyric acid	10 ng/mL
							Perfluorobutanesulfonic acid (PFBS)	8.84 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Perfluorodecanoic acid	10 ng/mL
							Perfluorododecanoic acid	10 ng/mL
							Perfluorodecane Sulfonic acid	9.64 ng/mL
							Perfluoroheptanoic acid (PFHpA)	10 ng/mL
							Perfluoroheptanesulfonic acid	9.52 ng/mL
							Perfluorohexanoic acid	10 ng/mL
							Perfluorohexanesulfonic acid (PFHxS)	9.1 ng/mL
							Perfluorononanoic acid (PFNA)	10 ng/mL
							Perfluorooctanoic acid (PFOA)	10.01 ng/mL
							Perfluorononanesulfonic acid	9.6 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	9.28 ng/mL
							Perfluorooctane Sulfonamide	10 ng/mL
							Perfluoropentanoic acid	10 ng/mL
							Perfluoropentanesulfonic acid	9.38 ng/mL
							Perfluorotetradecanoic acid	10 ng/mL
							Perfluorotridecanoic acid	10 ng/mL
							Perfluoroundecanoic acid	10 ng/mL
.LCMPFC_ICALSU_00001	01/25/19	07/25/18	Methanol, Lot Fisher 168632	200 mL	LCd3-NMeFOSAA_00009	200 uL	d3-NMeFOSAA	0.05 ug/mL
					LCd5-NEtFOSAA_00009	200 uL	d5-NEtFOSAA	0.05 ug/mL
					LCM2-6:FTS_00009	200 uL	M2-6:2FTS	0.0475 ug/mL
					LCM2-8:2FTS_00011	200 uL	M2-8:2FTS	0.0479 ug/mL
					LCM2PFHxDA_00017	200 uL	13C2-PFHxDA	0.05 ug/mL
					LCM2PFOA_00012	200 uL	13C2-PFOA	0.05 ug/mL
					LCM2PFTeDA_00015	200 uL	13C2-PFTeDA	0.05 ug/mL
					LCM4PFHPA_00015	200 uL	13C4-PFHpA	0.05 ug/mL
					LCM5PFPEA_00016	200 uL	13C5-PFPeA	0.05 ug/mL
					LCM8FOSA_00020	200 uL	13C8 FOSA	0.05 ug/mL
					LCMPFBA_00016	200 uL	13C4 PFBA	0.05 ug/mL
					LCMPFBS_00009	200 uL	13C3-PFBS	0.0465 ug/mL
					LCMPFDA_00021	200 uL	13C2 PFDA	0.05 ug/mL
					LCMPFDoA_00016	200 uL	13C2 PFDoA	0.05 ug/mL
					LCMPFHxA_00023	200 uL	13C2 PFHxA	0.05 ug/mL
					LCMPFHxS_00016	200 uL	18O2 PFHxS	0.0473 ug/mL
					LCMPFNA_00016	200 uL	13C5 PFNA	0.05 ug/mL
					LCMPFOA_00020	200 uL	13C4 PFOA	0.05 ug/mL
					LCMPFOS_00028	200 uL	13C4 PFOS	0.0478 ug/mL
					LCMPFUdA_00018	200 uL	13C2 PFUnA	0.05 ug/mL
..LCd3-NMeFOSAA_00009	11/08/22	WELLINGTON, Lot d3NMeFOSAA1117			(Purchased Reagent)		d3-NMeFOSAA	50 ug/mL
..LCd5-NEtFOSAA_00009	11/08/22	WELLINGTON, Lot d5NEtFOSAA1117			(Purchased Reagent)		d5-NEtFOSAA	50 ug/mL
..LCM2-6:FTS_00009	02/16/23	WELLINGTON, Lot M262FTS0218			(Purchased Reagent)		M2-6:2FTS	47.5 ug/mL
..LCM2-8:2FTS_00011	01/24/23	WELLINGTON, Lot M282FTS0118			(Purchased Reagent)		M2-8:2FTS	47.9 ug/mL
..LCM2PFHxDA_00017	07/13/22	Wellington Laboratories, Lot M2PFHxDA0717			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFOA_00012	10/26/22	Wellington Laboratories, Lot M2PFOA1017			(Purchased Reagent)		13C2-PFOA	50 ug/mL
..LCM2PFTeDA_00015	11/30/22	Wellington Laboratories, Lot M2PFTeDA1117			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..LCM4PFHPA_00015	05/03/22	Wellington Laboratories, Lot M4PFHpA0517			(Purchased Reagent)		13C4-PFHpA	50 ug/mL
..LCM5PFPEA_00016	07/20/22	Wellington Laboratories, Lot M5PFPeA0717			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00020	10/11/22	Wellington Laboratories, Lot M8FOSA1017I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00016	02/16/23	Wellington Laboratories, Lot MPFBA0218			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFBS_00009	02/15/23	Wellington Laboratories, Lot M3PFBS0218			(Purchased Reagent)		13C3-PFBS	46.5 ug/mL
..LCMPFDA_00021	02/16/23	Wellington Laboratories, Lot MPFDA0218			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00016	02/16/23	Wellington Laboratories, Lot MPFDoA0218			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA_00023	10/27/22	Wellington Laboratories, Lot MPFHxA1017			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS_00016	03/22/23	Wellington Laboratories, Lot MPFHxS0318			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA_00016	12/14/22	Wellington Laboratories, Lot MPFNA1217			(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00020	05/04/23	Wellington Laboratories, Lot MPFOA0418			(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00028	06/15/23	Wellington Laboratories, Lot MPFOS0618			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUdA_00018	05/11/23	Wellington Laboratories, Lot MPFUdA0518			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
.LCPFCSP_00163	01/16/19	07/20/18	Methanol, Lot 180632	250 mL	LC4:2FTS_00005	100 uL	1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	0.01868 ug/mL
					LC6:2FTS_00007	100 uL	1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	0.01896 ug/mL
					LC8:2FTS_00007	100 uL	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	0.01916 ug/mL
					LCbr-NEtFOSAA_00001	100 uL	N-ethyl perfluorooctane sulfonamidoacetic acid	0.02 ug/mL
					LCbr-NMeFOSAA_00001	100 uL	N-methyl perfluorooctane sulfonamidoacetic acid	0.02 ug/mL
					LCPFBA_00008	100 uL	Perfluorobutyric acid	0.02 ug/mL
					LCPFBS_00009	100 uL	Perfluorobutanesulfonic acid (PFBS)	0.01768 ug/mL
					LCPFDA_00008	100 uL	Perfluorodecanoic acid	0.02 ug/mL
					LCPFDoA_00010	100 uL	Perfluorododecanoic acid	0.02 ug/mL
					LCPFDS_00008	100 uL	Perfluorodecane Sulfonic acid	0.01928 ug/mL
					LCPFHpA_00011	100 uL	Perfluoroheptanoic acid (PFHpA)	0.02 ug/mL
					LCPFHpSA_00003	100 uL	Perfluoroheptanesulfonic acid	0.01904 ug/mL
					LCPFHxA_00010	100 uL	Perfluorohexanoic acid	0.02 ug/mL
					LCPFHxS-br_00006	100 uL	Perfluorohexanesulfonic acid (PFHxS)	0.0182 ug/mL
					LCPFNA_00010	100 uL	Perfluorononanoic acid (PFNA)	0.02 ug/mL
							Perfluorooctanoic acid (PFOA)	0.02002 ug/mL
					LCPFNS_00003	100 uL	Perfluorononanesulfonic acid	0.0192 ug/mL
					LCPFOA_00011	100 uL	Perfluorooctanoic acid (PFOA)	0.02002 ug/mL
					LCPFOS-br_00007	100 uL	Perfluorooctanesulfonic acid (PFOS)	0.01856 ug/mL
					LCPFOSA_00013	100 uL	Perfluorooctane Sulfonamide	0.02 ug/mL
					LCPFPeA_00010	100 uL	Perfluoropentanoic acid	0.02 ug/mL
					LCPFPeS_00003	100 uL	Perfluoropentanesulfonic acid	0.01876 ug/mL
					LCPFTeDA_00009	100 uL	Perfluorotetradecanoic acid	0.02 ug/mL
					LCPFTrDA_00009	100 uL	Perfluorotridecanoic acid	0.02 ug/mL
					LCPFUdA_00008	100 uL	Perfluoroundecanoic acid	0.02 ug/mL
..LC4:2FTS_00005	12/12/21	WELLINGTON, Lot 42FTS1216			(Purchased Reagent)		1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	46.7 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..LC6:2FTS_00007	04/20/22	WELLINGTON, Lot 62FTS0417			(Purchased Reagent)		1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	47.4 ug/mL
..LC8:2FTS_00007	12/12/21	WELLINGTON, Lot 82FTS1216			(Purchased Reagent)		1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	47.9 ug/mL
..LCbr-NEtFOSAA_00001	01/17/23	WELLINGTON, Lot brNEtFOSAA0118			(Purchased Reagent)		N-ethyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
..LCbr-NMeFOSAA_00001	01/17/23	WELLINGTON, Lot brNMeFOSAA0118			(Purchased Reagent)		N-methyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
..LCPFBA_00008	05/29/22	Wellington Laboratories, Lot PFBA0517			(Purchased Reagent)		Perfluorobutyric acid	50 ug/mL
..LCPFBS_00009	09/21/22	Wellington Laboratories, Lot LPFBS0917			(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
..LCPFDA_00008	05/29/22	Wellington Laboratories, Lot PFDA0517			(Purchased Reagent)		Perfluorodecanoic acid	50 ug/mL
..LCPFDoA_00010	05/29/22	Wellington Laboratories, Lot PFDoA0517			(Purchased Reagent)		Perfluorododecanoic acid	50 ug/mL
..LCPFDS_00008	11/08/22	Wellington Laboratories, Lot LPFDS1117			(Purchased Reagent)		Perfluorodecane Sulfonic acid	48.2 ug/mL
..LCPFHpA_00011	09/27/22	Wellington Laboratories, Lot PFHpA0917			(Purchased Reagent)		Perfluoroheptanoic acid (PFHpA)	50 ug/mL
..LCPFHpSA_00003	09/01/22	Wellington Laboratories, Lot LPFHpS0817			(Purchased Reagent)		Perfluoroheptanesulfonic acid	47.6 ug/mL
..LCPFHxA_00010	09/27/22	Wellington Laboratories, Lot PFHxA0917			(Purchased Reagent)		Perfluorohexanoic acid	50 ug/mL
..LCPFHxS-br_00006	01/04/22	Wellington Laboratories, Lot brPFHxSK0117			(Purchased Reagent)		Perfluorohexanesulfonic acid (PFHxS)	45.5 ug/mL
..LCPFNA_00010	07/20/22	Wellington Laboratories, Lot PFNA0717			(Purchased Reagent)		Perfluorononanoic acid (PFNA)	50 ug/mL
							Perfluorooctanoic acid (PFOA)	0.05 ug/mL
..LCPFNS_00003	09/27/22	Wellington Laboratories, Lot LPFNS0917			(Purchased Reagent)		Perfluorononanesulfonic acid	48 ug/mL
..LCPFOA_00011	09/27/22	Wellington Laboratories, Lot PFOA0917			(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
..LCPFOS-br_00007	01/12/22	Wellington Laboratories, Lot brPFOSK0117			(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	46.4 ug/mL
..LCPFOSA_00013	09/01/22	Wellington Laboratories, Lot FOSA0817I			(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL
..LCPFPeA_00010	06/14/22	Wellington Laboratories, Lot PFPeA0617			(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL
..LCPFPeS_00003	01/11/22	Wellington Laboratories, Lot LPFPeS0117			(Purchased Reagent)		Perfluoropentanesulfonic acid	46.9 ug/mL
..LCPFTeDA_00009	09/30/21	Wellington Laboratories, Lot PFTeDA0916			(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL
..LCPFTrDA_00009	05/02/22	Wellington Laboratories, Lot PFTrDA0517			(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL
..LCPFUdA_00008	10/18/21	Wellington Laboratories, Lot PFUdA1016			(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL
LCPFCIC_FULL_00012	12/05/18	07/05/18	MeOH/H2O, Lot 09285	10 mL	LCMPFC_ALL_SU_00075	0.5 mL	13C2-PFOA	2.5 ng/mL
.LCMPFC_ALL_SU_00075	12/05/18	06/05/18	Methanol, Lot Baker 141039	200 mL	LCM2PFOA_00008	200 uL	13C2-PFOA	0.05 ug/mL
..LCM2PFOA_00008	02/12/21	Wellington Laboratories, Lot M2PFOA0216			(Purchased Reagent)		13C2-PFOA	50 ug/mL
LCPFCIC_FULL_00012	12/05/18	07/05/18	MeOH/H2O, Lot 09285	10 mL	LCMPFC_ALL_SU_00075	0.5 mL	d3-NMeFOSAA	2.5 ng/mL
							d5-NEtFOSAA	2.5 ng/mL
							M2-6:2FTS	2.375 ng/mL
							M2-8:2FTS	2.395 ng/mL
							13C2-PFHxDA	2.5 ng/mL
							13C2-PFTeDA	2.5 ng/mL
							13C4-PFHpA	2.5 ng/mL
							13C5-PFPeA	2.5 ng/mL
							13C8 FOSA	2.5 ng/mL
							13C4 PFBA	2.5 ng/mL
							13C3-PFBS	2.325 ng/mL
							13C2 PFDA	2.5 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							13C2 PFDoA	2.5 ng/mL
							13C2 PFHxA	2.5 ng/mL
							18O2 PFHxS	2.365 ng/mL
							13C5 PFNA	2.5 ng/mL
							13C4 PFOA	2.5 ng/mL
							13C4 PFOS	2.39 ng/mL
							13C2 PFUnA	2.5 ng/mL
					LCPFCSP_00155	1.25 mL	Perfluorobutanesulfonic acid (PFBS)	2.21 ng/mL
							Perfluoroheptanoic acid (PFHpA)	2.5 ng/mL
							Perfluorohexanesulfonic acid (PFHxS)	2.275 ng/mL
							Perfluorononanoic acid (PFNA)	2.5 ng/mL
							Perfluorooctanoic acid (PFOA)	2.5025 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	2.32 ng/mL
.LCMPFC_ALL_SU_00075	12/05/18	06/05/18	Methanol, Lot Baker 141039	200 mL	LCd3-NMeFOSAA_00008	200 uL	d3-NMeFOSAA	0.05 ug/mL
					LCd5-NEtFOSAA_00008	200 uL	d5-NEtFOSAA	0.05 ug/mL
					LCM2-6:FTS_00008	200 uL	M2-6:2FTS	0.0475 ug/mL
					LCM2-8:2FTS_00010	200 uL	M2-8:2FTS	0.0479 ug/mL
					LCM2PFHxDA_00016	200 uL	13C2-PFHxDA	0.05 ug/mL
					LCM2PFTeDA_00014	200 uL	13C2-PFTeDA	0.05 ug/mL
					LCM4PFHPA_00014	200 uL	13C4-PFHpA	0.05 ug/mL
					LCM5PFPEA_00015	200 uL	13C5-PFPeA	0.05 ug/mL
					LCM8FOSA_00019	200 uL	13C8 FOSA	0.05 ug/mL
					LCMPFBA_00015	200 uL	13C4 PFBA	0.05 ug/mL
					LCMPFBS_00008	200 uL	13C3-PFBS	0.0465 ug/mL
					LCMPFDA_00020	200 uL	13C2 PFDA	0.05 ug/mL
					LCMPFDoA_00015	200 uL	13C2 PFDoA	0.05 ug/mL
					LCMPFHxA_00022	200 uL	13C2 PFHxA	0.05 ug/mL
					LCMPFHxS_00015	200 uL	18O2 PFHxS	0.0473 ug/mL
					LCMPFNA_00015	200 uL	13C5 PFNA	0.05 ug/mL
					LCMPFOA_00019	200 uL	13C4 PFOA	0.05 ug/mL
					LCMPFOS_00027	200 uL	13C4 PFOS	0.0478 ug/mL
					LCMPFUdA_00017	200 uL	13C2 PFUnA	0.05 ug/mL
..LCd3-NMeFOSAA_00008	11/08/22	WELLINGTON, Lot d3NMeFOSAA1117			(Purchased Reagent)		d3-NMeFOSAA	50 ug/mL
..LCd5-NEtFOSAA_00008	11/08/22	WELLINGTON, Lot d5NEtFOSAA1117			(Purchased Reagent)		d5-NEtFOSAA	50 ug/mL
..LCM2-6:FTS_00008	02/16/23	WELLINGTON, Lot M262FTS0218			(Purchased Reagent)		M2-6:2FTS	47.5 ug/mL
..LCM2-8:2FTS_00010	01/24/23	WELLINGTON, Lot M282FTS0118			(Purchased Reagent)		M2-8:2FTS	47.9 ug/mL
..LCM2PFHxDA_00016	07/13/22	Wellington Laboratories, Lot M2PFHxDA0717			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFTeDA_00014	11/30/22	Wellington Laboratories, Lot M2PFTeDA1117			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHPA_00014	05/03/22	Wellington Laboratories, Lot M4PFHpA0517			(Purchased Reagent)		13C4-PFHpA	50 ug/mL
..LCM5PFPEA_00015	07/20/22	Wellington Laboratories, Lot M5PFPeA0717			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00019	10/11/22	Wellington Laboratories, Lot M8FOSA1017I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00015	02/16/23	Wellington Laboratories, Lot MPFBA0218			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFBS_00008	02/15/23	Wellington Laboratories, Lot M3PFBS0218			(Purchased Reagent)		13C3-PFBS	46.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..LCMPFDA_00020	02/16/23	Wellington Laboratories, Lot MPFDA0218			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00015	02/16/23	Wellington Laboratories, Lot MPFDoA0218			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA_00022	10/27/22	Wellington Laboratories, Lot MPFHxA1017			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS_00015	03/22/23	Wellington Laboratories, Lot MPFHxS0318			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA_00015	12/14/22	Wellington Laboratories, Lot MPFNA1217			(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00019	05/04/23	Wellington Laboratories, Lot MPFOA0418			(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00027	02/15/23	Wellington Laboratories, Lot MPFOS0218			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUdA_00017	11/22/21	Wellington Laboratories, Lot MPFUdA1116			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
.LCPFCSP_00155	12/17/18	06/17/18	Methanol, Lot 180632	250 mL	LCPFBS_00009	100 uL	Perfluorobutanesulfonic acid (PFBS)	0.01768 ug/mL
					LCPFHpA_00011	100 uL	Perfluoroheptanoic acid (PFHpA)	0.02 ug/mL
					LCPFHxS-br_00006	100 uL	Perfluorohexanesulfonic acid (PFHxS)	0.0182 ug/mL
					LCPFNA_00010	100 uL	Perfluorononanoic acid (PFNA)	0.02 ug/mL
							Perfluorooctanoic acid (PFOA)	0.02002 ug/mL
					LCPFOA_00011	100 uL	Perfluorooctanoic acid (PFOA)	0.02002 ug/mL
					LCPFOS-br_00007	100 uL	Perfluorooctanesulfonic acid (PFOS)	0.01856 ug/mL
..LCPFBS_00009	09/21/22	Wellington Laboratories, Lot LPFBS0917			(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
..LCPFHpA_00011	09/27/22	Wellington Laboratories, Lot PFHpA0917			(Purchased Reagent)		Perfluoroheptanoic acid (PFHpA)	50 ug/mL
..LCPFHxS-br_00006	01/04/22	Wellington Laboratories, Lot brPFHxSK0117			(Purchased Reagent)		Perfluorohexanesulfonic acid (PFHxS)	45.5 ug/mL
..LCPFNA_00010	07/20/22	Wellington Laboratories, Lot PFNA0717			(Purchased Reagent)		Perfluorononanoic acid (PFNA)	50 ug/mL
							Perfluorooctanoic acid (PFOA)	0.05 ug/mL
..LCPFOA_00011	09/27/22	Wellington Laboratories, Lot PFOA0917			(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
..LCPFOS-br_00007	01/12/22	Wellington Laboratories, Lot brPFOSK0117			(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	46.4 ug/mL
LCPFCIC_FULL_00013	01/25/19	07/31/18	MeOH/H2O, Lot 09285	100 mL	LCMPFC_ICALSU_00001	5 mL	13C2-PFOA	2.5 ng/mL
.LCMPFC_ICALSU_00001	01/25/19	07/25/18	Methanol, Lot Fisher 168632	200 mL	LCM2PFOA_00012	200 uL	13C2-PFOA	0.05 ug/mL
..LCM2PFOA_00012	10/26/22	Wellington Laboratories, Lot M2PFOA1017			(Purchased Reagent)		13C2-PFOA	50 ug/mL
LCPFCIC_FULL_00013	01/25/19	07/31/18	MeOH/H2O, Lot 09285	100 mL	LCMPFC_ICALSU_00001	5 mL	d3-NMeFOSAA	2.5 ng/mL
							d5-NEtFOSAA	2.5 ng/mL
							M2-6:2FTS	2.375 ng/mL
							M2-8:2FTS	2.395 ng/mL
							13C2-PFHxDA	2.5 ng/mL
							13C2-PFTeDA	2.5 ng/mL
							13C4-PFHpA	2.5 ng/mL
							13C5-PFPeA	2.5 ng/mL
							13C8 FOSA	2.5 ng/mL
							13C4 PFBA	2.5 ng/mL
							13C3-PFBS	2.325 ng/mL
							13C2 PFDA	2.5 ng/mL
							13C2 PFDoA	2.5 ng/mL
							13C2 PFHxA	2.5 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							18O2 PFHxS	2.365 ng/mL
							13C5 PFNA	2.5 ng/mL
							13C4 PFOA	2.5 ng/mL
							13C4 PFOS	2.39 ng/mL
							13C2 PFUnA	2.5 ng/mL
					LCPFAC-24PAR_00002	125 uL	Perfluorobutanesulfonic acid (PFBS)	2.2125 ng/mL
							Perfluoroheptanoic acid (PFHpA)	2.5 ng/mL
							Perfluorohexanesulfonic acid (PFHxS)	2.28 ng/mL
							Perfluorononanoic acid (PFNA)	2.5 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	2.31375 ng/mL
							Perfluorooctanoic acid (PFOA)	2.5 ng/mL
.LCMPFC_ICALSU_00001	01/25/19	07/25/18	Methanol, Lot Fisher 168632	200 mL	LCd3-NMeFOSAA_00009	200 uL	d3-NMeFOSAA	0.05 ug/mL
					LCd5-NEtFOSAA_00009	200 uL	d5-NEtFOSAA	0.05 ug/mL
					LCM2-6:FTS_00009	200 uL	M2-6:2FTS	0.0475 ug/mL
					LCM2-8:2FTS_00011	200 uL	M2-8:2FTS	0.0479 ug/mL
					LCM2PFHxDA_00017	200 uL	13C2-PFHxDA	0.05 ug/mL
					LCM2PFTeDA_00015	200 uL	13C2-PFTeDA	0.05 ug/mL
					LCM4PFHPA_00015	200 uL	13C4-PFHpA	0.05 ug/mL
					LCM5PFPEA_00016	200 uL	13C5-PFPeA	0.05 ug/mL
					LCM8FOSA_00020	200 uL	13C8 FOSA	0.05 ug/mL
					LCMPFBA_00016	200 uL	13C4 PFBA	0.05 ug/mL
					LCMPFBS_00009	200 uL	13C3-PFBS	0.0465 ug/mL
					LCMPFDA_00021	200 uL	13C2 PFDA	0.05 ug/mL
					LCMPFDoA_00016	200 uL	13C2 PFDoA	0.05 ug/mL
					LCMPFHxA_00023	200 uL	13C2 PFHxA	0.05 ug/mL
					LCMPFHxS_00016	200 uL	18O2 PFHxS	0.0473 ug/mL
					LCMPFNA_00016	200 uL	13C5 PFNA	0.05 ug/mL
					LCMPFOA_00020	200 uL	13C4 PFOA	0.05 ug/mL
					LCMPFOS_00028	200 uL	13C4 PFOS	0.0478 ug/mL
					LCMPFUdA_00018	200 uL	13C2 PFUnA	0.05 ug/mL
..LCd3-NMeFOSAA_00009	11/08/22	WELLINGTON, Lot d3NMeFOSAA1117			(Purchased Reagent)		d3-NMeFOSAA	50 ug/mL
..LCd5-NEtFOSAA_00009	11/08/22	WELLINGTON, Lot d5NEtFOSAA1117			(Purchased Reagent)		d5-NEtFOSAA	50 ug/mL
..LCM2-6:FTS_00009	02/16/23	WELLINGTON, Lot M262FTS0218			(Purchased Reagent)		M2-6:2FTS	47.5 ug/mL
..LCM2-8:2FTS_00011	01/24/23	WELLINGTON, Lot M282FTS0118			(Purchased Reagent)		M2-8:2FTS	47.9 ug/mL
..LCM2PFHxDA_00017	07/13/22	Wellington Laboratories, Lot M2PFHxDA0717			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFTeDA_00015	11/30/22	Wellington Laboratories, Lot M2PFTeDA1117			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHPA_00015	05/03/22	Wellington Laboratories, Lot M4PFHpA0517			(Purchased Reagent)		13C4-PFHpA	50 ug/mL
..LCM5PFPEA_00016	07/20/22	Wellington Laboratories, Lot M5PFPeA0717			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00020	10/11/22	Wellington Laboratories, Lot M8FOSA1017I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00016	02/16/23	Wellington Laboratories, Lot MPFBA0218			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFBS_00009	02/15/23	Wellington Laboratories, Lot M3PFBS0218			(Purchased Reagent)		13C3-PFBS	46.5 ug/mL
..LCMPFDA_00021	02/16/23	Wellington Laboratories, Lot MPFDA0218			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00016	02/16/23	Wellington Laboratories, Lot MPFDoA0218			(Purchased Reagent)		13C2 PFDoA	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..LCMPFHxA_00023	10/27/22	Wellington Laboratories, Lot MPFHxA1017			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS_00016	03/22/23	Wellington Laboratories, Lot MPFHxS0318			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA_00016	12/14/22	Wellington Laboratories, Lot MPFNA1217			(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00020	05/04/23	Wellington Laboratories, Lot MPFOA0418			(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00028	06/15/23	Wellington Laboratories, Lot MPFOS0618			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUdA_00018	05/11/23	Wellington Laboratories, Lot MPFUdA0518			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
.LCPFAC-24PAR_00002	04/18/23	Wellington Laboratories, Lot PFAC24PAR0418			(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	1.77 ug/mL
							Perfluoroheptanoic acid (PFHpA)	2 ug/mL
							Perfluorohexanesulfonic acid (PFHxS)	1.824 ug/mL
							Perfluorononanoic acid (PFNA)	2 ug/mL
							Perfluorooctanesulfonic acid (PFOS)	1.851 ug/mL
							Perfluorooctanoic acid (PFOA)	2 ug/mL
LCPFCSP_00161	01/16/19	07/16/18	Methanol, Lot 180632	250 mL	LC11ClPF3OUdS_00002	100 uL	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonate	0.01884 ug/mL
					LC4:2FTS_00005	100 uL	1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	0.01868 ug/mL
					LC6:2FTS_00007	100 uL	1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	0.01896 ug/mL
					LC8:2FTS_00007	100 uL	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	0.01916 ug/mL
					LC9Cl-PF3ONS_00002	100 uL	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonate	0.01864 ug/mL
					LCbr-NEtFOSAA_00001	100 uL	N-ethyl perfluorooctane sulfonamidoacetic acid	0.02 ug/mL
					LCbr-NMeFOSAA_00001	100 uL	N-methyl perfluorooctane sulfonamidoacetic acid	0.02 ug/mL
					LCDONA_00002	100 uL	ADONA	0.02 ug/mL
					LCHFPO-DA_00002	100 uL	Perfluoro(2-propoxypropanoic) acid	0.02 ug/mL
					LCPFBA_00008	100 uL	Perfluorobutyric acid	0.02 ug/mL
					LCPFBS_00009	100 uL	Perfluorobutane Sulfonate	0.01768 ug/mL
							Perfluorobutanesulfonic acid (PFBS)	0.01768 ug/mL
					LCPFDA_00008	100 uL	Perfluorodecanoic acid	0.02 ug/mL
					LCPFDoA_00010	100 uL	Perfluorododecanoic acid	0.02 ug/mL
					LCPFDS_00008	100 uL	Perfluorodecane Sulfonic acid	0.01928 ug/mL
					LCPFHpA_00011	100 uL	Perfluoroheptanoic acid (PFHpA)	0.02 ug/mL
					LCPFHpSA_00003	100 uL	Perfluoroheptanesulfonic acid	0.01904 ug/mL
					LCPFHxA_00010	100 uL	Perfluorohexanoic acid	0.02 ug/mL
					LCPFHxDA_00010	100 uL	Perfluorohexadecanoic acid	0.02 ug/mL
					LCPFHxS-br_00006	100 uL	Perfluorohexane Sulfonate	0.0182 ug/mL
							Perfluorohexanesulfonic acid (PFHxS)	0.0182 ug/mL
					LCPFNA_00010	100 uL	Perfluorononanoic acid (PFNA)	0.02 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Perfluorooctanoic acid (PFOA)	0.02002 ug/mL
					LCPFNS_00003	100 uL	Perfluorononanesulfonic acid	0.0192 ug/mL
					LCPFOA_00011	100 uL	Perfluorooctanoic acid (PFOA)	0.02002 ug/mL
					LCPFODA_00010	100 uL	Perfluorooctadecanoic acid	0.02 ug/mL
					LCPFOS-br_00007	100 uL	Perfluorooctanesulfonic acid (PFOS)	0.01856 ug/mL
					LCPFOSA_00013	100 uL	Perfluorooctane Sulfonamide	0.02 ug/mL
					LCPFPeA_00010	100 uL	Perfluoropentanoic acid	0.02 ug/mL
					LCPFPeS_00003	100 uL	Perfluoropentanesulfonic acid	0.01876 ug/mL
					LCPFTeDA_00009	100 uL	Perfluorotetradecanoic acid	0.02 ug/mL
					LCPFTrDA_00009	100 uL	Perfluorotridecanoic acid	0.02 ug/mL
					LCPFUdA_00008	100 uL	Perfluoroundecanoic acid	0.02 ug/mL
.LC11CIPF3OUdS_00002	09/30/21	Wellington Labs, Lot 11CIPF3OUdS0916			(Purchased Reagent)		11-Chloroeicosafluoro-3-oxaundecane-1-sulfonate	47.1 ug/mL
.LC4:2FTS_00005	12/12/21	WELLINGTON, Lot 42FTS1216			(Purchased Reagent)		1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	46.7 ug/mL
.LC6:2FTS_00007	04/20/22	WELLINGTON, Lot 62FTS0417			(Purchased Reagent)		1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	47.4 ug/mL
.LC8:2FTS_00007	12/12/21	WELLINGTON, Lot 82FTS1216			(Purchased Reagent)		1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	47.9 ug/mL
.LC9CI-PF3ONS_00002	09/30/21	Wellington Labs, Lot 9CIPF3ONS0916			(Purchased Reagent)		9-Chlorohexadecafluoro-3-oxanonane-1-sulfonate	46.6 ug/mL
.LCbr-NEtFOSAA_00001	01/17/23	WELLINGTON, Lot brNEtFOSAA0118			(Purchased Reagent)		N-ethyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
.LCbr-NMeFOSAA_00001	01/17/23	WELLINGTON, Lot brNMeFOSAA0118			(Purchased Reagent)		N-methyl perfluorooctane sulfonamidoacetic acid	50 ug/mL
.LCDONA_00002	03/26/23	WELLINGTON, Lot NADONA0318			(Purchased Reagent)		ADONA	50 ug/mL
.LCHFPO-DA_00002	03/26/21	WELLINGTON, Lot HFPODA0318			(Purchased Reagent)		Perfluoro(2-propoxypropanoic) acid	50 ug/mL
.LCPFBA_00008	05/29/22	Wellington Laboratories, Lot PFBA0517			(Purchased Reagent)		Perfluorobutyric acid	50 ug/mL
.LCPFBS_00009	09/21/22	Wellington Laboratories, Lot LPFBS0917			(Purchased Reagent)		Perfluorobutane Sulfonate	44.2 ug/mL
							Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
.LCPFDA_00008	05/29/22	Wellington Laboratories, Lot PFDA0517			(Purchased Reagent)		Perfluorodecanoic acid	50 ug/mL
.LCPFDoA_00010	05/29/22	Wellington Laboratories, Lot PFDoA0517			(Purchased Reagent)		Perfluorododecanoic acid	50 ug/mL
.LCPFDS_00008	11/08/22	Wellington Laboratories, Lot LPFDS1117			(Purchased Reagent)		Perfluorodecane Sulfonic acid	48.2 ug/mL
.LCPFHpA_00011	09/27/22	Wellington Laboratories, Lot PFHpA0917			(Purchased Reagent)		Perfluoroheptanoic acid (PFHpA)	50 ug/mL
.LCPFHpSA_00003	09/01/22	Wellington Laboratories, Lot LPFHpS0817			(Purchased Reagent)		Perfluoroheptanesulfonic acid	47.6 ug/mL
.LCPFHxA_00010	09/27/22	Wellington Laboratories, Lot PFHxA0917			(Purchased Reagent)		Perfluorohexanoic acid	50 ug/mL
.LCPFHxDA_00010	07/13/22	Wellington Laboratories, Lot PFHxDA0717			(Purchased Reagent)		Perfluorohexadecanoic acid	50 ug/mL
.LCPFHxS-br_00006	01/04/22	Wellington Laboratories, Lot brPFHxSK0117			(Purchased Reagent)		Perfluorohexane Sulfonate	45.5 ug/mL
							Perfluorohexanesulfonic acid (PFHxS)	45.5 ug/mL
.LCPFNA_00010	07/20/22	Wellington Laboratories, Lot PFNA0717			(Purchased Reagent)		Perfluorononanoic acid (PFNA)	50 ug/mL
							Perfluorooctanoic acid (PFOA)	0.05 ug/mL
.LCPFNS_00003	09/27/22	Wellington Laboratories, Lot LPFNS0917			(Purchased Reagent)		Perfluorononanesulfonic acid	48 ug/mL
.LCPFOA_00011	09/27/22	Wellington Laboratories, Lot PFOA0917			(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
.LCPFODA_00010	07/13/22	Wellington Laboratories, Lot PFODA0717			(Purchased Reagent)		Perfluorooctadecanoic acid	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-41403-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.LCPFOS-br_00007	01/12/22	Wellington Laboratories, Lot brPFOSK0117			(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	46.4 ug/mL
.LCPFOSA_00013	09/01/22	Wellington Laboratories, Lot FOSA0817I			(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL
.LCPFPeA_00010	06/14/22	Wellington Laboratories, Lot PFPeA0617			(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL
.LCPFPeS_00003	01/11/22	Wellington Laboratories, Lot LPFPeS0117			(Purchased Reagent)		Perfluoropentanesulfonic acid	46.9 ug/mL
.LCPFTeDA_00009	09/30/21	Wellington Laboratories, Lot PFTeDA0916			(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL
.LCPFTrDA_00009	05/02/22	Wellington Laboratories, Lot PFTrDA0517			(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL
.LCPFUdA_00008	10/18/21	Wellington Laboratories, Lot PFUdA1016			(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL

Reagent

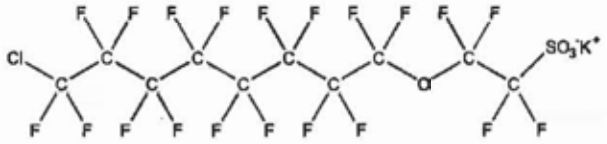
LC11CIPF3OUdS_00002

h: 4/16/18 SKJ

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:	11Cl-PF3OUdS	**LOT NUMBER:**	11ClPF3OUdS0916
COMPOUND:	Potassium 11-chloroeicosafluoro-3-oxaundecane-1-sulfonate		
STRUCTURE:		**CAS #:**	83329-89-9



MOLECULAR FORMULA:	$C_{10}F_{20}ClSO_4K$	**MOLECULAR WEIGHT:**	670.69
CONCENTRATION:	50.0 ± 2.5 µg/ml (K Salt)	**SOLVENT(S):**	Methanol
	47.1 ± 2.4 µg/ml (11Cl-PF3OUdS anion)		
CHEMICAL PURITY:	>98%		
LAST TESTED: (mm/dd/yyyy)	09/30/2016		
EXPIRY DATE: (mm/dd/yyyy)	09/30/2021		
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- This compound is a minor component of the commercial formulation known as F-53B.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 10/19/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

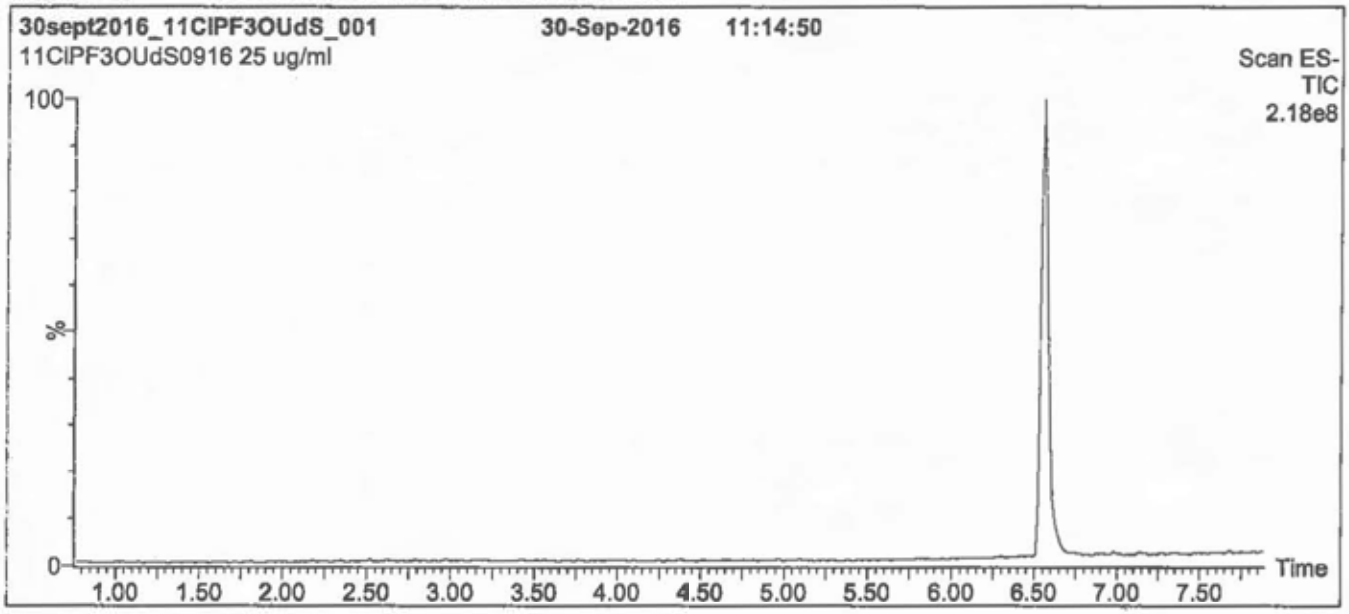
This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

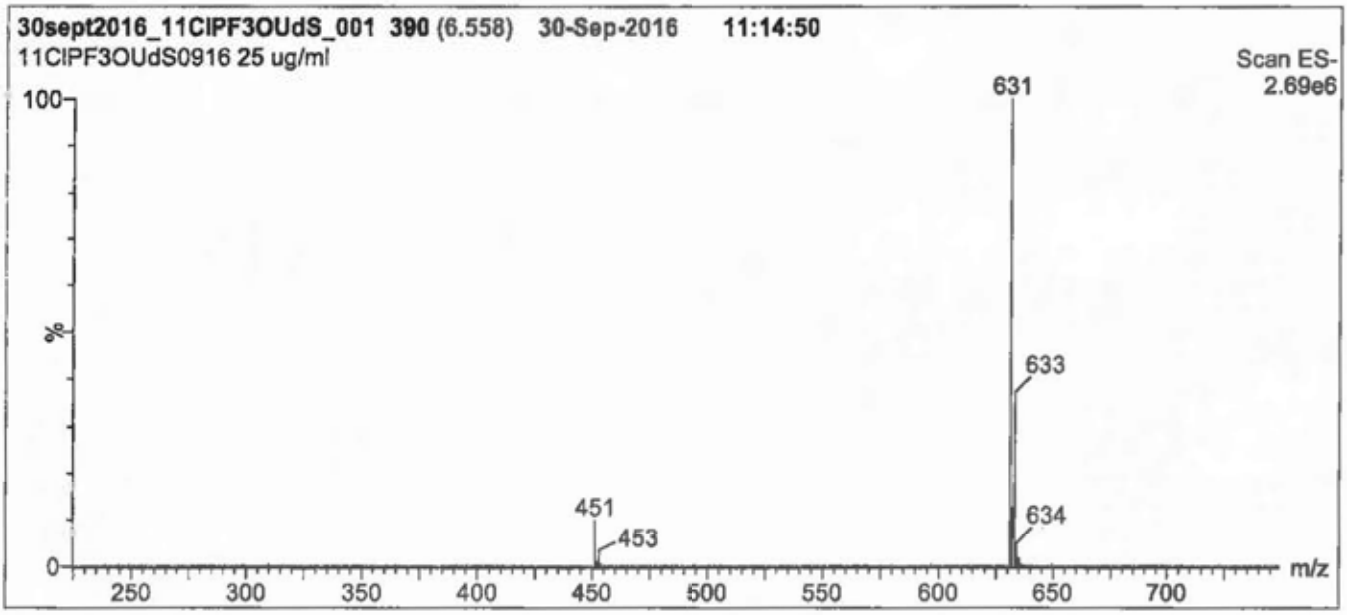
CALA

ANAB ACCREDITED

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: **11Cl-PF3OUdS; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for
1.5 min before returning to initial conditions in 0.5 min.
Time: 10 min

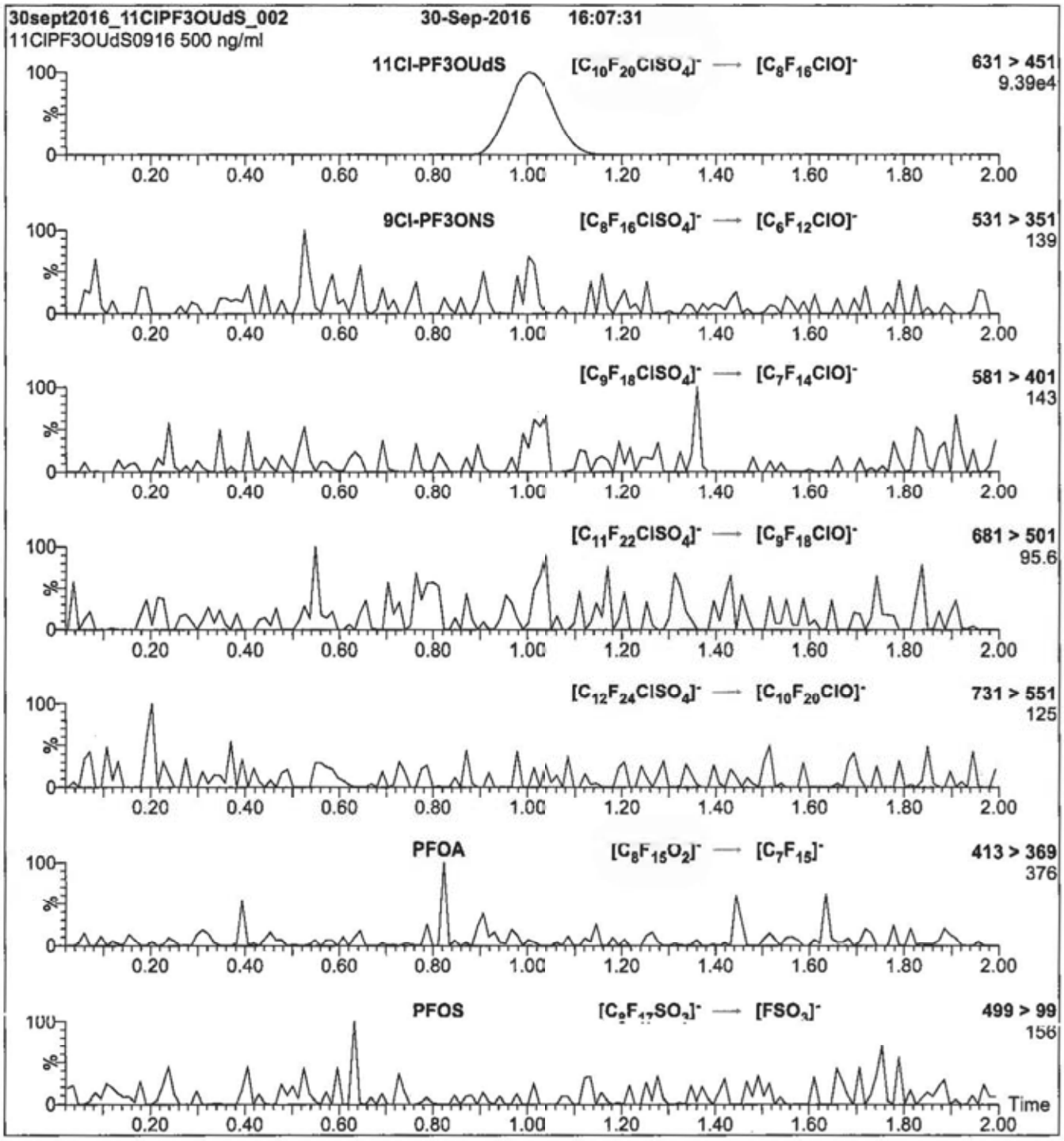
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 45.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **11Cl-PF3OUdS; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml 11Cl-PF3OUdS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.24e-3
Collision Energy (eV) = 20

Reagent

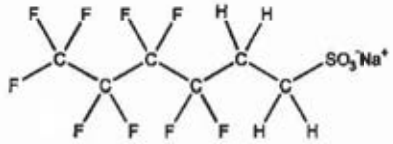
LC4:2FTS_00005

r: 9/21/17 SKV

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE:	4:2FTS	**LOT NUMBER:**	42FTS1216
COMPOUND:	Sodium 1H,1H,2H,2H-perfluorohexane sulfonate		
STRUCTURE:		**CAS #:**	Not available



MOLECULAR FORMULA:	$C_6H_4F_9SO_3Na$	**MOLECULAR WEIGHT:**	350.13
CONCENTRATION:	50.0 ± 2.5 µg/ml (Na salt)	**SOLVENT(S):**	Methanol
	46.7 ± 2.3 µg/ml (4:2FTS anion)		
CHEMICAL PURITY:	>98%		
LAST TESTED: (mm/dd/yyyy)	12/12/2016		
EXPIRY DATE: (mm/dd/yyyy)	12/12/2021		
RECOMMENDED STORAGE:	Refrigerate ampoule		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 12/21/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

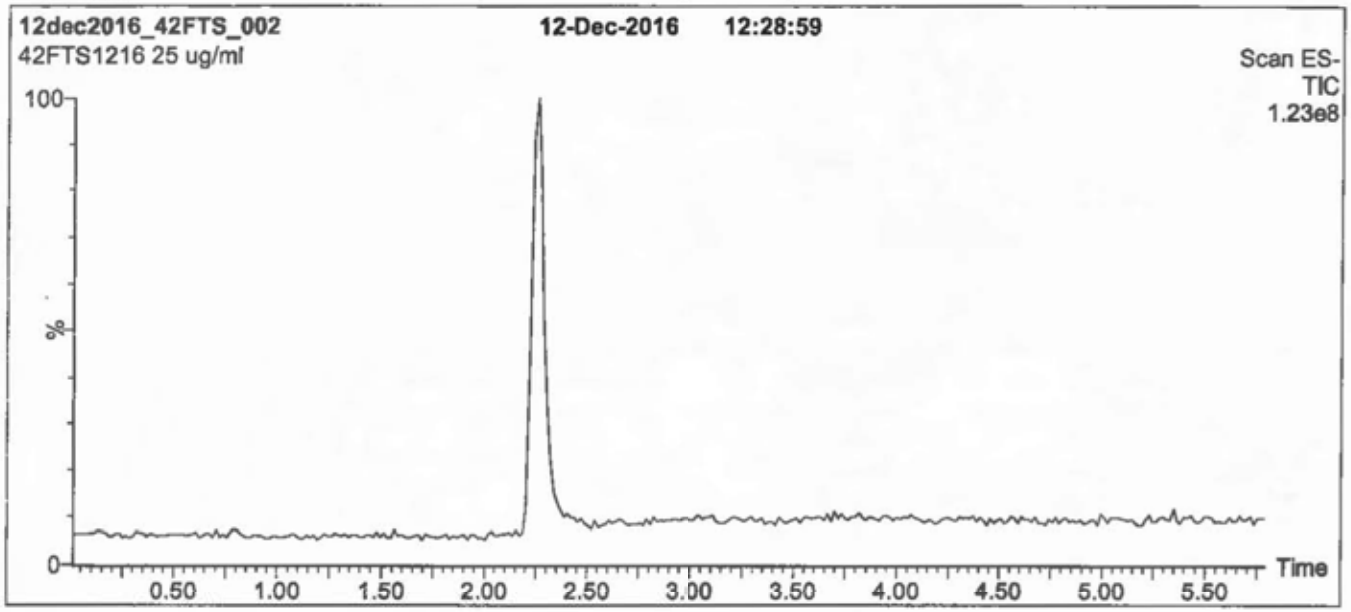
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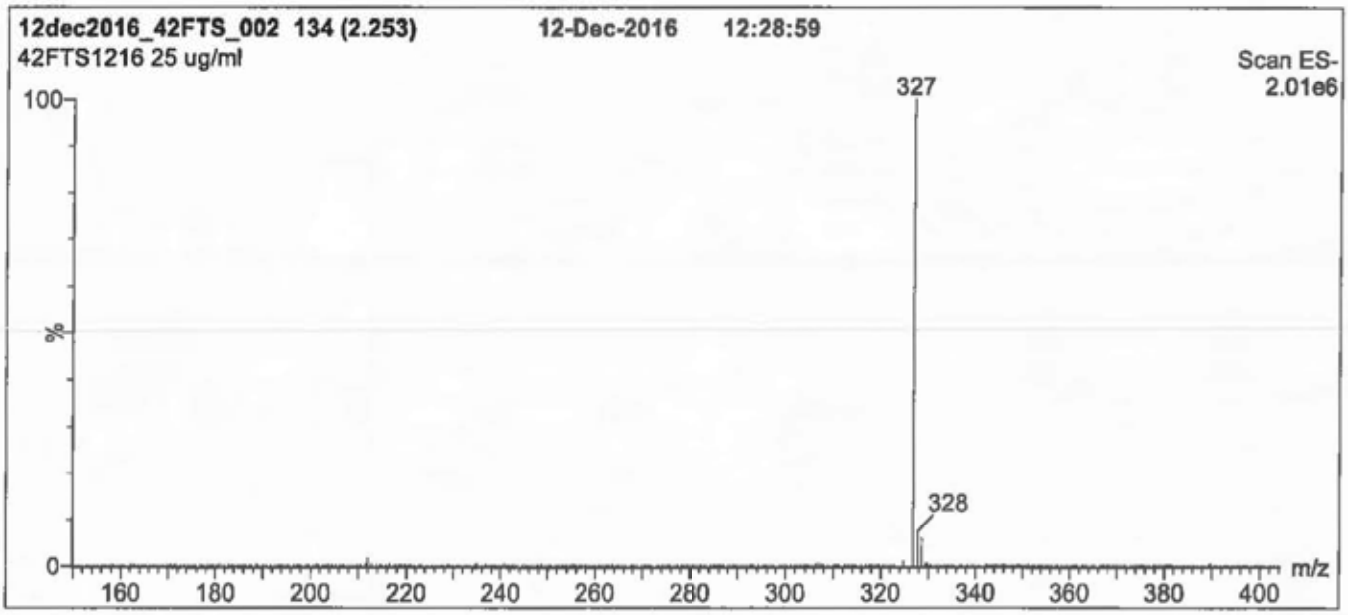
CALA

ANAB ACCREDITED

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Figure 1: **4:2FTS; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7.5 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

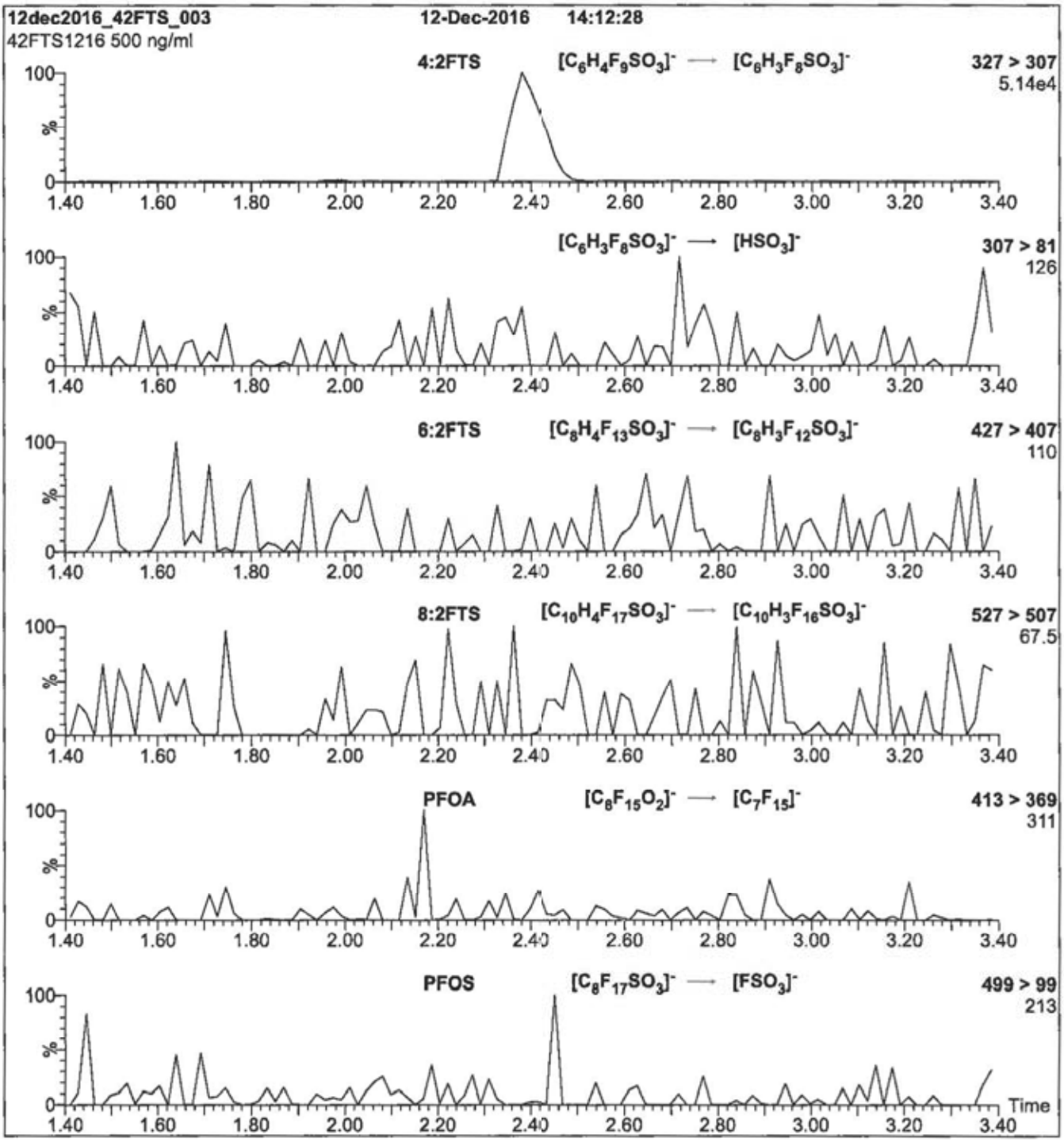
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 25.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: **4:2FTS; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml 4:2FTS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.31e-3
Collision Energy (eV) = 25

Reagent

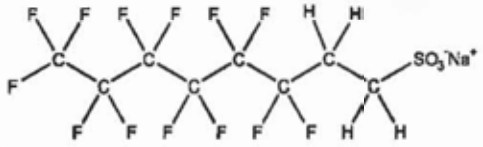
LC6:2FTS_00007

r: 9k1/17 SKV

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE:	6:2FTS	**LOT NUMBER:**	62FTS0417
COMPOUND:	Sodium 1H,1H,2H,2H-perfluorooctane sulfonate		
STRUCTURE:		**CAS #:**	Not available



MOLECULAR FORMULA:	$C_8H_4F_{13}SO_3Na$	**MOLECULAR WEIGHT:**	450.15
CONCENTRATION:	50.0 ± 2.5 µg/ml (Na salt)	**SOLVENT(S):**	Methanol
	47.4 ± 2.4 µg/ml (6:2FTS anion)		
CHEMICAL PURITY:	>98%		
LAST TESTED: (mm/dd/yyyy)	04/20/2017		
EXPIRY DATE: (mm/dd/yyyy)	04/20/2022		
RECOMMENDED STORAGE:	Refrigerate ampoule		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: _____ **Date:** 04/24/2017 (mm/dd/yyyy)
B.G. Chittim, General Manager

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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UNCERTAINTY:

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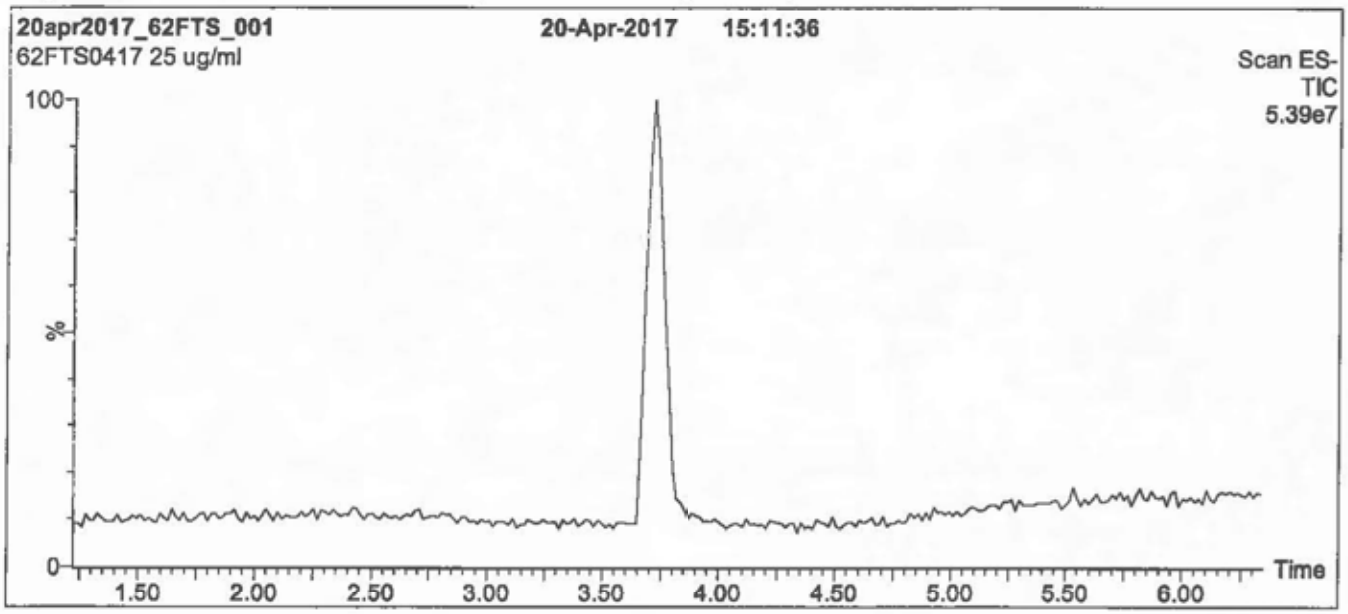
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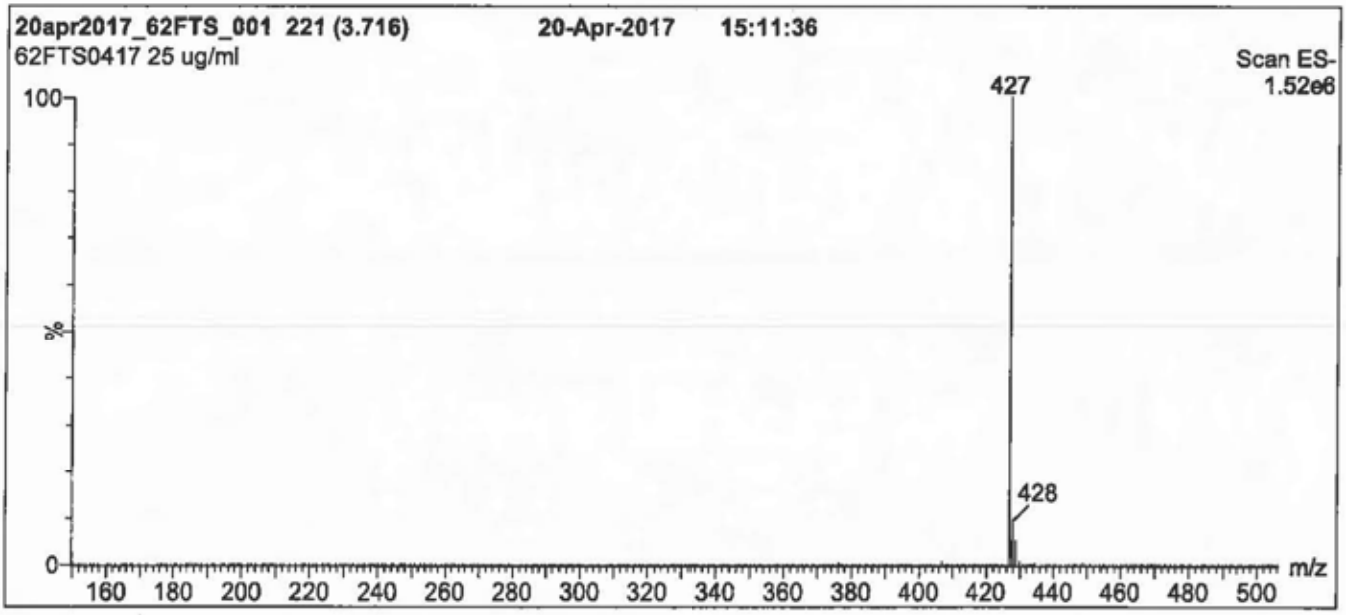
CALA

ANAB ACCREDITED

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Figure 1: **6:2FTS; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 85% organic over 7.5 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

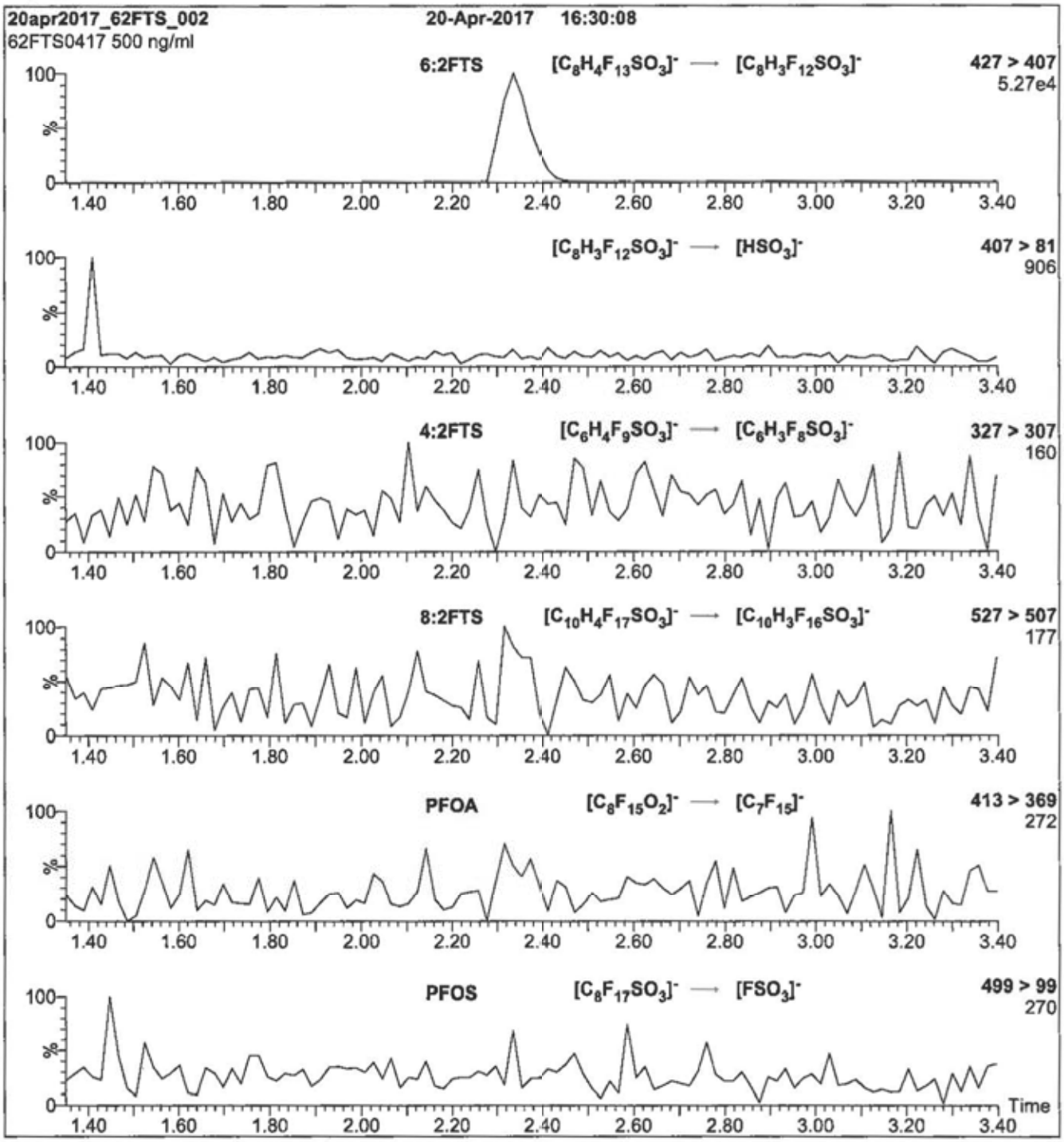
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 30.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **6:2FTS; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: Direct loop injection
10 µl (500 ng/ml 6:2FTS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.35e-3
Collision Energy (eV) = 25

Reagent

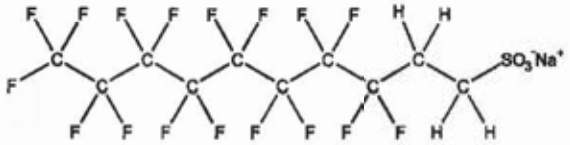
LC8:2FTS_00007

n: 9/21/17-SK

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:	8:2FTS	**LOT NUMBER:**	82FTS1216
COMPOUND:	Sodium 1H,1H,2H,2H-perfluorodecane sulfonate		
STRUCTURE:		**CAS #:**	Not available



MOLECULAR FORMULA:	$C_{10}H_4F_{17}SO_3Na$	**MOLECULAR WEIGHT:**	550.16
CONCENTRATION:	50.0 ± 2.5 µg/ml (Na salt)	**SOLVENT(S):**	Methanol
	47.9 ± 2.4 µg/ml (8:2FTS anion)		
CHEMICAL PURITY:	>98%		
LAST TESTED: (mm/dd/yyyy)	12/12/2016		
EXPIRY DATE: (mm/dd/yyyy)	12/12/2021		
RECOMMENDED STORAGE:	Refrigerate ampoule		

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 12/21/2016 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

Lincoln AASF #1

1. Product and Company Identification

Identity (as used on label & list):	**ECO Freeze Protected Foam**
Product Description:	Water Soluble Surfactants, Freeze depressants and Water
Intended Use:	Firefighting foam solution for use on class A fires and class B fires as supplied.
Manufacturer:	Baum's Castorine Co., Inc. 200 Matthew Street Rome, New York 13440 USA 800-825-8154

2. Hazards Identification

Hazardous Classification:

Pictogram: None

Signal word: None

Under conditions of intended use this product is not considered hazardous and does not pose a risk to health.

Overview; Ingredients not listed as a carcinogen by IARC, NTP, or OSHA

DOT Hazard Class: Not Applicable
Threshold Value Limit (TLV): Not Determined

Signs and Symptoms of Exposure:

Eyes	May cause eye irritation, No permanent damage anticipated from acute exposure.
Skin	may cause skin irritation, No permanent damage anticipated from acute exposure. Prolonged contact with product may cause discomfort.
Ingestion	Not expected to be a primary route of exposure, will produce gastrointestinal discomfort, nausea, vomiting, diarrhea
Inhalation	Not expected to be a primary route of exposure, vapors or mists in unusually high concentration, in poorly ventilated areas may cause irritation of nose and throat characterized by coughing. Aspiration of liquid will cause irritation to respiratory tract.

3. Composition/ Information on Ingredients

ECO Freeze Protected Foam is a blend of organic surfactants being anionic, nonionic, amphoteric surfactants and Freeze depressants. ECO Freeze Protected Foam does not contain PFOS or PFOA.

4. First Aid Measures

Inhalation:	Remove to fresh air. If irritation persists, seek medical attention. If breathing has stopped, assist ventilation with a mechanical device or use rescue breathing with a pocket mask.
Skin:	Wash skin with water. remove all contaminated clothes and shoes. Thoroughly clean clothes and shoes before reuse. Consult a physician if irritation develops.
Eyes:	Flush with water for 15 minutes. If eye irritation persists, seek medical attention.
Ingestion:	If swallowed, get immediate medical attention or advice. If victim is conscious and able to swallow, give large amounts of water. Do not give anything by mouth to the person who is unconscious or convulsing. Do not induce vomiting unless directed by a physician.

5. Fire Fighting Measures

Flash Point	Not Applicable
Auto Ignition Temperature:	Not Applicable
Flammable Limits	Not Applicable
Classification	Not Flammable
Extinguishing Media	Not Applicable

Special Fire Fighting Procedures: NFPA Code: Health 1, Fire 0, Reactivity 0
Use water spray to cool fire-exposed surfaces to prevent over-pressure of containers and to protect personnel. Use air-supplied breathing equipment for enclosed areas.

6. Accidental Release Measures

Containment Procedures	Stop flow of material if without risk. Dike spill with inert absorbent. Block any potential routes to water systems, sewers, streams, lakes, etc.
Clean-Up Procedures	Wear appropriate protective equipment and clothing. Absorb with inert absorbent, shovel material into appropriate container for disposal.
Evacuation Procedures	Keep unnecessary personnel away.

7. Handling and Storage

Handling Procedures	Avoid contact with skin and eyes. Observe good industrial hygiene practices and wash thoroughly after handling.
Technical Measures	Work practices should minimize contact.
Technical Precautions	Local exhaust is normally not required unless the process produces a mist.
Storage Procedures	Store in tightly closed original container, in well ventilated place, away from strong acids. Prevent from freezing. If frozen, move to warn area.

8. Exposure Controls/ Personal Protection

Ventilation Engineering Controls:	Ventilation should effectively remove and prevent any buildup of any vapor or mist generated from the use of this product

Personal Protection Equipment (PPE)

Respiratory Protection:	If ventilation is not sufficient to effectively prevent buildup of aerosols or vapors, appropriate NIOSH/MSHA rated respiratory protection must be provided.
Skin Protection:	Use Impervious gloves. Use of impervious apron and boots are recommended
Eye/Face Protection:	Wear safety glasses, chemical goggles or a full face shield.
Other Protective Clothing / Equipment:	None.

9. Physical and Chemical Properties

Physical State	Liquid
Appearance and Color	Water white
Freezing Point	-35°F, -37.2°C
Boiling Point approximately	212° F, 100°C
Odor	FaintlyAmmoniacal
Vapor Pressure (mmHg)	equivalent to water
Vapor Density (air= 1) less than	equivalent to water
Solubility in Water	Complete

Specific Gravity (H_2O= 1) approximately	1.036
Weight/Gallon(lb.)	8.64
Burning Properties	Oxides of carbon and nitrogen may be produced after all moisture is boiled off.
Flammability	Not Flammable
Explosive Properties	Not Explosive
Flashpoint	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	Not applicable
pH range	7.8 – 8.6
Typical pH	8.20
Refractive index	35.0-37.0° Brix
Evaporation Rate (water= 1)	< 1
Viscosity@ 40°C	≈ 29 cSt.

10. Stability and Reactivity

Chemical Stability:	This is a chemically stable material.
Conditions to Avoid:	Heat from fire sufficient to overpressure container.
Materials to Avoid:	Strong acids and oxidizers
Hazardous Decomposition or Byproducts:	Material will not decompose in use or storage. Oxides of carbon, nitrogen may be produced after all moisture is boiled off in a fire.
Hazardous Polymerization	Will not occur.

11. Toxicological Information

Eyes	Will cause irritation and conjunctivitis depending on length of exposure, solution concentration and first aid measures provided.
Skin	Prolonged contact with product may cause discomfort, no adverse effects expected form absorption of material through skin
Ingestion	Not expected to be a primary route of exposure. Rat oral LD_{50} is greater than 5000milligrams/kilogram of body weight
Inhalation	Vapors or mists in unusually high concentration, in poorly ventilated areas may cause irritation of nose and throat.

Carcinogenicity: NTP: No IARC Monographs: No OSHA Regulated: No

12. Ecological Information

The product is not expected to be hazardous to the environment.

Mobility: This product is soluble in water and will spread in water systems

Degradability: All components are inherently bio-degradable.

13. Disposal Considerations

Waste Material Disposal of in accordance with Local, State and Provincial Environmental Regulations.

Treat container as residue.

14. Transport Information

Not Regulated

15. Regulatory Information

DOT Hazard Class:	Not regulated
EPA Hazardous Substances:	None
SARA 311/312 Hazards:	Immediate (Acute) Health Hazard
SARA Title III:	none
California Proposition 65:	This product does not contain any chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.
Governmental Inventory Status:	All components comply with TSCA, DSL, AICS, NZIoC, ENCS, KECI, PICCS and IECSC.

16. OTHER INFORMATION

US NFPA Codes	**Health**	**Fire**	**Reactivity**	
	1	0	0	
HMIS Codes	**Health**	**Fire**	**Reactivity**	**PPE**
	1	0	0	Section 8

The information on this SDS reflects the latest information that we have on hazards, properties, and handling of this product under recommended conditions of use. This company believes this information to be accurate and reliable however, the accuracy and completeness is not guaranteed.

Lincoln AASF

2400 Northwest 24th Street

Lincoln, NE 68524

Inquiry Number: 5872123.47

November 18, 2019

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

11/18/19

Site Name:

Lincoln AASF
2400 Northwest 24th Street
Lincoln, NE 68524
EDR Inquiry # 5872123.47

Client Name:

AECOM
12120 Shamrock Plaza
Omaha, NE 68154
Contact: Hans Sund

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	*Scale*	*Details*	*Source*
2016	1"=875'	Flight Year: 2016	USDA/NAIP
2012	1"=875'	Flight Year: 2012	USDA/NAIP
2009	1"=875'	Flight Year: 2009	USDA/NAIP
2006	1"=875'	Flight Year: 2006	USDA/NAIP
1999	1"=875'	Acquisition Date: April 06, 1999	USGS/DOQQ
1981	1"=875'	Flight Date: September 20, 1981	USDA
1978	1"=875'	Flight Date: May 10, 1978	USGS
1961	1"=875'	Flight Date: April 13, 1961	USGS

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INQUIRY #: 5872123.47
YEAR: 2016
= 875'
N
EDR


INQUIRY #: 5872123.47
YEAR: 2012
= 875'
N
EDR


INQUIRY #: 5872123.47
YEAR: 2009
= 875'
N
EDR


INQUIRY #: 5872123.47
YEAR: 2006
= 875'
N
EDR


INQUIRY #: 5872123.47
YEAR: 1999
= 875'
N
EDR


INQUIRY #: 5872123.47
YEAR: 1981
= 875'
N
EDR


INQUIRY #: 5872123.47
YEAR: 1978
= 875'
N
EDR
Subject boundary not shown because it exceeds image extent or image is not georeferenced.



INQUIRY #: 5872123.47

YEAR: 1961

= 875'

N

EDR

Subject boundary not shown because it exceeds image extent or image is not georeferenced.

Lincoln AASF
2400 Northwest 24th Street
Lincoln, NE 68524

Inquiry Number: 5872123.44s
November 15, 2019

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION	PAGE
Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	8
Orphan Summary	415
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting SSURGO Soil Map	A-5
Physical Setting Source Map	A-11
Physical Setting Source Map Findings	A-13
Physical Setting Source Records Searched	PSGR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

2400 NORTHWEST 24TH STREET
LINCOLN, NE 68524

COORDINATES

Latitude (North):	40.8372110 - 40° 50' 13.95''
Longitude (West):	96.7533910 - 96° 45' 12.20''
Universal Tranverse Mercator:	Zone 14
UTM X (Meters):	689419.6
UTM Y (Meters):	4522903.5
Elevation:	1150 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	6716272 LINCOLN, NE
Version Date:	2014
Southwest Map:	6715782 EMERALD, NE
Version Date:	2014

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140819
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
2400 NORTHWEST 24TH STREET
LINCOLN, NE 68524

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	LINCOLN AIR GRD BLDG	NEBR ANG BASE BLDG 2	NE LUST	Higher	1 ft.
2	AIR NATIONAL GUARD	SITE 10 2301 W. ADAM	NE LUST	Higher	1 ft.
A3	AIR NAT GUARD 605-2	NEANG #605-2	NE LUST	Higher	1 ft.
B4	NEBRASKA AIR NATIONA	2420 W BUTLER AVE	NE UST	Higher	1 ft.
B5	NEBRASKA AIR NATIONA	2420 W BUTLER AVE	NE SHWS, NE AIRS, NE NPDES, NE TIER 2, NE UIC	Higher	1 ft.
B6	NEBRASKA AIR NATIONA	BLDG 640 2420 W BUTL	NE UST	Higher	1 ft.
7	UNITED AIRLINES - AD	LINCOLN MUNICIPAL AI	NE LUST	Higher	1 ft.
8	AIR NAT'L GUARD-LINC	AIR GUARD BASE	NE LAST	Higher	1 ft.
A9	BLDG 19-T	LINCOLN AFB #19-T	NE LUST	Higher	1 ft.
A10	J-P 4 FUEL FARM	2301 WEST ADAMS NO O	NE LUST	Higher	1 ft.
A11	LINCOLN AIR GRD BLDG	LINCOLN AIR GRD BASE	NE LUST	Higher	1 ft.
C12	ARMY AVIATION SUPPOR	2601 NORTHWEST 25TH	NE SHWS, NE SPILLS, NE ASBESTOS, NE NPDES, NE TIER...	Higher	1 ft.
C13	NEBRASKA AIR GUARD	2585 WEST FURNACE AV	NE AST	Higher	1 ft.
A14	AMMO SHOP BLDG 2774	AMMO SHOP BLDG 2774	NE LUST	Higher	1 ft.
15	COMBINED SUPPORT	MAINTENANCE SHOP (CS	NE HIST UST	Higher	1 ft.
D16	NEARNG USPFO-SB AND	2950-2960 NORTH PARK	RCRA-SQG, WI MANIFEST	Higher	1 ft.
D17	COMBINED SUPPORT/MAI	2960 N PARK RD	NE UST	Higher	1 ft.
18	AIR NATIONAL GUARD	2700 NW 24TH ST	NE AST	Higher	1 ft.
B19	155TH AIR REFUELING	2420 WEST BUTLER AVE	RCRA-SQG, WI MANIFEST	Higher	1 ft.
A20	LINCOLN AIR GRD BLDG	NE ANG BASE BLDG 605	NE LUST	Higher	1 ft.
21	LINCOLN AIRPORT AUTH	AIRLINE TERMINAL BLD	NE UST	Higher	1 ft.
B22	NEBRASKA AIR NATIONA	2420 W BUTLER AVE	NE AST, NE HIST AST, NE ASBESTOS	Higher	1 ft.
C23	ARMY AVIATION SUPPOR	624 MUNICIPAL AIRPOR	SEMS-ARCHIVE, RCRA-VSQG, DOCKET HWC, WI MANIFEST	Higher	1 ft.
E24	LINCOLN MUNICIPAL AI	2400 W ADAMS ST	NE SHWS, NE INST CONTROL, NE AIRS, NE ASBESTOS, NE...	Higher	53, 0.010, North
E25	HILLAERO MODIFICATIO	2400 WEST ADAMS STRE	RCRA-SQG, RAATS, ICIS, US AIRS, FINDS, ECHO, WI...	Higher	53, 0.010, North
E26	DUNCAN TANK	2400 W ADAMS ST	SEMS, RCRA NonGen / NLR, ICIS, US AIRS, FINDS	Higher	53, 0.010, North
E27	LINCOLN AIR FORCE BA	2400 W ADAMS ST	NE SHWS, NE LUST, NE TIER 2	Higher	53, 0.010, North
E28	DUNCAN AVIATION HANG	2400 W ADAMS	NE UST	Higher	53, 0.010, North
E29	DUNCAN AVIATION	2400 WEST ADAMS	NE LUST	Higher	53, 0.010, North
E30	UNITED AIRLINES TERM	2400 E ADAMS STE 100	NE UST	Higher	53, 0.010, North
E31	LINCOLN MEMORIAL AIR	2400 W ADAMS ST	RCRA NonGen / NLR	Higher	53, 0.010, North
E32	UNITED AIRLINES ADF	2400 E ADAMS	NE LUST	Higher	61, 0.012, North
F33	LINCOLN ELECTRIC SYS	2300 NW 12TH ST	NE UST	Higher	114, 0.022, East
F34	LINCOLN ELECTRIC SYS	2300 NW 12 STREET	NE LUST	Higher	114, 0.022, East
G35	SINCLAIR SERVICE STA	2500 NW 12TH	NE LUST	Higher	285, 0.054, East
G36	PIERSON ROGER	2500 NORTHWEST 12TH	EDR Hist Auto	Higher	285, 0.054, East
G37	CASEYS GENERAL STORE	2500 NW 12TH ST	NE UST	Higher	285, 0.054, East
H38	A & S INC	2925 N W 12TH ST	EDR Hist Auto	Higher	345, 0.065, ENE
H39	U STOP #11	2925 NW 12TH ST	NE LUST, NE UST, NE HIST UST	Higher	345, 0.065, ENE

MAPPED SITES SUMMARY

Target Property Address:
2400 NORTHWEST 24TH STREET
LINCOLN, NE 68524

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
I40	MOLEX LLC	1400 W BOND CIRCLE	RCRA-SQG, NE LUST, US AIRS, FINDS, ECHO, NE AIRS,...	Higher	557, 0.105, NE
I41	MOLEX INC	1400 W BOND CIR	NE UST	Higher	557, 0.105, NE
I42	MOLEX	1400 WEST BOND CIRCL	NE LUST	Higher	557, 0.105, NE
J43	LINCOLN AIRPORT AUTH	BLDG #2079 4520 W ST	NE UST, NE HIST UST	Higher	683, 0.129, NE
J44	DISCOUNT GAS & FOOD	1201 W BOND CIR	NE UST	Higher	824, 0.156, NE
J45	AIRPORT AMOCO	1201 W BOND CIRCLE	NE LUST	Higher	824, 0.156, NE
46	FAT DOGS BP	3100 NW 12TH ST	NE LUST, NE UST, NE HIST UST	Higher	834, 0.158, ENE
K47	NORTHWEST 12TH ST GW	NW 12TH ST & W BOND	SEMS-ARCHIVE	Higher	918, 0.174, NE
L48	JERRY JENSEN SHOP	1025 WEST NANCE	NE LUST	Higher	1029, 0.195, East
L49	JERRY L JENSEN	1025 W NANCE	NE UST	Higher	1029, 0.195, East
K50	YASUFUKU USA INC	3201 NW 12TH SUITE 1	RCRA-VSQG, WI MANIFEST	Higher	1032, 0.195, NE
51	DUNCAN AVIATION FUEL	FUEL FARM, 3500 AVIA	NE LAST	Higher	1395, 0.264, NNE
M52	DUNCAN AVIATION	E OF HANGER	NE LUST	Higher	1886, 0.357, NNE
M53	DUNCAN AVIATION	LINCOLN MUNICIPAL AI	NE LUST	Higher	1886, 0.357, NNE
M54	DUNCAN AVIATION	MUNICIPAL AIRPORT	NE LAST	Higher	1886, 0.357, NNE
M55	DUNCAN AVIATION HANG	LINCOLN MUNICIPAL AI	NE LUST	Higher	1886, 0.357, NNE
56	KABREDLOS #104	730 W CORNHUSKER HWY	NE LUST, NE UST, NE HIST UST	Higher	2039, 0.386, East
N57	DUNCAN AVIA EAST MAI	3801 NORTH PARK ROAD	NE LUST	Higher	2256, 0.427, NNE
N58	LIN AIRE FUEL FARM	3803 N PARK AVE,LYNN	NE LUST	Higher	2260, 0.428, NNE
59	LINCOLN TOWER	TOWER BLDG AIRPORT T	NE LUST	Higher	2353, 0.446, NNW
60	RECYCLING ENTERPRISE	1200 WEST UPLAND AVE	NE SWRCY, NE TIER 2	Higher	2439, 0.462, NE
61	UNKNOWN - ACE HARDWA	12TH & UPLAND STREET	NE LUST	Higher	2537, 0.480, NE
62	LINCOLN COMMUN ANX #		FUDS	Higher	4846, 0.918, NNE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ---------- Federal Facility Site Information listing

Federal RCRA CORRACTS facilities list

CORRACTS ---------- Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ---------- RCRA - Large Quantity Generators

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROL ---------- Sites with Institutional Controls

Federal ERNS list

ERNS ---------- Emergency Response Notification System

State and tribal landfill and/or solid waste disposal site lists

NE SWF/LF ---------- Licensed Landfill List

State and tribal leaking storage tank lists

INDIAN LUST ---------- Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

FEMA UST ---------- Underground Storage Tank Listing
INDIAN UST ---------- Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

NE VCP ---------- RAPMA Sites
INDIAN VCP ---------- Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

NE BROWNFIELDS ---------- Potential Brownfields Inventory Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ---------- A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

INDIAN ODI ---------- Report on the Status of Open Dumps on Indian Lands
ODI ---------- Open Dump Inventory
DEBRIS REGION 9 ---------- Torres Martinez Reservation Illegal Dump Site Locations
IHS OPEN DUMPS ---------- Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ---------- Delisted National Clandestine Laboratory Register
US CDL ---------- National Clandestine Laboratory Register

Local Land Records

LIENS 2 ---------- CERCLA Lien Information

Records of Emergency Release Reports

HMIRS ---------- Hazardous Materials Information Reporting System
NE SPILLS 90 ---------- SPILLS 90 data from FirstSearch
NE SPILLS 80 ---------- SPILLS 80 data from FirstSearch

Other Ascertainable Records

DOD ---------- Department of Defense Sites
SCRD DRYCLEANERS ---------- State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR ---------- Financial Assurance Information
EPA WATCH LIST ---------- EPA WATCH LIST
2020 COR ACTION ---------- 2020 Corrective Action Program List

TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
CONSENT	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US MINES	Mines Master Index File
ABANDONED MINES	Abandoned Mines
UXO	Unexploded Ordnance Sites
FUELS PROGRAM	EPA Fuels Program Registered Listing
NE DRYCLEANERS	Drycleaner Facility Listing
NE Financial Assurance	Financial Assurance Information Listing
MINES MRDS	Mineral Resources Data System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants
EDR Hist Cleaner	EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

NE RGA HWS	Recovered Government Archive State Hazardous Waste Facilities List
NE RGA LUST	Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

STANDARD ENVIRONMENTAL RECORDS

Federal CERCLIS list

SEMS: SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the SEMS list, as provided by EDR, and dated 07/19/2019 has revealed that there is 1 SEMS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DUNCAN TANK Site ID: 0702015 EPA Id: NE0572890028	***2400 W ADAMS ST***	***N 0 - 1/8 (0.010 mi.)***	***E26***	***225***

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

A review of the SEMS-ARCHIVE list, as provided by EDR, and dated 07/19/2019 has revealed that there are 2 SEMS-ARCHIVE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ARMY AVIATION SUPPOR Site ID: 0702033 EPA Id: NE7210090018	***624 MUNICIPAL AIRPOR***	***0 - 1/8 (0.000 mi.)***	***C23***	***177***
NORTHWEST 12TH ST GW Site ID: 0702009 EPA Id: NED981715741	NW 12TH ST & W BOND	NE 1/8 - 1/4 (0.174 mi.)	K47	398

EXECUTIVE SUMMARY

Federal RCRA generators list

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 06/24/2019 has revealed that there are 4 RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NEARNG USPFO-SB AND EPA ID:: NER000000760	***2950-2960 NORTH PARK***	***0 - 1/8 (0.000 mi.)***	***D16***	***157***
155TH AIR REFUELING EPA ID:: NE1572890035	***2420 WEST BUTLER AVE***	***0 - 1/8 (0.000 mi.)***	***B19***	***167***
HILLAERO MODIFICATIO EPA ID:: NED082724071	***2400 WEST ADAMS STRE***	***N 0 - 1/8 (0.010 mi.)***	***E25***	***187***
MOLEX LLC EPA ID:: NED085825321	***1400 W BOND CIRCLE***	***NE 0 - 1/8 (0.105 mi.)***	***I40***	***291***

RCRA-VSQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-VSQG list, as provided by EDR, and dated 06/24/2019 has revealed that there are 2 RCRA-VSQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ARMY AVIATION SUPPOR EPA ID:: NE7210090018	***624 MUNICIPAL AIRPOR***	***0 - 1/8 (0.000 mi.)***	***C23***	***177***
YASUFUKU USA INC EPA ID:: NE0000316794	***3201 NW 12TH SUITE 1***	***NE 1/8 - 1/4 (0.195 mi.)***	***K50***	***401***

State- and tribal - equivalent CERCLIS

NE SHWS: The Nebraska Department of Environmental Quality is providing this information from it's own database. The data, although not verified to be the most current or accurate for any specific site, is generally based on the contents of the physical documents in the files. You may contact the Records Management Unit at (402) 471-3557 to make arrangements to view or to get a photocopy of the physical file.

A review of the NE SHWS list, as provided by EDR, and dated 06/17/2019 has revealed that there are 4 NE SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NEBRASKA AIR NATIONA	***2420 W BUTLER AVE***	***0 - 1/8 (0.000 mi.)***	***B5***	***10***

DEQ Id: 59696

ARMY AVIATION SUPPOR DEQ Id: 58085	***2601 NORTHWEST 25TH***	***0 - 1/8 (0.000 mi.)***	***C12***	***103***
LINCOLN MUNICIPAL AI DEQ Id: 28874	***2400 W ADAMS ST***	***N 0 - 1/8 (0.010 mi.)***	***E24***	***181***
LINCOLN AIR FORCE BA DEQ Id: 64134	***2400 W ADAMS ST***	***N 0 - 1/8 (0.010 mi.)***	***E27***	***238***

State and tribal leaking storage tank lists

NE LAST: The Leaking Aboveground Storage Tanks database

A review of the NE LAST list, as provided by EDR, and dated 07/09/2019 has revealed that there are 3 NE LAST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AIR NAT'L GUARD-LINC File Number: 24023-S-0940 Facility Status: NO FURTHER ACTION (INCIDENT CLOSED)	AIR GUARD BASE	0 - 1/8 (0.000 mi.)	8	101
DUNCAN AVIATION FUEL File Number: 121205-SM-0825 Facility Status: NO FURTHER ACTION (INCIDENT CLOSED)	FUEL FARM, 3500 AVIA	NNE 1/4 - 1/2 (0.264 mi.)	51	405
DUNCAN AVIATION File Number: 06090-DDB-1850 Facility Status: NO FURTHER ACTION (INCIDENT CLOSED)	MUNICIPAL AIRPORT	NNE 1/4 - 1/2 (0.357 mi.)	M54	406

NE LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Environmental Control's Spill Tracking Reports.

A review of the NE LUST list, as provided by EDR, and dated 04/08/2019 has revealed that there are 28 NE LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LINCOLN AIR GRD BLDG File Number: 040996-GW-0935 File Number: 040996-GW-0800 Facility Status: NO FURTHER ACTION (INCIDENT CLOSED)	NEBR ANG BASE BLDG 2	0 - 1/8 (0.000 mi.)	A1	8
AIR NATIONAL GUARD File Number: 073191-RF-1200 Facility Status: NO FURTHER ACTION (INCIDENT CLOSED)	SITE 10 2301 W. ADAM	0 - 1/8 (0.000 mi.)	2	8
AIR NAT GUARD 605-2 File Number: 030696-99-0000 Facility Status: NO FURTHER ACTION (INCIDENT CLOSED)	NEANG #605-2	0 - 1/8 (0.000 mi.)	A3	9
UNITED AIRLINES - AD File Number: AP11957 Facility Status: NO FURTHER ACTION (INCIDENT CLOSED)	LINCOLN MUNICIPAL AI	0 - 1/8 (0.000 mi.)	7	100
BLDG 19-T	LINCOLN AFB #19-T	0 - 1/8 (0.000 mi.)	A9	101

File Number: 022493-NM-1440 Facility Status: NO FURTHER ACTION (INCIDENT CLOSED)				
J-P 4 FUEL FARM File Number: 081591-RF-1200 Facility Status: NO FURTHER ACTION (INCIDENT CLOSED)	2301 WEST ADAMS NO O	0 - 1/8 (0.000 mi.)	A10	102
LINCOLN AIR GRD BLDG File Number: 112295-NH-1300 File Number: 022996-GW-1420 Facility Status: NO FURTHER ACTION (INCIDENT CLOSED)	LINCOLN AIR GRD BASE	0 - 1/8 (0.000 mi.)	A11	102
AMMO SHOP BLDG 2774 File Number: 072693-NM-1208 Facility Status: NO FURTHER ACTION (INCIDENT CLOSED)	AMMO SHOP BLDG 2774	0 - 1/8 (0.000 mi.)	A14	156
LINCOLN AIR GRD BLDG File Number: 071796-99-0004 Facility Status: NO FURTHER ACTION (INCIDENT CLOSED)	NE ANG BASE BLDG 605	0 - 1/8 (0.000 mi.)	A20	172
LINCOLN AIR FORCE BA File Number: 070692-99-0014 Facility Status: NO FURTHER ACTION (INCIDENT CLOSED)	***2400 W ADAMS ST***	***N 0 - 1/8 (0.010 mi.)***	***E27***	***238***
DUNCAN AVIATION File Number: 122997-NM-1000 Facility Status: NEBRASKA RBCA TIER I OR TIER II INVESTIGATION	2400 WEST ADAMS	N 0 - 1/8 (0.010 mi.)	E29	283
UNITED AIRLINES ADF File Number: 041202-99-0000 Facility Status: NO FURTHER ACTION (INCIDENT CLOSED)	2400 E ADAMS	N 0 - 1/8 (0.012 mi.)	E32	285
LINCOLN ELECTRIC SYS File Number: 043091-99-0000 Facility Status: NO FURTHER ACTION (INCIDENT CLOSED)	2300 NW 12 STREET	E 0 - 1/8 (0.022 mi.)	F34	286
SINCLAIR SERVICE STA File Number: 02090-KAM-1400 Facility Status: NO FURTHER ACTION (INCIDENT CLOSED)	2500 NW 12TH	E 0 - 1/8 (0.054 mi.)	G35	286
U STOP #11 File Number: 102595-GW-0830 Facility Status: LUST TRUST FUND PRIORITY LIST - PENDING WORK	***2925 NW 12TH ST***	***ENE 0 - 1/8 (0.065 mi.)***	***H39***	***288***
MOLEX LLC File Number: 080696-GW-0950 Facility Status: NO FURTHER ACTION (INCIDENT CLOSED)	***1400 W BOND CIRCLE***	***NE 0 - 1/8 (0.105 mi.)***	***I40***	***291***
MOLEX File Number: 121394-99-0001 Facility Status: NO FURTHER ACTION (INCIDENT CLOSED)	1400 WEST BOND CIRCL	NE 0 - 1/8 (0.105 mi.)	I42	394
AIRPORT AMOCO File Number: 112095-CT-1040 Facility Status: NO FURTHER ACTION (INCIDENT CLOSED)	1201 W BOND CIRCLE	NE 1/8 - 1/4 (0.156 mi.)	J45	396
FAT DOGS BP File Number: 052793-ML-1000 Facility Status: NEBRASKA RBCA TIER I OR TIER II INVESTIGATION	***3100 NW 12TH ST***	***ENE 1/8 - 1/4 (0.158 mi.)***	***46***	***396***
JERRY JENSEN SHOP File Number: 072099-CT-0900 Facility Status: NO FURTHER ACTION (INCIDENT CLOSED)	1025 WEST NANCE	E 1/8 - 1/4 (0.195 mi.)	L48	400
DUNCAN AVIATION	E OF HANGER	NNE 1/4 - 1/2 (0.357 mi.)	M52	405

File Number: 06246-CCC-1500 Facility Status: NO FURTHER ACTION (INCIDENT CLOSED)				
DUNCAN AVIATION File Number: 08228-BTB-1310 Facility Status: NO FURTHER ACTION (INCIDENT CLOSED)	LINCOLN MUNICIPAL AI	NNE 1/4 - 1/2 (0.357 mi.)	M53	405
DUNCAN AVIATION HANG File Number: 07190-EPP-1030 Facility Status: NO FURTHER ACTION (INCIDENT CLOSED)	LINCOLN MUNICIPAL AI	NNE 1/4 - 1/2 (0.357 mi.)	M55	406
KABREDLOS #104 File Number: 102308-TH-1315 File Number: 11088-DDB-1345 Facility Status: BACKLOGGED - NOT YET INVESTIGATED Facility Status: NO FURTHER ACTION (INCIDENT CLOSED)	***730 W CORNHUSKER HWY***	***E 1/4 - 1/2 (0.386 mi.)***	***56***	***406***
DUNCAN AVIA EAST MAI File Number: AP2574 Facility Status: NO FURTHER ACTION (INCIDENT CLOSED)	3801 NORTH PARK ROAD	NNE 1/4 - 1/2 (0.427 mi.)	N57	408
LIN AIRE FUEL FARM File Number: 071692-MY-1430 Facility Status: NO FURTHER ACTION (INCIDENT CLOSED)	3803 N PARK AVE,LYNN	NNE 1/4 - 1/2 (0.428 mi.)	N58	409
LINCOLN TOWER File Number: 091694-99-0004 Facility Status: NO FURTHER ACTION (INCIDENT CLOSED)	TOWER BLDG AIRPORT T	NNW 1/4 - 1/2 (0.446 mi.)	59	409
UNKNOWN - ACE HARDWA File Number: 101597-PH-1315 Facility Status: NO FURTHER ACTION (INCIDENT CLOSED)	12TH & UPLAND STREET	NE 1/4 - 1/2 (0.480 mi.)	61	413

State and tribal registered storage tank lists

NE UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Environmental Control's Facility and Tank Data.

A review of the NE UST list, as provided by EDR, and dated 07/23/2019 has revealed that there are 14 NE UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NEBRASKA AIR NATIONA Facility ID: 11410	2420 W BUTLER AVE	0 - 1/8 (0.000 mi.)	B4	9
NEBRASKA AIR NATIONA Facility ID: 5055	BLDG 640 2420 W BUTL	0 - 1/8 (0.000 mi.)	B6	100
COMBINED SUPPORT/MAI Tank Id/Tank Status: Currently in Use Facility ID: 11325	2960 N PARK RD	0 - 1/8 (0.000 mi.)	D17	165
LINCOLN AIRPORT AUTH Facility ID: 7306	AIRLINE TERMINAL BLD	0 - 1/8 (0.000 mi.)	21	172
DUNCAN AVIATION HANG Facility ID: 6756	2400 W ADAMS	N 0 - 1/8 (0.010 mi.)	E28	282
UNITED AIRLINES TERM	2400 E ADAMS STE 100	N 0 - 1/8 (0.010 mi.)	E30	283

Facility ID: 11957				
LINCOLN ELECTRIC SYS Facility ID: 10714	2300 NW 12TH ST	E 0 - 1/8 (0.022 mi.)	F33	285
CASEYS GENERAL STORE Tank Id/Tank Status: Currently in Use Facility ID: 11983	2500 NW 12TH ST	E 0 - 1/8 (0.054 mi.)	G37	287
U STOP #11 Tank Id/Tank Status: Currently in Use Facility ID: 6150	***2925 NW 12TH ST***	***ENE 0 - 1/8 (0.065 mi.)***	***H39***	***288***
MOLEX INC Facility ID: 1540	1400 W BOND CIR	NE 0 - 1/8 (0.105 mi.)	I41	393
LINCOLN AIRPORT AUTH Facility ID: 9936	***BLDG #2079 4520 W ST***	***NE 1/8 - 1/4 (0.129 mi.)***	***J43***	***394***
DISCOUNT GAS & FOOD Facility ID: 1131	1201 W BOND CIR	NE 1/8 - 1/4 (0.156 mi.)	J44	395
FAT DOGS BP Tank Id/Tank Status: Currently in Use Facility ID: 474	***3100 NW 12TH ST***	***ENE 1/8 - 1/4 (0.158 mi.)***	***46***	***396***
JERRY L JENSEN Facility ID: 11807	1025 W NANCE	E 1/8 - 1/4 (0.195 mi.)	L49	400

NE AST: The Aboveground Storage Tank database contains registered ASTs. The data come from the Department of Environmental Control's Facility and Tank Data.

A review of the NE AST list, as provided by EDR, and dated 09/03/2019 has revealed that there are 3 NE AST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NEBRASKA AIR GUARD Facility Id: 1080	2585 WEST FURNACE AV	0 - 1/8 (0.000 mi.)	C13	155
AIR NATIONAL GUARD Facility Id: 1055	2700 NW 24TH ST	0 - 1/8 (0.000 mi.)	18	166
NEBRASKA AIR NATIONA Facility Id: 2305-7	***2420 W BUTLER AVE***	***0 - 1/8 (0.000 mi.)***	***B22***	***173***

State and tribal institutional control / engineering control registries

NE INST CONTROL: A list of sites within Nebraska that have institutional controls. According to the Environmental Protection Agency (EPA), institutional controls are "non-engineering measures designed to prevent or limit exposure to hazardous substances left in place at a site, or assure effectiveness of the chosen remedy. Institutional controls are usually, but not always, legal controls, such as easements, restrictive covenants, and zoning ordinances " In short, institutional controls are a type of environmental covenant typically used when property is to be cleanup to a level determined by the potential environmental risks posed by a planned use, rather than to unrestricted use standards. This method of control has proven to be both environmentally and economically beneficial.

A review of the NE INST CONTROL list, as provided by EDR, and dated 03/19/2019 has revealed that

there is 1 NE INST CONTROL site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LINCOLN MUNICIPAL AI	***2400 W ADAMS ST***	***N 0 - 1/8 (0.010 mi.)***	***E24***	***181***

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Landfill / Solid Waste Disposal Sites

NE SWRCY: List of Department of Environmental Protection's Recycling Facilities

A review of the NE SWRCY list, as provided by EDR, and dated 05/07/2018 has revealed that there is 1 NE SWRCY site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
RECYCLING ENTERPRISE	***1200 WEST UPLAND AVE***	***NE 1/4 - 1/2 (0.462 mi.)***	***60***	***409***

Local Lists of Registered Storage Tanks

NE HIST UST: A listing of underground storage tank locations. This listing contains detail information that the UST listing does not. It is no longer updated by the agency. For current information see the UST listing.

A review of the NE HIST UST list, as provided by EDR, and dated 02/28/2005 has revealed that there are 4 NE HIST UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
COMBINED SUPPORT Facility Id: 11325	MAINTENANCE SHOP (CS	0 - 1/8 (0.000 mi.)	15	156
U STOP #11 Facility Id: 6150	***2925 NW 12TH ST***	***ENE 0 - 1/8 (0.065 mi.)***	***H39***	***288***
LINCOLN AIRPORT AUTH Facility Id: 9936	***BLDG #2079 4520 W ST***	***NE 1/8 - 1/4 (0.129 mi.)***	***J43***	***394***
FAT DOGS BP Facility Id: 474	***3100 NW 12TH ST***	***ENE 1/8 - 1/4 (0.158 mi.)***	***46***	***396***

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 06/24/2019 has revealed that

there are 2 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DUNCAN TANK EPA ID:: NE0572890028	***2400 W ADAMS ST***	***N 0 - 1/8 (0.010 mi.)***	***E26***	***225***
LINCOLN MEMORIAL AIR EPA ID:: NEX000504050	2400 W ADAMS ST	N 0 - 1/8 (0.010 mi.)	E31	284

FUDS: The Listing includes locations of Formerly Used Defense Sites Properties where the US Army Corps Of Engineers is actively working or will take necessary cleanup actions.

A review of the FUDS list, as provided by EDR, and dated 05/15/2019 has revealed that there is 1 FUDS site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LINCOLN COMMUN ANX #		NNE 1/2 - 1 (0.918 mi.)	62	413

WI MANIFEST: Hazardous waste manifest information.

A review of the WI MANIFEST list, as provided by EDR, and dated 05/31/2018 has revealed that there are 5 WI MANIFEST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NEARNG USPFO-SB AND ACT Status: A FID: 0 EPA ID: NER000000760	***2950-2960 NORTH PARK***	***0 - 1/8 (0.000 mi.)***	***D16***	***157***
155TH AIR REFUELING ACT Status: A FID: 0 EPA ID: NE1572890035	***2420 WEST BUTLER AVE***	***0 - 1/8 (0.000 mi.)***	***B19***	***167***
ARMY AVIATION SUPPOR ACT Status: A FID: 0 EPA ID: NE7210090018	***624 MUNICIPAL AIRPOR***	***0 - 1/8 (0.000 mi.)***	***C23***	***177***
HILLAERO MODIFICATIO ACT Status: A FID: 0 EPA ID: NED082724071	***2400 WEST ADAMS STRE***	***N 0 - 1/8 (0.010 mi.)***	***E25***	***187***
YASUFUKU USA INC ACT Status: A FID: 0 EPA ID: NE0000316794	***3201 NW 12TH SUITE 1***	***NE 1/8 - 1/4 (0.195 mi.)***	***K50***	***401***

EXECUTIVE SUMMARY

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there are 2 EDR Hist Auto sites within approximately 0.125 miles of the target property.

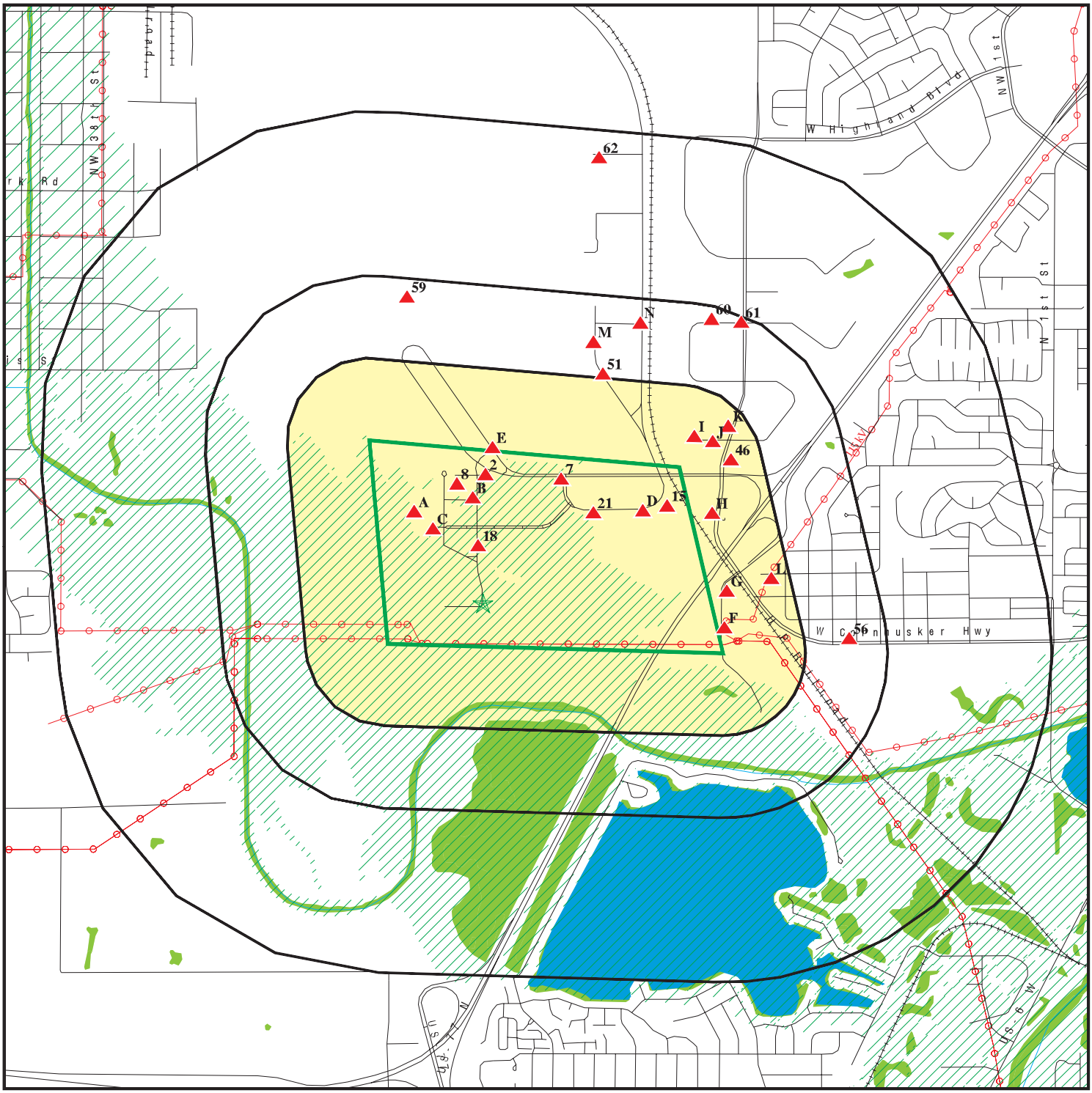
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PIERSON ROGER	2500 NORTHWEST 12TH	E 0 - 1/8 (0.054 mi.)	G36	286
A & S INC	2925 N W 12TH ST	ENE 0 - 1/8 (0.065 mi.)	H38	288

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 16 records.

Site Name	Database(s)
LINCOLN AIR PARK E SUBSTATION	NE SHWS
27TH & CORNHUSKER PWS SITE	NE SHWS
SEARCH RADAR ANNEX	NE SHWS
IMMANUEL CHURCH	NE LUST
LIED CENTER PARKING GARAG	NE LUST
NE ARMY NATIONAL GUARD	NE LUST
AUTO KING	NE LUST
KWIK SHOP 663	NE LUST
CASEYS GENERAL STORE	NE LUST
BNSF HOBSON: 201 N 7TH	NE LUST
CAPITAL BEACH MARINA	NE LUST
LINCOLN AIR PARK E SUBSTATION	FINDS
LINCOLN COUNTRY CLUB	NE RGA LUST
LINCOLN COUNTRY CL	NE RGA LUST
LINCOLN AIR PARK E SUBSTATION	NE RGA HWS
CITY OF LINCOLN	NE RGA LUST

OVERVIEW MAP - 5872123.44S



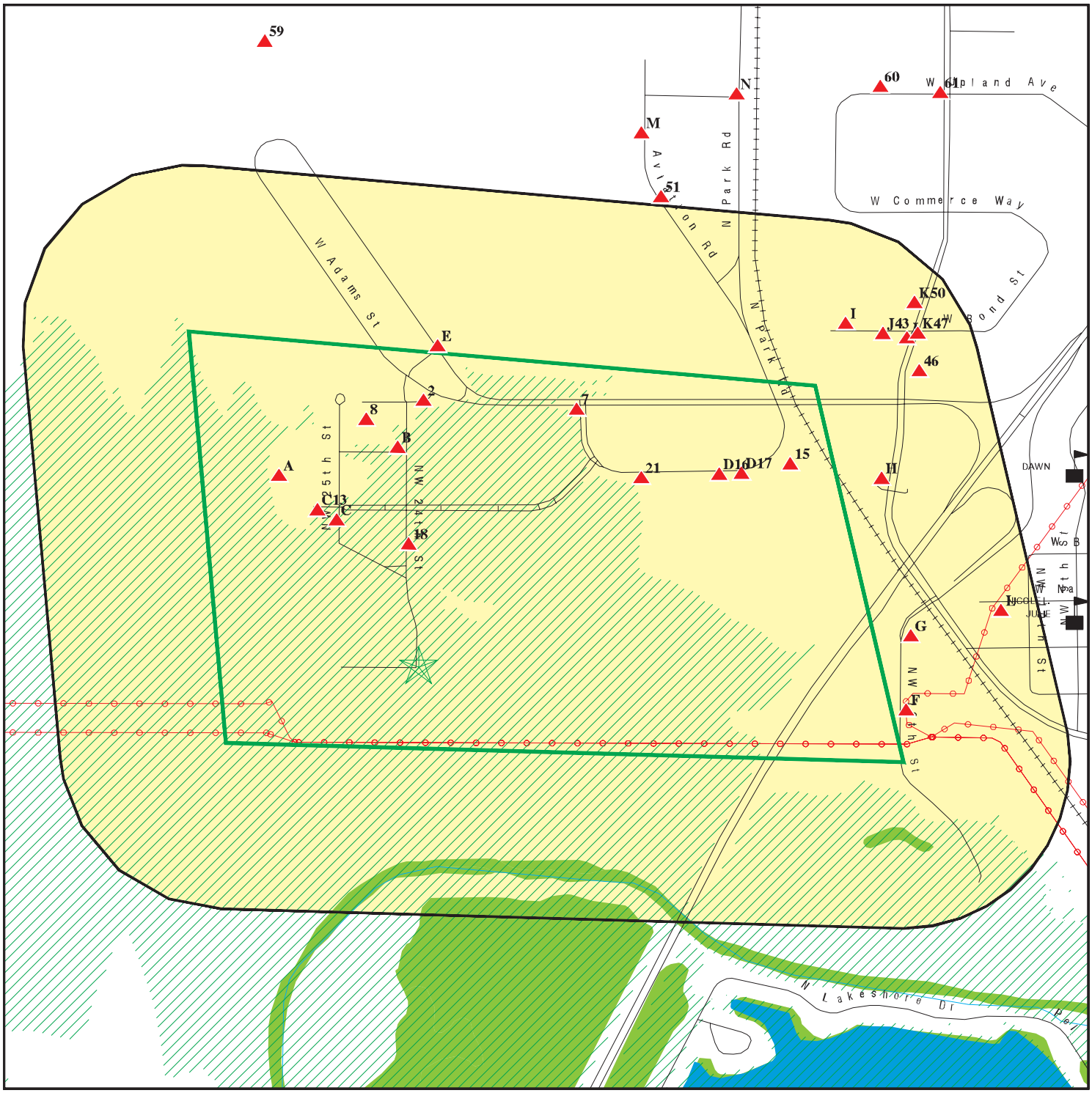
- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Lincoln AASF	CLIENT: AECOM
ADDRESS: 2400 Northwest 24th Street Lincoln NE 68524	CONTACT: Hans Sund INQUIRY #: 5872123.44s
LAT/LONG: 40.837211 / 96.753391	DATE: November 15, 2019 4:15 pm

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DETAIL MAP - 5872123.44S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Lincoln AASF	CLIENT: AECOM
ADDRESS: 2400 Northwest 24th Street Lincoln NE 68524	CONTACT: Hans Sund
LAT/LONG: 40.837211 / 96.753391	INQUIRY #: 5872123.44s DATE: November 15, 2019 4:16 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		1	0	0	NR	NR	1
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		1	1	0	NR	NR	2
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		4	0	NR	NR	NR	4
RCRA-VSQG	0.250		1	1	NR	NR	NR	2
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
NE SHWS	1.000		4	0	0	0	NR	4
State and tribal landfill and/or solid waste disposal site lists								
NE SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
NE LAST	0.500		1	0	2	NR	NR	3
NE LUST	0.500		17	3	8	NR	NR	28
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
NE UST	0.250		10	4	NR	NR	NR	14
NE AST	0.250		3	0	NR	NR	NR	3
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
NE INST CONTROL	0.500		1	0	0	NR	NR	1
State and tribal voluntary cleanup sites								
NE VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
NE BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
NE SWRCY	0.500		0	0	1	NR	NR	1
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
NE HIST UST	0.250		2	2	NR	NR	NR	4
NE HIST AST	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
NE SPILLS	TP		NR	NR	NR	NR	NR	0
NE SPILLS 90	TP		NR	NR	NR	NR	NR	0
NE SPILLS 80	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		2	0	NR	NR	NR	2
FUDS	1.000		0	0	0	1	NR	1
DOD	1.000		0	0	0	0	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
NE AIRS	TP		NR	NR	NR	NR	NR	0
NE ASBESTOS	TP		NR	NR	NR	NR	NR	0
NE DRYCLEANERS	0.250		0	0	NR	NR	NR	0
NE Financial Assurance	TP		NR	NR	NR	NR	NR	0
WI MANIFEST	0.250		4	1	NR	NR	NR	5
NE NPDES	TP		NR	NR	NR	NR	NR	0
NE TIER 2	TP		NR	NR	NR	NR	NR	0
NE UIC	TP		NR	NR	NR	NR	NR	0
MINES MRDS	TP		NR	NR	NR	NR	NR	0

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		2	NR	NR	NR	NR	2
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
NE RGA HWS	TP		NR	NR	NR	NR	NR	0
NE RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		0	53	12	11	1	0	77

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 **LINCOLN AIR GRD BLDG 203** **NE LUST** **S102257849**
NEBR ANG BASE BLDG 203 **N/A**
< 1/8 **LINCOLN, NE**
1 ft.

Site 1 of 7 in cluster A

Relative: Higher
Actual: 1164 ft.

LUST:

Facility Status:	**NO FURTHER ACTION (INCIDENT CLOSED)**
Incident Type:	UNDERGROUND STORAGE TANK - REGULATED UNDER FEDERAL RULES
File Number:	040996-GW-0935
Owner/RP:	NE AIR NATIONAL GUARD
SFM Num:	11410
Owner Mailing Address:	2420 WEST BUTLER AVE
Owner Mailing City:	LINCOLN
Owner Mailing State:	NE
Owner Mailing Zip:	68524
Discovery Date:	10/25/1995
Material Released:	WASTE OIL

Facility Status:	**NO FURTHER ACTION (INCIDENT CLOSED)**
Incident Type:	UNDERGROUND STORAGE TANK - REGULATED UNDER FEDERAL RULES
File Number:	040996-GW-0800
Owner/RP:	NE AIR NATIONAL GUARD
SFM Num:	11410
Owner Mailing Address:	2420 WEST BUTLER AVE
Owner Mailing City:	LINCOLN
Owner Mailing State:	NE
Owner Mailing Zip:	68524
Discovery Date:	10/23/1995
Material Released:	WASTE OIL

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2 **AIR NATIONAL GUARD** **NE LUST** **S101291619**
SITE 10 2301 W. ADAMS **N/A**
< 1/8 **LINCOLN, NE**
1 ft.

Relative: Higher
Actual: 1166 ft.

LUST:

Facility Status:	**NO FURTHER ACTION (INCIDENT CLOSED)**
Incident Type:	UNDERGROUND STORAGE TANK - REGULATED UNDER FEDERAL RULES
File Number:	073191-RF-1200
Owner/RP:	NE AIR NATIONAL GUARD
SFM Num:	NONE
Owner Mailing Address:	2301WEST ADAMS
Owner Mailing City:	LINCOLN
Owner Mailing State:	NE
Owner Mailing Zip:	68524
Discovery Date:	07/26/1991
Material Released:	JP4 JET FUEL-O/W SEPARTOR

A3 **AIR NAT GUARD 605-2** **NE LUST** **S102021203**
NEANG #605-2 **N/A**
< 1/8 **LINCOLN, NE**
1 ft.

Site 2 of 7 in cluster A

Relative: LUST:
Higher

Actual: **Facility Status:** **NO FURTHER ACTION (INCIDENT CLOSED)**
1164 ft. Incident Type: UNDERGROUND STORAGE TANK - REGULATED UNDER FEDERAL RULES
File Number: 030696-99-0000
Owner/RP: NE AIR NATIONAL GUARD
SFM Num: 11410
Owner Mailing Address: 2420 WEST BUTLER AVE
Owner Mailing City: LINCOLN
Owner Mailing State: NE
Owner Mailing Zip: 68524
Discovery Date: 10/23/1995
Material Released: JP-4 JET FUEL

B4 **NEBRASKA AIR NATIONAL GUARD (NEANG)** **NE UST** **U004227703**
2420 W BUTLER AVE **N/A**
< 1/8 **LINCOLN, NE 68524**
1 ft.

Site 1 of 5 in cluster B

Relative: UST:
Higher

Actual: Name: NEBRASKA AIR NATIONAL GUARD (NEANG)
1161 ft. Address: 2420 W BUTLER AVE
City: LINCOLN
Zip: 68524

Facility:
Facility ID: 11410
Owner Name: NEBRASKA AIR NATIONAL GUARD
Owner Address: 2301 WEST ADAMS ST
Owner City,St,Zip: LINCOLN, NE 68524
Tanks Currently In Use: 0
Tanks Temp Out Of Use: 0
Tanks Perm Out Of Use: 0
Tanks Closed In Place: 0
Tanks Removed: 9

Owner: NEBRASKA AIR NATIONAL GUARD
Owner Address: 2301 WEST ADAMS ST
Owner City,St,Zip: LINCOLN, NE 68524
Tank Corrosion Protection: Not reported
Tank Id/Tank Status: 1 / Not Reported
Tank Contents: Not reported
Tank Size: Not reported
Tank Date Installed: Not reported
Tank Type: Not reported
Tank Construction: Not reported
Tank Internal Protection: Not reported
Tank External Protection: Not reported
Tank Secondary Containment: Not reported
Piping Construction Material: Not reported

B5 **NEBRASKA AIR NATIONAL GUARD** **NE SHWS** **S107690815**
2420 W BUTLER AVE **NE AIRS** **N/A**
< 1/8 **LINCOLN, NE 68524** **NE NPDES**
1 ft. **NE TIER 2**
Site 2 of 5 in cluster B **NE UIC**

Relative: Higher
Actual: 1161 ft.

SHWS:
Name: NEBRASKA AIR NATIONAL GUARD
Address: 2420 W BUTLER AVE
City,State,Zip: LINCOLN, NE 68524
DEQ ID: 59696
Program Acronym: SF
Directions to Facility: &2301 W Adams;N of the Creek at Air Nat Guard Base

NE AIRS:
Name: NEBRASKA AIR NATIONAL GUARD
Address: 2420 W BUTLER AVE
City,State,Zip: LINCOLN, NE 68524
Facility ID: 59696
Directions to Facility: &2301 W Adams;N of the Creek at Air Nat Guard Base

NE NPDES:
Name: NEBRASKA AIR NATIONAL GUARD
Address: 2420 W BUTLER AVE
City,State,Zip: LINCOLN, NE 68524
Facility ID: 59696
Directions to Facility: &2301 W Adams;N of the Creek at Air Nat Guard Base
Program Acronym: PCS
Permit: Not reported
Application Number: Not reported
Issued: Not reported
Expires: Not reported
Extended: Not reported

Name: NEBRASKA AIR NATIONAL GUARD
Address: 2420 W BUTLER AVE
City,State,Zip: LINCOLN, NE
Facility ID: 59696
Directions to Facility: Not reported
Program Acronym: Not reported
Permit: NPDES Industrial Stormwater
Application Number: NER910272
Issued: 11/02/2016
Expires: 06/30/2021
Extended: Not reported

TIER 2:
Name: NEBRASKA AIR NATIONAL GUARD
Address: 2420 W BUTLER AVE
City,State,Zip: LINCOLN, NE 68524-1888
Year: 2017
Facility ID: 59696
Location: Not reported
SR No: Not reported
Mailing Name: Not reported
Mailing Address: Not reported
Mailing Address 2: Not reported
Mailing Suite: Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Mailing City:	Not reported
Mailing State:	Not reported
Mailing Zip:	Not reported
Latitude:	Not reported
Longitude:	Not reported

Chemical:

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2017
Gas:	Not reported
SR Number:	Not reported
Case Number:	8006619
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 636
Mix:	Not reported
Max. Amount:	25,000 - 49,999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	10,000 - 24,999
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	GASOLINE
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2017
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	JET FUEL STORAGE FACILITY NEAR BUILDING 668
Mix:	Not reported
Max. Amount:	1,000,000 - 9,999,999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	1,000,000 - 9,999,999
Chemical ID:	3934
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	KEROSENE
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2017
Gas:	Not reported
SR Number:	Not reported
Case Number:	57556
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 668
Mix:	Not reported
Max. Amount:	50,000 - 74,999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	50,000 - 74,999
Chemical ID:	4238
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	PROPYLENE GLYCOL
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	DE-ICING FLUID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2017
Gas:	Not reported
SR Number:	Not reported
Case Number:	7664939
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	BUILDING 651
Mix:	Not reported
Max. Amount:	500 - 999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	100 - 499
Chemical ID:	4302
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	SULFURIC ACID
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	SULFURIC ACID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	7664939
imm:	Not reported
EHS:	Y
Liquid:	Not reported
Storage Location:	BUILDING 651
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4302
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	SULFURIC ACID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	8006619
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 636
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Facid:	59696
conf:	Not reported
del:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	57556
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 668
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4238
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	DE-ICING FLUID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	JET FUEL STORAGE FACILITY NEAR BUILDING 668
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3934
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2006
Gas:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

SR Number:	Not reported
Case Number:	8006619
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	Not reported
Mix:	Not reported
Max. Amount:	4
Pressure:	Not reported
Pure:	Not reported
Average Amount:	4
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	GASOLINE
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2006
Gas:	Not reported
SR Number:	Not reported
Case Number:	57556
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	Not reported
Mix:	Not reported
Max. Amount:	4
Pressure:	Not reported
Pure:	Not reported
Average Amount:	4
Chemical ID:	4238
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	PROPYLENE GLYCOL
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	Not reported
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2006
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

EHS:	Not reported
Liquid:	Not reported
Storage Location:	Not reported
Mix:	Not reported
Max. Amount:	6
Pressure:	Not reported
Pure:	Not reported
Average Amount:	6
Chemical ID:	3934
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	KEROSENE
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2015
Gas:	Not reported
SR Number:	Not reported
Case Number:	7664939
imm:	Not reported
EHS:	Y
Liquid:	Not reported
Storage Location:	BUILDING 651
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4302
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	SULFURIC ACID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2015
Gas:	Not reported
SR Number:	Not reported
Case Number:	8006619
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 636

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2015
Gas:	Not reported
SR Number:	Not reported
Case Number:	57556
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 668
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4238
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	DE-ICING FLUID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2015
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	JET FUEL STORAGE FACILITY NEAR BUILDING 668
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3934
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Name:	NEBRASKA AIR NATIONAL GUARD
Address:	2420 W BUTLER AVE
City,State,Zip:	LINCOLN, NE 68524-1888
Year:	2015
Facility ID:	59696
Location:	&2301 W Adams;N of the Creek at Air Nat Guard Base
SR No:	1782
Mailing Name:	Not reported
Mailing Address:	Not reported
Mailing Address 2:	Not reported
Mailing Suite:	Not reported
Mailing City:	Not reported
Mailing State:	Not reported
Mailing Zip:	Not reported
Latitude:	Not reported
Longitude:	Not reported

Chemical:

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2017
Gas:	Not reported
SR Number:	Not reported
Case Number:	8006619
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 636
Mix:	Not reported
Max. Amount:	25,000 - 49,999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	10,000 - 24,999
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	GASOLINE
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2017
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	JET FUEL STORAGE FACILITY NEAR BUILDING 668
Mix:	Not reported
Max. Amount:	1,000,000 - 9,999,999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	1,000,000 - 9,999,999
Chemical ID:	3934
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	KEROSENE
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2017
Gas:	Not reported
SR Number:	Not reported
Case Number:	57556
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 668
Mix:	Not reported
Max. Amount:	50,000 - 74,999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	50,000 - 74,999
Chemical ID:	4238
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	PROPYLENE GLYCOL
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	DE-ICING FLUID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Facid:	59696
conf:	Not reported
del:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Fire:	Not reported
Year:	2017
Gas:	Not reported
SR Number:	Not reported
Case Number:	7664939
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	BUILDING 651
Mix:	Not reported
Max. Amount:	500 - 999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	100 - 499
Chemical ID:	4302
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	SULFURIC ACID
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	SULFURIC ACID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	7664939
imm:	Not reported
EHS:	Y
Liquid:	Not reported
Storage Location:	BUILDING 651
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4302
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	SULFURIC ACID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2016
Gas:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

SR Number:	Not reported
Case Number:	8006619
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 636
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	57556
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 668
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4238
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	DE-ICING FLUID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

EHS:	Not reported
Liquid:	Not reported
Storage Location:	JET FUEL STORAGE FACILITY NEAR BUILDING 668
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3934
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2006
Gas:	Not reported
SR Number:	Not reported
Case Number:	8006619
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	Not reported
Mix:	Not reported
Max. Amount:	4
Pressure:	Not reported
Pure:	Not reported
Average Amount:	4
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	GASOLINE
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2006
Gas:	Not reported
SR Number:	Not reported
Case Number:	57556
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Mix:	Not reported
Max. Amount:	4
Pressure:	Not reported
Pure:	Not reported
Average Amount:	4
Chemical ID:	4238
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	PROPYLENE GLYCOL
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	Not reported
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2006
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	Not reported
Mix:	Not reported
Max. Amount:	6
Pressure:	Not reported
Pure:	Not reported
Average Amount:	6
Chemical ID:	3934
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	KEROSENE
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2015
Gas:	Not reported
SR Number:	Not reported
Case Number:	7664939
imm:	Not reported
EHS:	Y
Liquid:	Not reported
Storage Location:	BUILDING 651
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4302
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	SULFURIC ACID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2015
Gas:	Not reported
SR Number:	Not reported
Case Number:	8006619
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 636
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2015
Gas:	Not reported
SR Number:	Not reported
Case Number:	57556
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 668
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4238

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	DE-ICING FLUID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2015
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	JET FUEL STORAGE FACILITY NEAR BUILDING 668
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3934
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Name:	NEBRASKA AIR NATIONAL GUARD
Address:	2420 W BUTLER AVE
City,State,Zip:	LINCOLN, NE 68524-1888
Year:	2014
Facility ID:	59696
Location:	&2301 W Adams;N of the Creek at Air Nat Guard Base
SR No:	1824
Mailing Name:	Not reported
Mailing Address:	Not reported
Mailing Address 2:	Not reported
Mailing Suite:	Not reported
Mailing City:	Not reported
Mailing State:	Not reported
Mailing Zip:	Not reported
Latitude:	Not reported
Longitude:	Not reported

Chemical:

Facid:	59696
conf:	Not reported
del:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Fire:	Not reported
Year:	2017
Gas:	Not reported
SR Number:	Not reported
Case Number:	8006619
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 636
Mix:	Not reported
Max. Amount:	25,000 - 49,999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	10,000 - 24,999
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	GASOLINE
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2017
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	JET FUEL STORAGE FACILITY NEAR BUILDING 668
Mix:	Not reported
Max. Amount:	1,000,000 - 9,999,999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	1,000,000 - 9,999,999
Chemical ID:	3934
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	KEROSENE
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2017
Gas:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

SR Number:	Not reported
Case Number:	57556
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 668
Mix:	Not reported
Max. Amount:	50,000 - 74,999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	50,000 - 74,999
Chemical ID:	4238
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	PROPYLENE GLYCOL
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	DE-ICING FLUID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2017
Gas:	Not reported
SR Number:	Not reported
Case Number:	7664939
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	BUILDING 651
Mix:	Not reported
Max. Amount:	500 - 999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	100 - 499
Chemical ID:	4302
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	SULFURIC ACID
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	SULFURIC ACID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	7664939
imm:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

EHS:	Y
Liquid:	Not reported
Storage Location:	BUILDING 651
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4302
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	SULFURIC ACID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	8006619
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 636
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	57556
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 668

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4238
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	DE-ICING FLUID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	JET FUEL STORAGE FACILITY NEAR BUILDING 668
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3934
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2006
Gas:	Not reported
SR Number:	Not reported
Case Number:	8006619
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	Not reported
Mix:	Not reported
Max. Amount:	4
Pressure:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Pure:	Not reported
Average Amount:	4
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	GASOLINE
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2006
Gas:	Not reported
SR Number:	Not reported
Case Number:	57556
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	Not reported
Mix:	Not reported
Max. Amount:	4
Pressure:	Not reported
Pure:	Not reported
Average Amount:	4
Chemical ID:	4238
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	PROPYLENE GLYCOL
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	Not reported
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2006
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	Not reported
Mix:	Not reported
Max. Amount:	6
Pressure:	Not reported
Pure:	Not reported
Average Amount:	6
Chemical ID:	3934

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	KEROSENE
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2015
Gas:	Not reported
SR Number:	Not reported
Case Number:	7664939
imm:	Not reported
EHS:	Y
Liquid:	Not reported
Storage Location:	BUILDING 651
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4302
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	SULFURIC ACID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2015
Gas:	Not reported
SR Number:	Not reported
Case Number:	8006619
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 636
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2015
Gas:	Not reported
SR Number:	Not reported
Case Number:	57556
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 668
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4238
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	DE-ICING FLUID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2015
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	JET FUEL STORAGE FACILITY NEAR BUILDING 668
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3934
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

tempcd:	Not reported
trdsec:	Not reported
Name:	NEBRASKA AIR NATIONAL GUARD
Address:	2420 W BUTLER AVE
City,State,Zip:	LINCOLN, NE 68524-1888
Year:	2013
Facility ID:	59696
Location:	&2301 W Adams;N of the Creek at Air Nat Guard Base
SR No:	1597
Mailing Name:	Not reported
Mailing Address:	Not reported
Mailing Address 2:	Not reported
Mailing Suite:	Not reported
Mailing City:	Not reported
Mailing State:	Not reported
Mailing Zip:	Not reported
Latitude:	Not reported
Longitude:	Not reported

Chemical:

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2017
Gas:	Not reported
SR Number:	Not reported
Case Number:	8006619
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 636
Mix:	Not reported
Max. Amount:	25,000 - 49,999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	10,000 - 24,999
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	GASOLINE
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2017
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

EHS:	Not reported
Liquid:	Not reported
Storage Location:	JET FUEL STORAGE FACILITY NEAR BUILDING 668
Mix:	Not reported
Max. Amount:	1,000,000 - 9,999,999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	1,000,000 - 9,999,999
Chemical ID:	3934
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	KEROSENE
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2017
Gas:	Not reported
SR Number:	Not reported
Case Number:	57556
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 668
Mix:	Not reported
Max. Amount:	50,000 - 74,999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	50,000 - 74,999
Chemical ID:	4238
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	PROPYLENE GLYCOL
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	DE-ICING FLUID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2017
Gas:	Not reported
SR Number:	Not reported
Case Number:	7664939
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	BUILDING 651

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Mix:	Not reported
Max. Amount:	500 - 999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	100 - 499
Chemical ID:	4302
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	SULFURIC ACID
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	SULFURIC ACID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	7664939
imm:	Not reported
EHS:	Y
Liquid:	Not reported
Storage Location:	BUILDING 651
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4302
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	SULFURIC ACID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	8006619
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 636
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	57556
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 668
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4238
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	DE-ICING FLUID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	JET FUEL STORAGE FACILITY NEAR BUILDING 668
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3934

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2006
Gas:	Not reported
SR Number:	Not reported
Case Number:	8006619
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	Not reported
Mix:	Not reported
Max. Amount:	4
Pressure:	Not reported
Pure:	Not reported
Average Amount:	4
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	GASOLINE
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2006
Gas:	Not reported
SR Number:	Not reported
Case Number:	57556
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	Not reported
Mix:	Not reported
Max. Amount:	4
Pressure:	Not reported
Pure:	Not reported
Average Amount:	4
Chemical ID:	4238
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	PROPYLENE GLYCOL
Solid:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	Not reported
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2006
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	Not reported
Mix:	Not reported
Max. Amount:	6
Pressure:	Not reported
Pure:	Not reported
Average Amount:	6
Chemical ID:	3934
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	KEROSENE
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2015
Gas:	Not reported
SR Number:	Not reported
Case Number:	7664939
imm:	Not reported
EHS:	Y
Liquid:	Not reported
Storage Location:	BUILDING 651
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4302
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	SULFURIC ACID
sudrel:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2015
Gas:	Not reported
SR Number:	Not reported
Case Number:	8006619
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 636
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2015
Gas:	Not reported
SR Number:	Not reported
Case Number:	57556
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 668
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4238
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	DE-ICING FLUID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2015
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	JET FUEL STORAGE FACILITY NEAR BUILDING 668
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3934
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Name:	NEBRASKA AIR NATIONAL GUARD
Address:	2420 W BUTLER AVE
City,State,Zip:	LINCOLN, NE 68524-1888
Year:	2007
Facility ID:	59696
Location:	&2301 W Adams;N of the Creek at Air Nat Guard Base
SR No:	1647
Mailing Name:	Not reported
Mailing Address:	Not reported
Mailing Address 2:	Not reported
Mailing Suite:	Not reported
Mailing City:	Not reported
Mailing State:	Not reported
Mailing Zip:	Not reported
Latitude:	Not reported
Longitude:	Not reported

Chemical:

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2017
Gas:	Not reported
SR Number:	Not reported
Case Number:	8006619
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 636

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Mix:	Not reported
Max. Amount:	25,000 - 49,999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	10,000 - 24,999
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	GASOLINE
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2017
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	JET FUEL STORAGE FACILITY NEAR BUILDING 668
Mix:	Not reported
Max. Amount:	1,000,000 - 9,999,999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	1,000,000 - 9,999,999
Chemical ID:	3934
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	KEROSENE
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2017
Gas:	Not reported
SR Number:	Not reported
Case Number:	57556
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 668
Mix:	Not reported
Max. Amount:	50,000 - 74,999
Pressure:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Pure:	Not reported
Average Amount:	50,000 - 74,999
Chemical ID:	4238
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	PROPYLENE GLYCOL
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	DE-ICING FLUID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2017
Gas:	Not reported
SR Number:	Not reported
Case Number:	7664939
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	BUILDING 651
Mix:	Not reported
Max. Amount:	500 - 999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	100 - 499
Chemical ID:	4302
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	SULFURIC ACID
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	SULFURIC ACID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	7664939
imm:	Not reported
EHS:	Y
Liquid:	Not reported
Storage Location:	BUILDING 651
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4302

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	SULFURIC ACID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	8006619
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 636
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	57556
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 668
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4238
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	DE-ICING FLUID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	JET FUEL STORAGE FACILITY NEAR BUILDING 668
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3934
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2006
Gas:	Not reported
SR Number:	Not reported
Case Number:	8006619
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	Not reported
Mix:	Not reported
Max. Amount:	4
Pressure:	Not reported
Pure:	Not reported
Average Amount:	4
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	GASOLINE
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2006
Gas:	Not reported
SR Number:	Not reported
Case Number:	57556
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	Not reported
Mix:	Not reported
Max. Amount:	4
Pressure:	Not reported
Pure:	Not reported
Average Amount:	4
Chemical ID:	4238
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	PROPYLENE GLYCOL
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	Not reported
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2006
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	Not reported
Mix:	Not reported
Max. Amount:	6
Pressure:	Not reported
Pure:	Not reported
Average Amount:	6
Chemical ID:	3934
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	KEROSENE
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2015
Gas:	Not reported
SR Number:	Not reported
Case Number:	7664939
imm:	Not reported
EHS:	Y
Liquid:	Not reported
Storage Location:	BUILDING 651
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4302
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	SULFURIC ACID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2015
Gas:	Not reported
SR Number:	Not reported
Case Number:	8006619
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 636
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Facid:	59696
conf:	Not reported
del:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Fire:	Not reported
Year:	2015
Gas:	Not reported
SR Number:	Not reported
Case Number:	57556
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 668
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4238
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	DE-ICING FLUID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2015
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	JET FUEL STORAGE FACILITY NEAR BUILDING 668
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3934
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Name:	NEBRASKA AIR NATIONAL GUARD
Address:	2420 W BUTLER AVE
City,State,Zip:	LINCOLN, NE 68524-1888
Year:	2008
Facility ID:	59696

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Location:	&2301 W Adams;N of the Creek at Air Nat Guard Base
SR No:	1584
Mailing Name:	Not reported
Mailing Address:	Not reported
Mailing Address 2:	Not reported
Mailing Suite:	Not reported
Mailing City:	Not reported
Mailing State:	Not reported
Mailing Zip:	Not reported
Latitude:	Not reported
Longitude:	Not reported

Chemical:

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2017
Gas:	Not reported
SR Number:	Not reported
Case Number:	8006619
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 636
Mix:	Not reported
Max. Amount:	25,000 - 49,999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	10,000 - 24,999
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	GASOLINE
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2017
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	JET FUEL STORAGE FACILITY NEAR BUILDING 668
Mix:	Not reported
Max. Amount:	1,000,000 - 9,999,999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	1,000,000 - 9,999,999
Chemical ID:	3934

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	KEROSENE
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2017
Gas:	Not reported
SR Number:	Not reported
Case Number:	57556
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 668
Mix:	Not reported
Max. Amount:	50,000 - 74,999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	50,000 - 74,999
Chemical ID:	4238
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	PROPYLENE GLYCOL
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	DE-ICING FLUID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2017
Gas:	Not reported
SR Number:	Not reported
Case Number:	7664939
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	BUILDING 651
Mix:	Not reported
Max. Amount:	500 - 999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	100 - 499
Chemical ID:	4302
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	SULFURIC ACID
Solid:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	SULFURIC ACID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	7664939
imm:	Not reported
EHS:	Y
Liquid:	Not reported
Storage Location:	BUILDING 651
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4302
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	SULFURIC ACID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	8006619
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 636
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	57556
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 668
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4238
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	DE-ICING FLUID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	JET FUEL STORAGE FACILITY NEAR BUILDING 668
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3934
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2006
Gas:	Not reported
SR Number:	Not reported
Case Number:	8006619
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	Not reported
Mix:	Not reported
Max. Amount:	4
Pressure:	Not reported
Pure:	Not reported
Average Amount:	4
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	GASOLINE
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2006
Gas:	Not reported
SR Number:	Not reported
Case Number:	57556
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	Not reported
Mix:	Not reported
Max. Amount:	4
Pressure:	Not reported
Pure:	Not reported
Average Amount:	4
Chemical ID:	4238
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	PROPYLENE GLYCOL
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	Not reported
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Facid:	59696
conf:	Not reported
del:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Fire:	Not reported
Year:	2006
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	Not reported
Mix:	Not reported
Max. Amount:	6
Pressure:	Not reported
Pure:	Not reported
Average Amount:	6
Chemical ID:	3934
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	KEROSENE
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2015
Gas:	Not reported
SR Number:	Not reported
Case Number:	7664939
imm:	Not reported
EHS:	Y
Liquid:	Not reported
Storage Location:	BUILDING 651
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4302
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	SULFURIC ACID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2015
Gas:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

SR Number:	Not reported
Case Number:	8006619
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 636
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2015
Gas:	Not reported
SR Number:	Not reported
Case Number:	57556
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 668
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4238
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	DE-ICING FLUID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2015
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

EHS:	Not reported
Liquid:	Not reported
Storage Location:	JET FUEL STORAGE FACILITY NEAR BUILDING 668
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3934
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Name:	NEBRASKA AIR NATIONAL GUARD
Address:	2420 W BUTLER AVE
City,State,Zip:	LINCOLN, NE 68524-1888
Year:	2009
Facility ID:	59696
Location:	&2301 W Adams;N of the Creek at Air Nat Guard Base
SR No:	1666
Mailing Name:	Not reported
Mailing Address:	Not reported
Mailing Address 2:	Not reported
Mailing Suite:	Not reported
Mailing City:	Not reported
Mailing State:	Not reported
Mailing Zip:	Not reported
Latitude:	Not reported
Longitude:	Not reported

Chemical:

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2017
Gas:	Not reported
SR Number:	Not reported
Case Number:	8006619
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 636
Mix:	Not reported
Max. Amount:	25,000 - 49,999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	10,000 - 24,999
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	GASOLINE
Solid:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2017
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	JET FUEL STORAGE FACILITY NEAR BUILDING 668
Mix:	Not reported
Max. Amount:	1,000,000 - 9,999,999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	1,000,000 - 9,999,999
Chemical ID:	3934
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	KEROSENE
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2017
Gas:	Not reported
SR Number:	Not reported
Case Number:	57556
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 668
Mix:	Not reported
Max. Amount:	50,000 - 74,999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	50,000 - 74,999
Chemical ID:	4238
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	PROPYLENE GLYCOL
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	DE-ICING FLUID
sudrel:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2017
Gas:	Not reported
SR Number:	Not reported
Case Number:	7664939
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	BUILDING 651
Mix:	Not reported
Max. Amount:	500 - 999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	100 - 499
Chemical ID:	4302
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	SULFURIC ACID
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	SULFURIC ACID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	7664939
imm:	Not reported
EHS:	Y
Liquid:	Not reported
Storage Location:	BUILDING 651
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4302
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	SULFURIC ACID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	8006619
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 636
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	57556
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 668
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4238
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	DE-ICING FLUID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Facid:	59696
conf:	Not reported
del:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	JET FUEL STORAGE FACILITY NEAR BUILDING 668
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3934
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2006
Gas:	Not reported
SR Number:	Not reported
Case Number:	8006619
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	Not reported
Mix:	Not reported
Max. Amount:	4
Pressure:	Not reported
Pure:	Not reported
Average Amount:	4
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	GASOLINE
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2006
Gas:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

SR Number:	Not reported
Case Number:	57556
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	Not reported
Mix:	Not reported
Max. Amount:	4
Pressure:	Not reported
Pure:	Not reported
Average Amount:	4
Chemical ID:	4238
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	PROPYLENE GLYCOL
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	Not reported
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2006
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	Not reported
Mix:	Not reported
Max. Amount:	6
Pressure:	Not reported
Pure:	Not reported
Average Amount:	6
Chemical ID:	3934
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	KEROSENE
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2015
Gas:	Not reported
SR Number:	Not reported
Case Number:	7664939
imm:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

EHS:	Y
Liquid:	Not reported
Storage Location:	BUILDING 651
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4302
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	SULFURIC ACID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2015
Gas:	Not reported
SR Number:	Not reported
Case Number:	8006619
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 636
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2015
Gas:	Not reported
SR Number:	Not reported
Case Number:	57556
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 668

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4238
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	DE-ICING FLUID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2015
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	JET FUEL STORAGE FACILITY NEAR BUILDING 668
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3934
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Name:	NEBRASKA AIR NATIONAL GUARD
Address:	2420 W BUTLER AVE
City,State,Zip:	LINCOLN, NE 68524-1888
Year:	2010
Facility ID:	59696
Location:	&2301 W Adams;N of the Creek at Air Nat Guard Base
SR No:	1600
Mailing Name:	Not reported
Mailing Address:	Not reported
Mailing Address 2:	Not reported
Mailing Suite:	Not reported
Mailing City:	Not reported
Mailing State:	Not reported
Mailing Zip:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Latitude:	Not reported
Longitude:	Not reported

Chemical:

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2017
Gas:	Not reported
SR Number:	Not reported
Case Number:	8006619
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 636
Mix:	Not reported
Max. Amount:	25,000 - 49,999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	10,000 - 24,999
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	GASOLINE
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2017
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	JET FUEL STORAGE FACILITY NEAR BUILDING 668
Mix:	Not reported
Max. Amount:	1,000,000 - 9,999,999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	1,000,000 - 9,999,999
Chemical ID:	3934
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	KEROSENE
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2017
Gas:	Not reported
SR Number:	Not reported
Case Number:	57556
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 668
Mix:	Not reported
Max. Amount:	50,000 - 74,999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	50,000 - 74,999
Chemical ID:	4238
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	PROPYLENE GLYCOL
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	DE-ICING FLUID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2017
Gas:	Not reported
SR Number:	Not reported
Case Number:	7664939
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	BUILDING 651
Mix:	Not reported
Max. Amount:	500 - 999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	100 - 499
Chemical ID:	4302
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	SULFURIC ACID
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	SULFURIC ACID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Facid:	59696
conf:	Not reported
del:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	7664939
imm:	Not reported
EHS:	Y
Liquid:	Not reported
Storage Location:	BUILDING 651
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4302
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	SULFURIC ACID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	8006619
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 636
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2016
Gas:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

SR Number:	Not reported
Case Number:	57556
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 668
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4238
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	DE-ICING FLUID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	JET FUEL STORAGE FACILITY NEAR BUILDING 668
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3934
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2006
Gas:	Not reported
SR Number:	Not reported
Case Number:	8006619
imm:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

EHS:	Not reported
Liquid:	Not reported
Storage Location:	Not reported
Mix:	Not reported
Max. Amount:	4
Pressure:	Not reported
Pure:	Not reported
Average Amount:	4
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	GASOLINE
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2006
Gas:	Not reported
SR Number:	Not reported
Case Number:	57556
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	Not reported
Mix:	Not reported
Max. Amount:	4
Pressure:	Not reported
Pure:	Not reported
Average Amount:	4
Chemical ID:	4238
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	PROPYLENE GLYCOL
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	Not reported
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2006
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Mix:	Not reported
Max. Amount:	6
Pressure:	Not reported
Pure:	Not reported
Average Amount:	6
Chemical ID:	3934
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	KEROSENE
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2015
Gas:	Not reported
SR Number:	Not reported
Case Number:	7664939
imm:	Not reported
EHS:	Y
Liquid:	Not reported
Storage Location:	BUILDING 651
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4302
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	SULFURIC ACID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2015
Gas:	Not reported
SR Number:	Not reported
Case Number:	8006619
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 636
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2015
Gas:	Not reported
SR Number:	Not reported
Case Number:	57556
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 668
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4238
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	DE-ICING FLUID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2015
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	JET FUEL STORAGE FACILITY NEAR BUILDING 668
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3934

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Name:	NEBRASKA AIR NATIONAL GUARD
Address:	2420 W BUTLER AVE
City,State,Zip:	LINCOLN, NE 68524-1888
Year:	2011
Facility ID:	59696
Location:	&2301 W Adams;N of the Creek at Air Nat Guard Base
SR No:	1526
Mailing Name:	Not reported
Mailing Address:	Not reported
Mailing Address 2:	Not reported
Mailing Suite:	Not reported
Mailing City:	Not reported
Mailing State:	Not reported
Mailing Zip:	Not reported
Latitude:	Not reported
Longitude:	Not reported

Chemical:

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2017
Gas:	Not reported
SR Number:	Not reported
Case Number:	8006619
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 636
Mix:	Not reported
Max. Amount:	25,000 - 49,999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	10,000 - 24,999
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	GASOLINE
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Facid:	59696
conf:	Not reported
del:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Fire:	Not reported
Year:	2017
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	JET FUEL STORAGE FACILITY NEAR BUILDING 668
Mix:	Not reported
Max. Amount:	1,000,000 - 9,999,999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	1,000,000 - 9,999,999
Chemical ID:	3934
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	KEROSENE
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2017
Gas:	Not reported
SR Number:	Not reported
Case Number:	57556
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 668
Mix:	Not reported
Max. Amount:	50,000 - 74,999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	50,000 - 74,999
Chemical ID:	4238
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	PROPYLENE GLYCOL
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	DE-ICING FLUID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2017
Gas:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

SR Number:	Not reported
Case Number:	7664939
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	BUILDING 651
Mix:	Not reported
Max. Amount:	500 - 999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	100 - 499
Chemical ID:	4302
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	SULFURIC ACID
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	SULFURIC ACID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	7664939
imm:	Not reported
EHS:	Y
Liquid:	Not reported
Storage Location:	BUILDING 651
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4302
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	SULFURIC ACID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	8006619
imm:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 636
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	57556
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 668
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4238
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	DE-ICING FLUID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	JET FUEL STORAGE FACILITY NEAR BUILDING 668

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3934
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2006
Gas:	Not reported
SR Number:	Not reported
Case Number:	8006619
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	Not reported
Mix:	Not reported
Max. Amount:	4
Pressure:	Not reported
Pure:	Not reported
Average Amount:	4
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	GASOLINE
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2006
Gas:	Not reported
SR Number:	Not reported
Case Number:	57556
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	Not reported
Mix:	Not reported
Max. Amount:	4
Pressure:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Pure:	Not reported
Average Amount:	4
Chemical ID:	4238
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	PROPYLENE GLYCOL
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	Not reported
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2006
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	Not reported
Mix:	Not reported
Max. Amount:	6
Pressure:	Not reported
Pure:	Not reported
Average Amount:	6
Chemical ID:	3934
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	KEROSENE
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2015
Gas:	Not reported
SR Number:	Not reported
Case Number:	7664939
imm:	Not reported
EHS:	Y
Liquid:	Not reported
Storage Location:	BUILDING 651
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4302

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	SULFURIC ACID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2015
Gas:	Not reported
SR Number:	Not reported
Case Number:	8006619
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 636
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2015
Gas:	Not reported
SR Number:	Not reported
Case Number:	57556
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 668
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4238
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	DE-ICING FLUID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2015
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	JET FUEL STORAGE FACILITY NEAR BUILDING 668
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3934
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Name:	NEBRASKA AIR NATIONAL GUARD
Address:	2420 W BUTLER AVE
City,State,Zip:	LINCOLN, NE 68524-1888
Year:	2012
Facility ID:	59696
Location:	&2301 W Adams;N of the Creek at Air Nat Guard Base
SR No:	1572
Mailing Name:	Not reported
Mailing Address:	Not reported
Mailing Address 2:	Not reported
Mailing Suite:	Not reported
Mailing City:	Not reported
Mailing State:	Not reported
Mailing Zip:	Not reported
Latitude:	Not reported
Longitude:	Not reported

Chemical:

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2017
Gas:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

SR Number:	Not reported
Case Number:	8006619
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 636
Mix:	Not reported
Max. Amount:	25,000 - 49,999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	10,000 - 24,999
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	GASOLINE
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2017
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	JET FUEL STORAGE FACILITY NEAR BUILDING 668
Mix:	Not reported
Max. Amount:	1,000,000 - 9,999,999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	1,000,000 - 9,999,999
Chemical ID:	3934
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	KEROSENE
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2017
Gas:	Not reported
SR Number:	Not reported
Case Number:	57556
imm:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 668
Mix:	Not reported
Max. Amount:	50,000 - 74,999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	50,000 - 74,999
Chemical ID:	4238
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	PROPYLENE GLYCOL
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	DE-ICING FLUID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2017
Gas:	Not reported
SR Number:	Not reported
Case Number:	7664939
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	BUILDING 651
Mix:	Not reported
Max. Amount:	500 - 999
Pressure:	Not reported
Pure:	Not reported
Average Amount:	100 - 499
Chemical ID:	4302
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	SULFURIC ACID
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	SULFURIC ACID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported

Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	7664939
imm:	Not reported
EHS:	Y
Liquid:	Not reported
Storage Location:	BUILDING 651

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4302
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	SULFURIC ACID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	8006619
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 636
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3850
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	GASOLINE (INCLUDING DIESEL)
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	57556
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	EAST OF BASE MOTOR POOL BUILDING 668
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported

NEBRASKA AIR NATIONAL GUARD (Continued) **S107690815**

Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	4238
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	DE-ICING FLUID
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2016
Gas:	Not reported
SR Number:	Not reported
Case Number:	8008206
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	JET FUEL STORAGE FACILITY NEAR BUILDING 668
Mix:	Not reported
Max. Amount:	Not reported
Pressure:	Not reported
Pure:	Not reported
Average Amount:	Not reported
Chemical ID:	3934
Reaction:	Not reported
Chemical Reporting Name(Active Ingredient):	Not reported
Solid:	Not reported
Storage Code:	Not reported
Chemical Reporting Name(Trade Name):	JET FUEL
sudrel:	Not reported
tempcd:	Not reported
trdsec:	Not reported
Facid:	59696
conf:	Not reported
del:	Not reported
Fire:	Not reported
Year:	2006
Gas:	Not reported
SR Number:	Not reported
Case Number:	8006619
imm:	Not reported
EHS:	Not reported
Liquid:	Not reported
Storage Location:	Not reported
Mix:	Not reported
Max. Amount:	4
Pressure:	Not reported
Pure:	Not reported
Average Amount:	4
Chemical ID:	3850