



13 November 2020

Attention: LTC Michael Dunlap
Commander, 115 CES/Base Civil Engineer, 115 FW
Truax ANGB, WI
Madison, WI

Subject: Soil and Groundwater Sampling Results for Contaminated Materials Management

LTC Dunlap:

The United States Army Corps of Engineers, Omaha District, collected soil and groundwater samples at four locations around the apron repair at Truax ANGB, WI, for the purpose of contaminated materials management. This letter report summarizes the number and locations of the soil and groundwater samples that were collected and their corresponding laboratory results. Soil and groundwater samples were collected in accordance with the Wisconsin Department of Natural Resources guidance which is attached to the end of this report.

On 16 and 17 July 2020, USACE, Omaha District utilized a hollow stem auger Gus Pech 1300C to collect soil and groundwater samples from 4 locations around the apron repair. The sampling locations are shown on the attached Figure, Truax Field Sampling Locations.

At each sampling location, a hollow stem auger boring was advanced to beyond the groundwater table and soil samples were collected using stainless steel split spoons. Soil samples were collected 1 to 2 feet below grade and just above the water table at each location. Generally, groundwater was encountered at the site between 4 to 6 feet below grade. Following collection of the soil samples, a 2-inch temporary well was set in the borehole and a groundwater sample was collected as well. After sample collection, the remaining soil was returned to the borehole and the remainder of the borehole was filled with bentonite grout.

A duplicate soil sample was collected in sampling location #2 in the 2.5-4.5 foot range and a duplicate water sample was collected from sampling location #2. These duplicate samples are indicated on the attached Figure, Truax Field Sampling Locations. Three equipment blanks and one field blank were also collected during the sampling event. A trip blank was also included in the cooler with the groundwater samples for VOCs.

Soil and groundwater samples were immediately transported to APPL Laboratories in coolers on ice following completion of the sampling event. APPL Laboratories received the samples under proper chain of custody protocol. APPL Laboratories completed the analyses for volatile organic

compounds (VOCs). APPL Laboratories subcontracted the PFAS analysis to Pace Analytical in South Carolina as they were approved by the WDNR for PFAS analysis.

In summary, very few VOCs were detected in the soil or groundwater samples. PFAS were detected at low concentrations in all of the soil samples. PFAS were detected at concentrations above the lifetime health advisory limit of 70 parts per trillion in all of the groundwater samples and were at the highest concentrations at boring 3, TR20-03. A summary table of all of the VOCs and PFAS detections is included in the report as well as the laboratory analyses reports and chain of custody. Only detections are included in the table. If no value is on the table, the result for that analyte was non-detect.

If you have any questions regarding this information please do not hesitate to contact me at (402) 995-2783 or christopher.k.neuzil@usace.army.mil. We look forward to continuing to support Truax ANGB projects at the base.



Sincerely,

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Truax Field

Sampling Locations

Legend

-  Air National Guard
-  Sampling Location

TR20-01

TR20-02

TR20-04

TR20-03

Google Earth

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400 ft



**Detectable VOC and PFAS Results
Apron Repair
Truax Field, Wisconsin**

Sample	Matrix	Volatile Organics (mg/Kg soil, µg/L water)						
		1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Naphthalene	p-Isopropyltoluene	n-Propylbenzene	sec-Butylbenzene	Isopropylbenzene
Boring 1								
TF-TR20-01-SO-1-3-071720	soil							
TF-TR20-01-SO-3-5-071720	soil	0.58	0.20 J	0.29	0.15 J			
TF-TR20-01-AQ-071720	water	5.7	2.7	7.1		0.86 J	1.0	
Boring 2								
TF-TR20-02-SO-0.5-2.5-071720	soil							
TF-TR20-02-SO-2.5-4.5-071720	soil							
TF-TR20-12-SO-2.5-4.5-071620 (Duplicate)	soil							
TF-TR20-02-AQ-071720	water			3.5		1.4	1.7	2.0
TF-TR20-12-AQ-071720 (Duplicate)	water			3.4		1.2	1.5	1.6
Boring 3								
TF-TR20-03-SO-0.5-2.5-071720	soil							
TF-TR20-03-SO-2.5-4.5-071720	soil							
TF-TR20-03-AQ-071720	water							
Boring 4								
TF-TR20-04-SO-1-3-071720	soil							
TF-TR20-04-SO-3-5-071720	soil							
TF-TR20-04-AQ-071720	water							
QC								
TF-EB1-AQ-071720	water							
TF-EB2-AQ-071720	water							
TF-EB3-AQ-071720	water							
TF-FB1-AQ-071720	water							



**WISCONSIN AIR NATIONAL GUARD
HEADQUARTERS 115TH FIGHTER WING (ACC) (ANG)
3110 MITCHELL STREET
MADISON WISCONSIN 53704-2529**

22 September 2021

MEMORANDUM FOR WISCONSIN DEPARTMENT OF NATURAL RESOURCES

FROM: 115 CES/CC

SUBJECT: XGFG182005 F-35 Repair Apron, Truax Field. Materials Management Plan
Addendum – BRRTS #: 02-13-585319

1. Pursuant to the 21 July 2021 approved materials management plan, this serves as a project specific addendum for the subject project. This replaces a previous materials management plan approved for subject project on 10 March 2021.
2. Attachment 1 details PFAS sampling results for the subject project. All sample points within the sampling area contained PFAS compromised soils. For materials removed within the project site, materials will be managed as PFAS compromised soil. Materials removed within these boundaries (vertically and horizontally) will be managed in accordance with the 21 July 2021 letter, BRRTS #: 02-13-585319. These sample boundaries represent the entirety of the construction area.
3. If you have any additional questions, please feel free to contact me at 608-286-0010 or michael.dunlap@us.af.mil at any time. Thank you in advance for your review of this material management plan.

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MICHAEL J. DUNLAP, Lt Col, WI ANG
Commander, 115th Civil Engineer Squadron
Base Civil Engineer, 115th Fighter Wing

Attachment:

1. Nov 2020 PFAS Sampling Report Results

Apron Soil sampling results - PFAS

Site	Analyte	CAS Number	Conc. (ng/g)	LOQ	LOD	Qualifiers	WI RCL NI (ng/g)	EPA RSL (ng/g)
TF-TR20-01-SO-1-3-071720	PFOS	1763-23-1	1.2	1.1	0.55		1260	1260
TF-TR20-01-SO-3-5-071720	PFOS	1763-23-1	1.8	1.0	0.50		1260	1260
TF-TR20-02-SO-0.5-2.5-071720	PFOS	1763-23-1	1.0	1.1	0.55	J	1260	1260
TF-TR20-02-SO-2.5-4.5-071720	PFOS	1763-23-1	8.3	1.1	0.55		1260	1260
TF-TR20-02-SO-2.5-4.5-071720	8:2 FTS	39108-34-4	1.9	2.1	1.1	J		
TF-TR20-12-SO-2.5-4.5-071620(Dup)	PFHxS	355-46-4	0.37	1.3	0.65	J		
TF-TR20-12-SO-2.5-4.5-071620(Dup)	PFOSA	754-91-6	1.4	1.3	0.65			
TF-TR20-12-SO-2.5-4.5-071620(Dup)	PFOS	1763-23-1	21	1.3	0.65		1260	1260
TF-TR20-12-SO-2.5-4.5-071620(Dup)	8:2 FTS	39108-34-4	1.1	2.5	1.3	J		
TF-TR20-03-SO-0.5-2.5-071720	PFOS	1763-23-1	0.38	1.00	0.50	J	1260	1260
TF-TR20-03-SO-2.5-4.5-071720	PFBA	375-22-4	0.74	1.2	0.60	J		
TF-TR20-03-SO-2.5-4.5-071720	PFPeA	2706-90-3	1.7	1.2	0.60			
TF-TR20-03-SO-2.5-4.5-071720	PFHxA	307-24-4	1.5	1.2	0.60			
TF-TR20-03-SO-2.5-4.5-071720	PFPeS	2706-91-4	0.29	1.2	0.60	J		
TF-TR20-03-SO-2.5-4.5-071720	PFHpA	375-85-9	1.1	1.2	0.60	J		
TF-TR20-03-SO-2.5-4.5-071720	PFHxS	355-46-4	9.9	1.2	0.60			
TF-TR20-03-SO-2.5-4.5-071720	PFOA	335-67-1	2.2	1.2	0.60		1260	1260
TF-TR20-03-SO-2.5-4.5-071720	PFHpS	375-92-8	0.25	1.2	0.60	J		
TF-TR20-03-SO-2.5-4.5-071720	PFNA	375-95-1	3.2	1.200	0.60			
TF-TR20-03-SO-2.5-4.5-071720	PFOSA	754-91-6	0.39	1.200	0.60	J		
TF-TR20-03-SO-2.5-4.5-071720	PFOS	1763-23-1	36	1.200	0.60		1260	1260
TF-TR20-03-SO-2.5-4.5-071720	PFNS	68259-12-1	0.55	1.2	0.60	J		
TF-TR20-03-SO-2.5-4.5-071720	EtFOSAA	2991-50-6	0.28	1.2	1.2	J		
TF-TR20-03-SO-2.5-4.5-071720	PFDS	335-77-3	0.79	1.2	0.60	J		
TF-TR20-03-SO-2.5-4.5-071720	PFDoS	79780-39-5	0.26	1.2	0.60	J		
TF-TR20-04-SO-1-3-071720	PFOS	1763-23-1	3.5	0.98	0.49		1260	1260
TF-TR20-04-SO-3-5-071720	PFOS	1763-23-1	0.54	1.0	0.50	J	1260	1260

WI RCL NI - Wisconsin DNR Residual Contaminant Level - non-industrial

EPA RSL - US EPA Regional Screening Level (AF guidance for soils and sediments)

LOQ = Limit of quantification

LOD = Limit of detection

J = The amount detected is below the Reporting Limit/LOQ

Q = The ion transition ratio is outside of the acceptance criteria.

Truax Field

Sampling Locations

Legend

-  Air National Guard
-  Sampling Location



400 ft

Google Earth

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