South Dakota Spill Report Form

PRCF #: **Case #:** 2025.011

Reported (MM/DD/YY): 1/30/25	Time: 3:00pm	Recorded By: MJP

A. REPORTER

Reported By: Savvanah Baldwin			
Organization Name: Ellsworth AFB		☐ Discharger ☐ Public ☐ State ☐ Local ☑ Federal	
Phone:	Email:		
Address:			
City:	State:	Zip:	

B. DISCHARGER (Responsible Party) ☐ As Above in A

Name: AERO Simulation Inc			
Address: 8720 E Sligh Ave			
City: Tampa	State: FL	Zip: 33610	
Phone: (813) 628-4447	Email:		

C. INCIDENT DATE & LOCATION ☐ As Above In B

Spill Date: (MM/DD/YY) unknown	Spill Time: unknown		
Street or Approx. Location: 721 Kenny Road			
Survey Description: 44.155410, -103.093968			
City: Ellsworth AFB	County: Meade	State: SD	Zip: 57706

D. MATERIAL

Material type (Code/Name): ☐ Hazardous Substance ☑ Oil ☐ Material Unknown ☐ Other	Quantity Spilled	Spilled in Water	Units (Check one)
Hydraulic Oil	10	N/A	☐ lb. ☐ bbl. ☑ gal. ☐ oth.
			☐ lb. ☐ bbl. ☐ gal. ☐ oth.
			☐ lb. ☐ bbl. ☐ gal. ☐ oth.

E. SOURCE

Source of Spill: ☐ AST ☐ UST ☐ Railway ☐ Transport ☐ Fixed Facility ☐ Pipeline ☐ Highway ☐ Other

Description: Unknown

Regulated Tank Facility: ☐ Tank Facility ID #:

F. MEDIUM

Medium Affected: ☐ Air ☑ Land ☐ Water ☐ Groundwater ☐ Within Facilities Only

Waterway Affected: None

G. CAUSE

Reported Cause: ☐ Transportation Accident ☐ Operational Error ☐ Dumping ☐ Equipment Failure ☐ Natural Phenomenon ☑ Unknown ☐ Other

Description:

H. DAMAGES

# of Injuries: 0 | # of Fatalities: 0

I. ACTIONS

Response Action Taken:
None

K. NOTIFIED

Responding Agency: ☑ DANR ☐ Local ☐ Discharger ☑ Federal ☐ EPA ☐ Other

Agencies Notified:

K. COMMENTS

Comments:

Department of Agriculture and Natural Resources
Inspection, Compliance, and Remediation Program
523 East Capitol Avenue
Pierre, South Dakota 57501

Business Hours M – F 8:00-5:00 pm
Normal Business Hours- (605)773-3296
After Business Hours- (605) 773-3231

DEPARTMENT of AGRICULTURE and NATURAL RESOURCES
JOE FOSS BUILDING
523 E CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

January 31, 2025

Savannah Baldwin
Ellsworth Air Force Base
Water Quality Program Manager
721 Kenny Road
Ellsworth AFB, 57706

Subject: Department of Agriculture and Natural Resources File Number 2025.011: pertaining to a hydraulic oil release at Ellsworth Airforce Base in Meade County, South Dakota.

Dear Ms. Baldwin,

The Department of Agriculture and Natural Resources (DANR) is contacting you regarding the event noted above. A copy of the initial spill report form is enclosed for your review. Based on the information provided, due to unknown reasons, approximately 10 gallons of hydraulic oil was released onto the ground during work being performed by AERO Simulation Inc. staff. For this reason, DANR considers AERO Simulation Inc. responsible for the release. The procedures for performing cleanup in response to releases such as this were developed to prevent contamination of the state's surface water resources. Taking into consideration the work already completed, DANR requires the following:

- Scrape up the impacted soil;
- Provide this office with post cleanup pictures;
- Dispose of contaminated soil and absorbents at a properly permitted disposal facility;
- Provide this office with a copy of the disposal receipts;
- By February 27, 2025, please complete and return the enclosed Written Contamination Incident Follow Up Report form (this is a standard form so you can skip the questions that do not apply to your situation).

Macy Jo Peterson has been assigned as the project manager for this case. If you have questions or need additional information, please do not hesitate to contact her at (605) 773-3296. Thank you for your cooperation and assistance.

Sincerely,

Trish Kindt
Inspection, Compliance, & Remediation Program
(605) 773-3296

cc: Sean Henderson, Meade County Emergency Manager
Quinten Miklos, Air Force

INCIDENT FOLLOW-UP REPORT

RECEIVED
By Macy Jo Peterson at 9:24 am, May 16, 2025

DANR CASE FILE #: 2025.011

RETURN COMPLETED FORM TO:

SOUTH DAKOTA DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES (DANR)
INSPECTION, COMPLIANCE, AND REMEDIATION PROGRAM
JOE FOSS BUILDING
523 EAST CAPITOL AVENUE
PIERRE SD 57501-3182

NAME/TYPE OF PRODUCT SPILLED: HYDRAULIC FLUID

TOTAL AMOUNT OF PRODUCT SPILLED: APPROXIMATELY 10 GALLONS

POUNDS OF ACTIVE INGREDIENT SPILLED (fertilizer/pesticide spills): 0

AMOUNT OF PRODUCT RECOVERED: 10.23 TONS OF SOIL REMOVED AND BACKFILLED

WAS SURFACE WATER OR GROUND WATER IMPACTED BY THE SPILL?: No

SPILL DATE: Jan. 30, 2025 DATE CLEANUP OCCURRED: April 9, 2025

SPILL LOCATION (physical address, directions, distance to nearest intersection or landmark, etc.):

1940 EP Howe St, Bldg 8205 ELLSWORTH, SD 57706

LATITUDE/LONGITUDE: APPROXIMATELY 44.155562°, - 103.093351°

LAND USE (Residential, Commercial, Agricultural, Industrial, Other – describe): B1 FLIGHT SIM BUILDING

RESPONSIBLE PARTY: AERO SIMULATION, INC.

MAILING ADDRESS: 8720 E SLIGH AVE.

CITY/STATE: TAMPA/FLORIDA TELEPHONE NUMBER: 813-628-4447

PROPERTY OWNER: 28 Civil Engineer Squadron

MAILING ADDRESS: 2125 Scott Drive, Suite 2128

CITY/STATE: Ellsworth/ South Dakota TELEPHONE NUMBER: 605-385-2631

CONSULTANT / CLEANUP CONTRACTOR (if applicable): American Engineering Testing

MAILING ADDRESS 1745 Samco Rd.

CITY/STATE: Rapid City/ South Dakota TELEPHONE NUMBER: 800-792-6364

INSURANCE PROVIDER (if applicable):

NAME OF INSURED:

POLICY NUMBER: CLAIM NUMBER:

MAILING ADDRESS:

CITY/STATE: TELEPHONE NUMBER:

INCIDENT FOLLOW-UP REPORT (Page 2 of 2)

DANR CASE FILE #: 2025.011

WAS SOIL EXCAVATED?: YES DIMENSIONS OF EXCAVATION: APPROXIMATELY 9FT X 18FT X 1.5 DEEP

CUBIC YARDS EXCAVATED: APPROXIMATELY 9 CUBIC YARDS

DISPOSAL SITE (Name of Facility): RAPID CITY SOLID WASTE

DISPOSAL DATE: APRIL 9, 2025 ***If soil was disposed, attach copies of disposal receipts***

FERTILIZER/PESTICIDE SPILLS ONLY

WAS CONTAMINATED SOIL/MATERIAL LAND APPLIED?: _____

APPLICATION DATE _____ ***Requires DANR Pre-Approval***

WAS SPILL CONTAINED TO IMMEDIATE AREA?: YES

DISTANCE TO AND NAME OF NEAREST SURFACE WATER (include currently dry perennial streams): Unnamed Tributary of Box Elder Creek, Outfall 006 - 2.3 miles

DISTANCE TO NEAREST WATER WELL (if applicable): 4.1 miles

OWNER OF NEAREST WATER WELL (if applicable): Wesley Rick (Irrigation Well)

DESCRIBE RESPONSE ACTION AND ADDITIONAL WORK PLANNED:

Once spill of hydraulic fluid was identified, petroleum absorbent booms were placed around the spill site. Aero Simulation coordinated efforts to evaluate environmental impact through American Engineering Testing (AET), and efforts to remove impacted soil and backfill area through Lee Earley, Inc. (LEi), both out of Rapid City, SD. AET took initial soil samples to evaluate extent of spill and coordinated final excavation efforts with LEi. LEi completed excavation of impacted soil, which was determined to be an area of approximately 9ft x 18ft and 1.5ft deep, on April 9, 2025. With soil removed from impacted area, AET took further samples and submitted for analysis to ensure no further presence of hydraulic fluid. LEi backfilled excavated area with similar soil type. AET received lab results back noting results did not indicate any detections of petroleum in the soil samples. AET provided a Report of Remedial Excavation to be submitted with this form, with the opinion that no additional assessment or remediation associated with this petroleum release is warranted.

FORM COMPLETED BY: Jesse Helms DATE: May 14, 2025

E-MAIL ADDRESS: j_helms@aerosimulation.com

Original – DANR
Copy – Keep for your records.

DEPARTMENT of AGRICULTURE and NATURAL RESOURCES
JOE FOSS BUILDING
523 E CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

May 30, 2025

Savannah Baldwin
Ellsworth Air Force Base
2125 Scott Drive, Ste 2128
Ellsworth AFB, 57706

RE: Closure designation for DANR File 2025.011: pertaining to a hydraulic oil release at Ellsworth Air Force Base in Meade County, South Dakota.

Dear Ms. Baldwin,

The Department of Agriculture and Natural Resources (DANR) has reviewed the available information regarding the above referenced incident. Based on the information provided, there is no risk to human health or further risk to the environment. Therefore, the DANR is closing this case.

Due to unknown reasons, approximately 10 gallons of hydraulic oil was released onto the ground during work being performed by AERO Simulation Inc. staff. AERO Simulation contracted the services of American Engineering Testing (AET) to oversee assessment and soil management. Post cleanup sample results confirmed soil samples were non detect for hydraulic oil. The impacted area was backfilled with clean soil and the contaminated soil was taken to the Rapid City Solid Waste Facility. If any future problems arise related to this spill, AERO Simulation may be responsible to perform further assessment and cleanup.

If you have questions or concerns about this site's closure designation, DANR spill case file information is publicly available at http://apps.sd.gov/NR42InteractiveMap#, or contact Macy Jo Peterson of my staff at (605) 773-3296. Thank you for your cooperation and willingness to protect South Dakota's natural resources.

Sincerely,

Terry Florentz, P.E.
Administrator
Inspection, Compliance, and Remediation Program

cc: Sean Henderson, Meade County Emergency Manager
Quinten Miklos, Air Force



From: HQS-SMB-NRC@uscg.mil
To: DENR-INCIDENT REPORTS; Kindt, Trish
Subject: [EXT] NRC#1422316
Date: Thursday, January 30, 2025 2:53:41 PM

NATIONAL RESPONSE CENTER 1-800-424-8802
*** For Public Use ***
Information released to a third party shall comply with any
applicable federal and/or state Freedom of Information and Privacy Laws

Incident Report # 1422316

INCIDENT DESCRIPTION

*Report taken by NRC on 30-JAN-25 at 15:41 ET.
Incident Type: FIXED
Incident Cause: UNKNOWN
Affected Area:
Incident was discovered on 30-JAN-25 at 12:00 local incident time.
Affected Medium: SOIL / SOIL

SUSPECTED RESPONSIBLE PARTY

Organization: AERO SIMULATION INC

Type of Organization: PRIVATE ENTERPRISE

INCIDENT LOCATION
ELLSWORTH AIR FORCE BASE County: MEADE
44.155404 N 103.09386 W
State: SD
Latitude: 44° 09' 19" N
Longitude: 103° 05' 38" W

RELEASED MATERIAL(S)
CHRIS Code: OHY Official Material Name: HYDRAULIC OIL
Also Known As:
Qty Released: 10 GALLON(S)

DESCRIPTION OF INCIDENT
CALLER REPORTED THAT A STATIONARY PIECE OF EQUIPMENT ON A MILITARY BASE RELEASED 10 GALLONS OF HYDRAULIC OIL FOR UNKNOWN REASONS ONTO SOIL

INCIDENT DETAILS
Package: N/A
Building ID:
Type of Fixed Object: MILITARY
Power Generating Facility: UNKNOWN
Generating Capacity:
Type of Fuel:
NPDES:

NPDES Compliance: UNKNOWN

IMPACT

Fire Involved: NO Fire Extinguished: UNKNOWN

INJURIES: NO Sent to Hospital: Empl/Crew: Passenger:
FATALITIES: NO Empl/Crew: Passenger: Occupant:
EVACUATIONS:NO Who Evacuated: Radius/Area:

Damages: NO

Closure Type	Description of Closure	Hours Closed	Direction of Closure

Air: NO

Road: NO Major Artery:NO

Waterway:NO

Track: NO

Passengers Transferred: NO
Environmental Impact: NO
Media Interest: NONE

REMEDIAL ACTIONS

RELEASE HAS BEEN SECURED. CLEANING WILL BE CONDUCTED BY THE SRP IN THE NEXT 24 HOURS
Release Secured: YES
Release Rate:
Estimated Release Duration:

WEATHER

ADDITIONAL AGENCIES NOTIFIED

Federal:
State/Local:
State/Local On Scene:
State Agency Number:

NOTIFICATIONS BY NRC

CENTERS FOR DISEASE CONTROL (GRASP)
30-JAN-25 15:52
ASST COMDT FOR INTELLIGENCE (CG-2) (OFFICE OF INTELLIGENCE PLANS AND POLICY (CG-25))
30-JAN-25 15:52
DEPT OF HEALTH AND HUMAN SERVICES (SECRETARY OPERATION CENTER (SOC))
30-JAN-25 15:52
DHS CISA (CISA CENTRAL)
30-JAN-25 15:52
OFFICE OF ENV. POLICY & COMPLIANCE (OEPC REGION 8)
30-JAN-25 15:52
OFFICE OF ENV. POLICY & COMPLIANCE (DOI OFFICE OF ENVIRONMENTAL POLICY AND COMPLIANCE)

30-JAN-25 15:52
DOT CRISIS MANAGEMENT CENTER (MAIN OFFICE)
30-JAN-25 15:52
U.S. EPA VIII (MAIN OFFICE)

U.S. EPA VIII (OIL POLLUTION ACT ENFORCEMENT PRGM)
30-JAN-25 15:52
JOINT TASK FORCE CIVIL SUPPORT (CBRN ANALYSIS CELL)
30-JAN-25 15:52
NOAA RPTS FOR SD (MAIN OFFICE)
30-JAN-25 15:52
PIPELINE & HAZMAT SAFETY ADMIN (HAZARDOUS MATERIAL ACCIDENT INVESTIGATION)
30-JAN-25 15:52
REPORTING PARTY (RP SUBMITTER)
30-JAN-25 15:52
SOUTH DAKOTA DANR (INSPECTION, COMPLIANCE, AND REMEDIATION (PUBLIC))
30-JAN-25 15:52
SOUTH DAKOTA DANR (INSPECTION, COMPLIANCE, AND REMEDIATION)
30-JAN-25 15:52
U.S. NAVY SUPSALV (OIL SPILL RESPONSE)
30-JAN-25 15:52
TRANSPORTATION SECURITY ADMIN (REGION 4 SURFACE OPERATIONS)
30-JAN-25 15:52
USCG DISTRICT 8 (MAIN OFFICE)
30-JAN-25 15:52
US COURTS JUDICIAL SECURITY DIV (FACILITIES AND SECURITY OFFICE (FSO))
30-JAN-25 15:52
USDA FOREST SERVICE (NORTHERN REGION (USFS REGION 1))
30-JAN-25 15:52
USDA FOREST SERVICE (REGION 2 OSC)
30-JAN-25 15:52
NAVY MILITARY SEALIFT COMMAND (N7 ENVIRONMENTAL POLICY)
30-JAN-25 15:52

ADDITIONAL INFORMATION

*** END INCIDENT REPORT #1422316 ***
Report any problems by calling 1-800-424-8802
PLEASE VISIT OUR WEB SITE AT http://nrc.uscg.mil

MIDCONTINENT
TESTING LABORATORIES, INC.

2381 South Plaza Drive P.O. Box 3388 Rapid City, SD 57709
(605) 348-0111 -- www.thechemistrylab.com

RECEIVED
By Macy Jo Peterson at 7:40 am, Apr 09, 2025

Sample Site:	Landfill Disposal
Project Name:	EAFB Flight Sim Excavation
Project Number:	P-0040721
Sampled:	03/17/25 at 12:00 PM by Jeremy Huot
Sample Matrix:	Soil

AET
1745 SAMCO ROAD
RAPID CITY, SD 57702

Lab ID#:	20250319541
Received:	03/19/25 at 09:14 AM by Shela Carpenter
Account:	W1202 - AET - Rapid City

Parameter	Result	Units	DF	MDL	PQL	Method	Analyst	Date
Metals - TCLP								
Arsenic (As)	< 0.005	mg/L	10	0.00036	0.005	EPA SW846 6020	TNA	03/31/25
Barium (Ba)	1.47	mg/L	10	0.00073	0.005	EPA SW846 6020	TNA	03/31/25
Cadmium (Cd)	0.003	mg/L	10	0.000303	0.001	EPA SW846 6020	TNA	03/31/25
Chromium (Cr)	< 0.001	mg/L	10	0.000109	0.001	EPA SW846 6020 DRC	TNA	03/31/25
Lead (Pb)	< 0.001	mg/L	10	0.00015	0.001	EPA SW846 6020	TNA	03/31/25
Mercury (Hg)	< 0.0002	mg/L	1	0.000045	0.0002	EPA SW846 7471B	GRT	04/02/25
Selenium (Se)	< 0.005	mg/L	10	0.001	0.005	EPA SW846 6020	TNA	03/31/25
Silver (Ag)	< 0.001	mg/L	10	0.00014	0.001	EPA SW846 6020	TNA	03/31/25
Semi-Volatile								
Naphthalene-soc	< 25.0	mg/kg	150	10.5	75.0	SW846 8100-S	SAC	03/21/25
TPH(Total Extractable Hydrocarbons)	11300	mg/kg	1	1.29	10.0	SW846 8015B-S	SAC	03/21/25
Extraction								
Extraction TPH/SOC	1.00	none	1			SW846 3550	SAC	03/19/25

Notes:
GC/FID profile indicated the predominant presence of hydrocarbons in the motor oil range reported as Total Extractable Hydrocarbons.

Report Approved By:



Report Approved On: 4/3/2025 10:18:13 AM

MIDCONTINENT
TESTING LABORATORIES, INC.

2381 South Plaza Drive P.O. Box 3388 Rapid City, SD 57709
(605) 348-0111 -- www.thechemistrylab.com

Lab Numbers: 20250319541 - 20250319541

QC Sample Report

Parameter	Lab#	QC Value	Smp Value	Spike	DF	Result	Limits	Method
Spike								
Mercury - D	0331201	0.0020	< 0.0002	0.002	1	100.5 %	(87.59) - (117.2)	EPA 245.1
Silver - D	0321704	7.47	4.90	0.025	100	102.7 %	(69.47) - (116.5)	EPA 200.8
Arsenic - T	0313907	0.228	< 0.005	0.025	10	91.4 %	(76.14) - (118.2)	EPA 200.8
Barium - T	0313907	0.295	0.060	0.025	10	93.9 %	(74.19) - (116.3)	EPA 200.8
Cadmium - T	0313907	0.233	< 0.001	0.025	10	93.2 %	(84.01) - (108.2)	EPA 200.8
Chromium - T	0313907	0.255	< 0.001	0.025	10	101.9 %	(84.46) - (111.4)	EPA 200.8 DRC
Lead - T	0313907	0.2446	< 0.0010	0.025	10	97.9 %	(84.68) - (114.6)	EPA 200.8
Mercury - T	0331301	0.0020	< 0.0002	0.002	1	97.5 %	(86.58) - (115.4)	EPA 245.1
Mercury - T	0331209	0.0020	< 0.0002	0.002	1	100.5 %	(86.58) - (115.4)	EPA 245.1
Selenium - T	0313907	1.17	< 0.005	0.125	10	93.4 %	(77.00) - (115.6)	EPA 200.8
Silver - T	0313907	0.2357	< 0.0010	0.025	10	94.3 %	(79.01) - (112.8)	EPA 200.8
Arsenic - TR	0331210	0.255	< 0.005	0.025	10	102.1 %	(88.20) - (103.1)	EPA 200.8
Arsenic - TR	0331211	0.238	< 0.005	0.025	10	95.2 %	(88.20) - (103.1)	EPA 200.8
Barium - TR	0331210	0.293	0.047	0.025	10	98.4 %	(86.24) - (99.80)	EPA 200.8
Barium - TR	0331211	0.288	0.052	0.025	10	94.4 %	(86.24) - (99.80)	EPA 200.8
Cadmium - TR	0331210	0.251	< 0.000	0.025	10	100.4 %	(88.24) - (105.3)	EPA 200.8
Cadmium - TR	0331211	0.246	< 0.000	0.025	10	98.4 %	(88.24) - (105.3)	EPA 200.8
Chromium - TR	0331210	0.2540	< 0.0010	0.025	10	101.6 %	(85.12) - (109.1)	EPA 200.8 DRC
Chromium - TR	0331211	0.2519	< 0.0010	0.025	10	100.8 %	(85.12) - (109.1)	EPA 200.8 DRC
Lead - TR	0331210	0.2528	< 0.0010	0.025	10	101.1 %	(87.90) - (106.5)	EPA 200.8
Lead - TR	0331211	0.2450	< 0.0010	0.025	10	98.0 %	(87.90) - (106.5)	EPA 200.8
Selenium - TR	0331211	1.18	< 0.002	0.125	10	94.3 %	(85.00) - (108.2)	EPA 200.8
Selenium - TR	0331210	1.27	< 0.002	0.125	10	101.5 %	(85.00) - (108.2)	EPA 200.8
Silver - TR	0331211	0.2472	< 0.0010	0.025	10	98.9 %	(77.89) - (108.4)	EPA 200.8
Silver - TR	0331210	0.2532	< 0.0010	0.025	10	101.3 %	(77.89) - (108.4)	EPA 200.8
Matrix Spike Duplicate								
Mercury - D	0331201	0.0020	0.0020		1	-0.499%	(-10.94) - (11.59)	EPA 245.1
Silver - D	0321704	7.24	7.47		100	-3.06%	(-5.033) - (6.052)	EPA 200.8
Arsenic - T	0313907	0.231	0.228		10	1.29%	(-6.392) - (7.273)	EPA 200.8
Barium - T	0313907	0.299	0.295		10	1.38%	(-5.396) - (7.908)	EPA 200.8
Cadmium - T	0313907	0.235	0.233		10	0.944%	(-5.800) - (7.482)	EPA 200.8
Chromium - T	0313907	0.257	0.255		10	0.763%	(-6.151) - (7.338)	EPA 200.8 DRC
Lead - T	0313907	0.2470	0.2446		10	0.948%	(-5.666) - (6.756)	EPA 200.8
Mercury - T	0331301	0.0019	0.0020		1	-1.55%	(-11.58) - (7.499)	EPA 245.1
Mercury - T	0331209	0.0020	0.0020		1	-2.01%	(-11.58) - (7.499)	EPA 245.1
Selenium - T	0313907	1.16	1.17		10	-0.365%	(-6.024) - (7.394)	EPA 200.8
Silver - T	0313907	0.2376	0.2357		10	0.820%	(-5.625) - (8.418)	EPA 200.8

Lab Numbers: **20250319541 - 20250319541**

Parameter	Lab#	QC Value	Smp Value	Spike	DF	Result	Limits	Method
Matrix Spike Duplicate								
Arsenic - TR	0331210	0.255	0.255		10	0.004%	(-5.792) - (6.160)	EPA 200.8
Arsenic - TR	0331211	0.242	0.238		10	1.46%	(-5.792) - (6.160)	EPA 200.8
Barium - TR	0331211	0.292	0.288		10	1.12%	(-3.321) - (4.879)	EPA 200.8
Barium - TR	0331210	0.296	0.293		10	0.917%	(-3.321) - (4.879)	EPA 200.8
Cadmium - TR	0331210	0.252	0.251		10	0.302%	(-4.325) - (5.663)	EPA 200.8
Cadmium - TR	0331211	0.246	0.246		10	0.061%	(-4.325) - (5.663)	EPA 200.8
Chromium - TR	0331211	0.2620	0.2519		10	3.90%	(-5.063) - (7.391)	EPA 200.8 DRC
Chromium - TR	0331210	0.2452	0.2540		10	-3.55%	(-5.063) - (7.391)	EPA 200.8 DRC
Lead - TR	0331211	0.2469	0.2450		10	0.773%	(-3.501) - (4.535)	EPA 200.8
Lead - TR	0331210	0.2521	0.2528		10	-0.309%	(-3.501) - (4.535)	EPA 200.8
Selenium - TR	0331211	1.22	1.18		10	3.74%	(-5.082) - (5.754)	EPA 200.8
Selenium - TR	0331210	1.26	1.27		10	-0.738%	(-5.082) - (5.754)	EPA 200.8
Silver - TR	0331210	0.2544	0.2532		10	0.465%	(-5.279) - (7.790)	EPA 200.8
Silver - TR	0331211	0.2456	0.2472		10	-0.674%	(-5.279) - (7.790)	EPA 200.8
Initial Calibration Verification								
Arsenic - D		0.050	0.050		1	0.500%	(-10.79) - (8.434)	EPA 200.8
Barium - D		0.050	0.050		1	0.00%	(-8.025) - (7.193)	EPA 200.8
Cadmium - D		0.050	0.050		1	0.640%	(-8.888) - (9.052)	EPA 200.8
Chromium - D		0.047	0.050		1	-5.42%	(-7.440) - (11.20)	EPA 200.8 DRC
Lead - D		0.0511	0.0500		1	2.26%	(-7.438) - (10.73)	EPA 200.8
Selenium - D		0.250	0.250		1	0.100%	(-11.32) - (9.226)	EPA 200.8
Silver - D		0.051	0.050		1	2.34%	(-5.642) - (9.470)	EPA 200.8
Mercury - T		0.0030	0.0030		1	-1.00%	(-7.993) - (11.49)	EPA 245.1
TPH-Diesel		1010	1000		1	1.30%	(-26.32) - (30.17)	SW846 8015B-S
Continuing Calibration Verification								
Arsenic - D		0.047	0.050		1	-5.60%	(-14.81) - (9.596)	EPA 200.8
Arsenic - D		0.047	0.050		1	-6.14%	(-14.81) - (9.596)	EPA 200.8
Arsenic - D		0.049	0.050		1	-2.12%	(-14.81) - (9.596)	EPA 200.8
Arsenic - D		0.045	0.050		1	-9.16%	(-14.81) - (9.596)	EPA 200.8
Arsenic - D		0.046	0.050		1	-7.24%	(-14.81) - (9.596)	EPA 200.8
Arsenic - D		0.050	0.050		1	-0.080%	(-14.81) - (9.596)	EPA 200.8
Arsenic - D		0.050	0.050		1	0.540%	(-14.81) - (9.596)	EPA 200.8
Barium - D		0.048	0.050		1	-4.88%	(-11.28) - (9.078)	EPA 200.8
Barium - D		0.048	0.050		1	-4.28%	(-11.28) - (9.078)	EPA 200.8
Barium - D		0.050	0.050		1	0.020%	(-11.28) - (9.078)	EPA 200.8
Barium - D		0.049	0.050		1	-1.12%	(-11.28) - (9.078)	EPA 200.8
Barium - D		0.049	0.050		1	-1.54%	(-11.28) - (9.078)	EPA 200.8
Barium - D		0.048	0.050		1	-3.32%	(-11.28) - (9.078)	EPA 200.8
Barium - D		0.050	0.050		1	0.400%	(-11.28) - (9.078)	EPA 200.8
Cadmium - D		0.049	0.050		1	-2.98%	(-8.754) - (6.456)	EPA 200.8
Cadmium - D		0.047	0.050		1	-5.54%	(-8.754) - (6.456)	EPA 200.8
Cadmium - D		0.049	0.050		1	-2.18%	(-8.754) - (6.456)	EPA 200.8
Cadmium - D		0.050	0.050		1	0.360%	(-8.754) - (6.456)	EPA 200.8
Cadmium - D		0.049	0.050		1	-1.32%	(-8.754) - (6.456)	EPA 200.8

Lab Numbers: **20250319541 - 20250319541**

Parameter	Lab#	QC Value	Smp Value	Spike	DF	Result	Limits	Method	
Continuing Calibration Verification									
Cadmium - D		0.050	0.050		1	0.240%	(-8.754) - (6.456)	EPA 200.8	
Cadmium - D		0.049	0.050		1	-2.90%	(-8.754) - (6.456)	EPA 200.8	
Chromium - D		0.051	0.050		1	1.66%	(-12.12) - (7.895)	EPA 200.8 DRC	
Chromium - D		0.051	0.050		1	1.40%	(-12.12) - (7.895)	EPA 200.8 DRC	
Chromium - D		0.051	0.050		1	1.66%	(-12.12) - (7.895)	EPA 200.8 DRC	
Chromium - D		0.053	0.050		1	5.96%	(-12.12) - (7.895)	EPA 200.8 DRC	
Chromium - D		0.053	0.050		1	5.00%	(-12.12) - (7.895)	EPA 200.8 DRC	
Chromium - D		0.052	0.050		1	2.94%	(-12.12) - (7.895)	EPA 200.8 DRC	
Chromium - D		0.051	0.050		1	2.56%	(-12.12) - (7.895)	EPA 200.8 DRC	
Lead - D		0.0504	0.0500		1	0.800%	(-6.712) - (7.988)	EPA 200.8	
Lead - D		0.0494	0.0500		1	-1.22%	(-6.712) - (7.988)	EPA 200.8	
Lead - D		0.0495	0.0500		1	-1.06%	(-6.712) - (7.988)	EPA 200.8	
Lead - D		0.0498	0.0500		1	-0.380%	(-6.712) - (7.988)	EPA 200.8	
Lead - D		0.0478	0.0500		1	-4.34%	(-6.712) - (7.988)	EPA 200.8	
Lead - D		0.0490	0.0500		1	-1.98%	(-6.712) - (7.988)	EPA 200.8	
Lead - D		0.0501	0.0500		1	0.120%	(-6.712) - (7.988)	EPA 200.8	
Selenium - D		0.237	0.250		1	-5.20%	(-13.08) - (6.186)	EPA 200.8	
Selenium - D		0.246	0.250		1	-1.41%	(-13.08) - (6.186)	EPA 200.8	
Selenium - D		0.240	0.250		1	-3.88%	(-13.08) - (6.186)	EPA 200.8	
Selenium - D		0.247	0.250		1	-1.09%	(-13.08) - (6.186)	EPA 200.8	
Selenium - D		0.232	0.250		1	-7.09%	(-13.08) - (6.186)	EPA 200.8	
Selenium - D		0.228	0.250		1	-8.75%	(-13.08) - (6.186)	EPA 200.8	
Selenium - D		0.248	0.250		1	-0.688%	(-13.08) - (6.186)	EPA 200.8	
Silver - D		0.049	0.050		1	-3.06%	(-13.28) - (9.723)	EPA 200.8	
Silver - D		0.050	0.050		1	0.600%	(-13.28) - (9.723)	EPA 200.8	
Silver - D		0.050	0.050		1	-0.600%	(-13.28) - (9.723)	EPA 200.8	
Silver - D		0.048	0.050		1	-3.16%	(-13.28) - (9.723)	EPA 200.8	
Silver - D		0.047	0.050		1	-5.30%	(-13.28) - (9.723)	EPA 200.8	
Silver - D		0.048	0.050		1	-3.28%	(-13.28) - (9.723)	EPA 200.8	
Silver - D		0.049	0.050		1	-1.30%	(-13.28) - (9.723)	EPA 200.8	
Silver - D		0.051	0.050		1	1.10%	(-13.28) - (9.723)	EPA 200.8	
Silver - D		0.050	0.050		1	-0.220%	(-13.28) - (9.723)	EPA 200.8	
Mercury - T		0.0019	0.0020		1	-3.50%	(-5.117) - (4.577)	EPA 245.1	
Mercury - T		0.0018	0.0020		1	-8.50%	(-5.117) - (4.577)	EPA 245.1	X
- Recovery was within 10% of expected value									
Mercury - T		0.0010	0.0010		1	1.00%	(-5.117) - (4.577)	EPA 245.1	
Mercury - T		0.0019	0.0020		1	-4.50%	(-5.117) - (4.577)	EPA 245.1	
Mercury - T		0.0019	0.0020		1	-3.50%	(-5.117) - (4.577)	EPA 245.1	
Mercury - T		0.0050	0.0050		1	0.400%	(-5.117) - (4.577)	EPA 245.1	
Mercury - T		0.0020	0.0020		1	-2.00%	(-5.117) - (4.577)	EPA 245.1	
Mercury - T		0.0020	0.0020		1	-1.50%	(-5.117) - (4.577)	EPA 245.1	
Mercury - T		0.0019	0.0020		1	-4.00%	(-5.117) - (4.577)	EPA 245.1	
Naphthalene-soc		23.2	25.0		1	-7.20%	(-41.10) - (29.14)	SW846 8100-S	
Naphthalene-soc		20.0	25.0		1	-20.0 %	(-41.24) - (28.68)	SW846 8100-S	
TPH-Diesel		1050	1000		1	5.40%	(-15.57) - (22.16)	SW846 8015B-S	
TPH-Diesel		976	1000		1	-2.40%	(-15.33) - (22.36)	SW846 8015B-S	

Lab Numbers: **20250319541 - 20250319541**

Parameter	Lab#	QC Value	Smp Value	Spike	DF	Result	Limits	Method	
Lab Control Spike									
Naphthalene-soc		1.99	0.00	2.50	1	79.6 %	(49.86) - (85.90)	SW846 8100-S	
TPH-Diesel		174	0.00	200	1	87.0 %	(58.65) - (103.9)	SW846 8015B-S	
Initial Calibration Blank									
Mercury - T		0.0000	0.000		1	0.00001	(-0.0003) - (0.0002)	EPA 245.1	
Continuing Calibration Blank									
Arsenic - D		0.000	0.00		1	0.00003	(-0.0001) - (0.0001)	EPA 200.8	
Barium - D		0.000	0.00		1	0.00002	(0.0000) - (0.0000)	EPA 200.8	
Cadmium - D		0.000	0.00		1	0.00004	(0.0000) - (0.0000)	EPA 200.8	X
- Blank value is less than half of the reporting limit									
Chromium - D		0.000	0.00		1	0.00004	(0.0000) - (0.0001)	EPA 200.8 DRC	
Lead - D		0.0000	0.000		1	0.00002	(0.0000) - (0.0000)	EPA 200.8	
Selenium - D		0.000	0.00		1	0.00021	(-0.0001) - (0.0005)	EPA 200.8	
Silver - D		0.000	0.00		1	0.00002	(0.0000) - (0.0000)	EPA 200.8	
Mercury - T		0.000	0.000		1	0	(-0.0001) - (0.0001)	EPA 245.1	
Mercury - T		0.0000	0.000		1	-0.00004	(-0.0001) - (0.0001)	EPA 245.1	
Mercury - T		0.000	0.000		1	0	(-0.0001) - (0.0001)	EPA 245.1	
Mercury - T		0.0000	0.000		1	0.00001	(-0.0001) - (0.0001)	EPA 245.1	
Mercury - T		0.0000	0.000		1	0.00001	(-0.0001) - (0.0001)	EPA 245.1	
Mercury - T		0.0000	0.000		1	-0.00003	(-0.0001) - (0.0001)	EPA 245.1	
Lab Reagent Blank									
Naphthalene-soc		0.00	0.00		1	0	(0.000) - (0.000)	SW846 8100-S	
TPH-Diesel		0.00	0.00		1	0	(-6.889) - (9.430)	SW846 8015B-S	

Approved By: 

Approved On: 04/03/2025 10:18 AM

AMERICAN ENGINEERING TESTING, INC.

☐ St. Paul Office
550 Cleveland Ave. N.
St. Paul, MN 55114
651-659-9001
651-659-1379 (fax)

☒ OTHER Rapid City Office

ADDRESS: 1745 Samco Road
Rapid City, SD

PHONE: 605-388-0029

16262

PAGE 1 OF 1

AET PROJECT NUMBER P-0040721 P.O.# 18-1123

PROJECT NAME/LOCATION EAFB Flight Sim Excavation

AET PROJECT MANAGER Jeremy Huot

SEND REPORT TO Jeremy Huot & Brad Bishop

SAMPLED BY (PRINT) Jeremy Huot

SAMPLER SIGNATURE

REQUESTED TURNAROUND TIME: ☒ NORMAL ☐ RUSH

DATE NEEDED BY: April 3, 2025

ITEM#	SAMPLE DESCRIPTION	DATE	TIME	SAMPLE TYPE	NO. OF CONTAINERS	PRESERVATIVES: UNPRESERVED	PRESERVATIVES: MeOH	PRESERVATIVES: HCL	PRESERVATIVES: H_2SO_4	PRESERVATIVES: HNO_3	FIELD FILTERED Y/N	ANALYSIS: TPH-TEH	ANALYSIS: Naphthalene	ANALYSIS: TCLP 8 RCRA Metals	REMARKS
1	Landfill Disposal	3/17/25	12:00	Soil	2	X					N	X	X		20250319541

NOTE: 4.5°C

ITEM NUMBER	RELINQUISHED BY/AFFILIATION	ACCEPTED BY/AFFILIATION	DATE	TIME
1	AET		3/19/25	9:14

MIDCONTINENT TESTING LABORATORIES

SAMPLE RECEIPT CHECKLIST

Company Name AET

Date/Time Received 3/19/25 (Date) 0914 (Time)

Project EAFB Flight Sim Excavation

Received by Sheila

Lab Number(s) 20250319541

Carrier Name Hand Delivered

UNPACKING

Yes	No		Initials
☑	☐	1. Shipping container in good condition?	
☐	☑	2. Custody seals present on shipping container? Condition: Intact ☐ Broken ☐	
☑	☐	3. Ice / Blue Ice (circle one) present in shipping container? Container(s) Temp. 1. 4.5°C 2. _____ 3. _____ 4. _____	
☐	☑	4. Bottles broken and/or leaking? (Photograph broken bottles.)	
☐	☑	5. Custody seals on sample bottles? Condition: Intact ☐ Broken ☐	

LABELING

Yes	No		Initials
☑	☐	6. Chain of custody Present?	
☑	☐	7. Chain of custody includes signatures, dates, and times when relinquished and received?	
☑	☐	8. Chain of custody agrees with bottle count?	
☑	☐	9. Chain of custody agrees with labels?	
☑	☐	10. Samples received within holding times?	
☑	☐	11. Samples in proper container?	
☑	☐	12. Sufficient sample volume for indicated tests?	

PRESERVATIVE

Yes	No		Initials	Yes	No		Initials
☐	☐	13. Metals bottle(s) pH < 2?		☐	☐	17. TOC bottle(s) pH < 2?	
☐	☐	14. Nutrient bottle(s) pH < 2?		☐	☐	18. Oil & Grease bottle(s) pH < 2?	
☐	☐	15. Cyanide bottle(s) pH > 12?		☐	☐	19. Volatiles pH < 2?	
☐	☐	16. Sulfide bottle(s) pH > 9?					

COMMENTS:

REPORT OF REMEDIAL EXCAVATION

Flight Sim Building Hydraulic Oil Release
Lat/Long: 44.155562°, -103.093351°
Ellsworth Air Force Base, South Dakota

AET Project No. P-0040721
SDDANR Spill No. 2025.011

Date:
May 14, 2025

Prepared for:
Aero Simulations, Inc.
8720 East Sligh Avenue
Tampa, Florida 33610

Geotechnical • Materials
Forensic • Environmental
Building Technology
Petrography/Chemistry

American Engineering Testing
1745 Samco Road
Rapid City, SD 57702
TeamAET.com • 800.792.6364

May 14, 2025

Aero Simulations, Inc.
8720 East Sligh Avenue
Tampa, Florida 33610

Attn: Mr. Jesse Helms
j_helms@aerosimulation.com

Report of Remedial Excavation
Flight Sim Building Hydraulic Oil Release
Lat/Long: 44.155562°, -103.093351°
Ellsworth Air Force Base, South Dakota
AET Project No. P-0040721
SDDANR Spill No. 2025.011

Dear Mr. Helms:

American Engineering Testing (AET) has completed the enclosed report of Remedial Excavation at the above referenced site. These services were performed according to our proposal dated February 6, 2025. The attached report is being submitted as an E-document. If you require hard copies of the report, please let us know and they will be made available.

We appreciate the opportunity to have been of service to you on this project. If you have any questions regarding the information presented in this report or if we can be of additional assistance, please contact me.

Sincerely,
American Engineering Testing



Bradley P. Bishop, CPRR
Senior Environmental Project Manager
bbishop@teamAET.com
Office: (605) 388-0029

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2. Site Location Aerial Image
3. Site Sketch with Excavation Extents and Soil Sample Locations
B. Methodologies
C. Landfill Soil Disposal Ticket
D. Analytical Reports

REPORT OF REMEDIAL EXCAVATION
FLIGHT SIM BUILDING HYDRAULIC OIL RELEASE
LAT/LONG: 44.155562°, -103.093351°
ELLSWORTH AIR FORCE BASE, SOUTH DAKOTA
AET PROJECT NO. P-0040721

1. INTRODUCTION

1.1 Site Description

The site is located adjacent to the flight simulator (sim) building situated in the northern vicinity of Ellsworth Airforce Base (EAFB) near Box Elder, South Dakota (SD) (Figures 1 and 2, Appendix A). The approximate latitude and longitude of the site are 44.155562°, -103.093351°. The Public Land Survey System (PLSS) location of the site is described as the southeast ¼ of the southeast ¼ of Section 01, Township 2 North, Range 8 East, Black Hills Principal Meridian, Meade County, SD.

1.2 Background Information

American Engineering Testing, Inc. (AET) was contracted by Aero Simulation, Inc. to perform an initial site visit, remedial excavation observations, soil screening/sampling, and reporting associated with a petroleum release consisting of hydraulic oil adjacent to the flight sim building at EAFB. The release was the result of a leaking piece of site equipment at the flight sim building. The release was reported on January 30, 2025, by Savannah Baldwin of EAFB. According to information obtained from the initial spill report form found on the SD Department of Agriculture and Natural Resources (SDDANR) online database, the petroleum release was estimated to be approximately 10 gallons of petroleum product.

1.3 Scope of Work

The scope of work we performed on this project consisted of the following items:

1. mobilize a licensed petroleum release remediator from our Rapid City, SD office for an initial site visit to observe the location and extents of the petroleum release areas, document site conditions, and collect a representative composite sample of the petroleum hydrocarbon impacted soil to be analyzed for the presence and concentration of total extractable hydrocarbons (TEH), naphthalene, and toxicity characteristic leaching procedure (TCLP) resource conservation and recovery act (RCRA) 8 metals;

2. serve as the regulatory liaison with SDDANR, Ellsworth Air Force Base (EAFB),

and the Client during the project;

3. mobilize a licensed petroleum release remediator to the project site to meet with an excavation contractor (LEi) to observe excavation of the petroleum impacted soil area;

4. collect two clearance grab soil samples from the terminal depth of the excavation floor and submit each sample to be analyzed for the presence and concentration of TEH and naphthalene;

5. coordinating proper disposal of the petroleum impacted soil with Rapid City Landfill; and

6. based on the project data collected, preparing a report for the project which includes the data collected, and our conclusions and recommendations based on that data compared to the Administrative Rules of SD (ARSD).

2. PROJECT RESULTS

2.1 Field and Excavation Observations

AET personnel mobilized to the site on February 5, 2025, to inspect the hydraulic oil release. Upon arrival at the site, AET personnel observed minor visible impacts to the surface. On March 17, 2025, AET personnel collected a composite soil sample from the impacted area and analyzed the sample for TEH, naphthalene, and TCLP RCRA 8 metals. This sample provided laboratory analysis required for disposal at the Rapid City Landfill.

AET personnel remobilized to the site on April 9, 2025, to meet with LEi to observe remedial excavation activities in the vicinity of the petroleum release. The impacted area was excavated to a depth of approximately 1.5 feet (ft) below grade (bg). The excavation area consisted of a 9 ft by 18 ft area.

The impacted area was defined by petroleum absorbent booms placed around the surface release during the initial site characterization visit. Additionally, a photoionization detector (PID) was utilized in an attempt to detect petroleum organic vapors, using the

methods described in Appendix B; however, due to the low volatile nature of hydraulic fluid, no organic vapors were detected. A table listing the soil screening locations and organic vapor screening results is included on Figure 3.

Petroleum impacts were limited to the lateral area previously discussed and were observed to penetrate no deeper than 1.5 ft bg. After removal of impacted soil was completed, LEi backfilled all areas of the excavation with clean soil to match previous surface conditions.

During the excavation process, impacted soil was removed from the release area and hauled to the Rapid City Landfill by LEi. According to the Rapid City Landfill's scale, approximately 10.23 tons of petroleum impacted soil was transported from the site and disposed of at the Rapid City Landfill. The soil disposal ticket obtained from the Rapid City Landfill is presented in Appendix C.

2.2 Soil Sample Analytical Results

One representative composite soil sample was collected from the petroleum release area prior to excavation activities to provide the laboratory analytical documentation required for disposal at the Rapid City Landfill. The soil was analyzed for the presence and concentration of TEH, naphthalene, and TCLP RCRA 8 metals, using methods described in Appendix B. Two additional grab soil samples (S-1 and S-2) were collected from the terminal depth of the remedial excavation at locations shown on Figure 3 once excavation activities had concluded. S-1 and S-2 were submitted as clearance samples to provide documentation that impacted soil exceeding the SDDANR ARSD Tier I Trigger/Action Levels had been removed from the release area. The laboratory analytical results for the collected samples are presented in Table 1, below. For comparison, the SDDANR ARSD Tier 1 Trigger/Action Levels are also presented with the analytical results in Table 1. The analytical laboratory reports are presented in Appendix D.

Review of the analytical results for the composite sample collected for landfill disposal approval indicate that the hydraulic oil release resulted in petroleum impacted soil in exceedance of the respective SDDANR ARSD Tier 1 Trigger Level for TEH.

Review of the analytical results for the samples collected at the terminal depth of the remedial excavation indicate that all petroleum constituent concentrations were below their respective practical quantitation limit.

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS[1]

Sample ID (Date Collected)	Depth[2]	Naphthalene	TEH
Landfill Disposal (03/17/25)	0.0 - 0.5	<25.0[3]	***11,300***[4]
S-1 (04/09/25)	1.5	<0.500	<10.0
S-2 (04/09/25)	1.5	<0.500	<10.0
Tier 1 Action Levels		**25**	**500**[5]

[1] All values are in mg/kg, which is equivalent to parts per million, unless otherwise noted.
[2] Depths measured in feet below ground surface.
[3] "<" denotes analyte not detected at or above the practical quantitation limit following the "less than" symbol.
[4] Concentrations in ***bold italics*** exceed Tier 1 Action Level.
[5] Total hydrocarbon concentration is considered a "trigger level" to require a more thorough evaluation of the site and is not intended to be a Tier 1 cleanup goal.

3.0 CONCLUSIONS & RECOMMENDATIONS

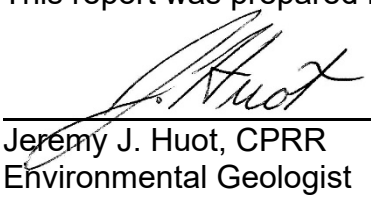
Upon review of the excavation field observations and clearance sample analytical results, it is AET's opinion that excavation activities at the site were successful in removing the petroleum impacted soil associated with the hydraulic oil release.

Based on this information, it is AET's opinion that no additional assessment or remediation associated with this petroleum release is warranted and the SDDANR should consider this site for closure. AET recommends that a copy of this report be submitted to the SDDANR for their review.

4.0 STANDARD OF CARE

The conclusions and recommendations contained in this report represent our professional opinions. These opinions were arrived at in accordance with currently accepted hydrogeologic and engineering practices at this time and location. Other than this, no warranty is implied or intended.

This report was prepared by:



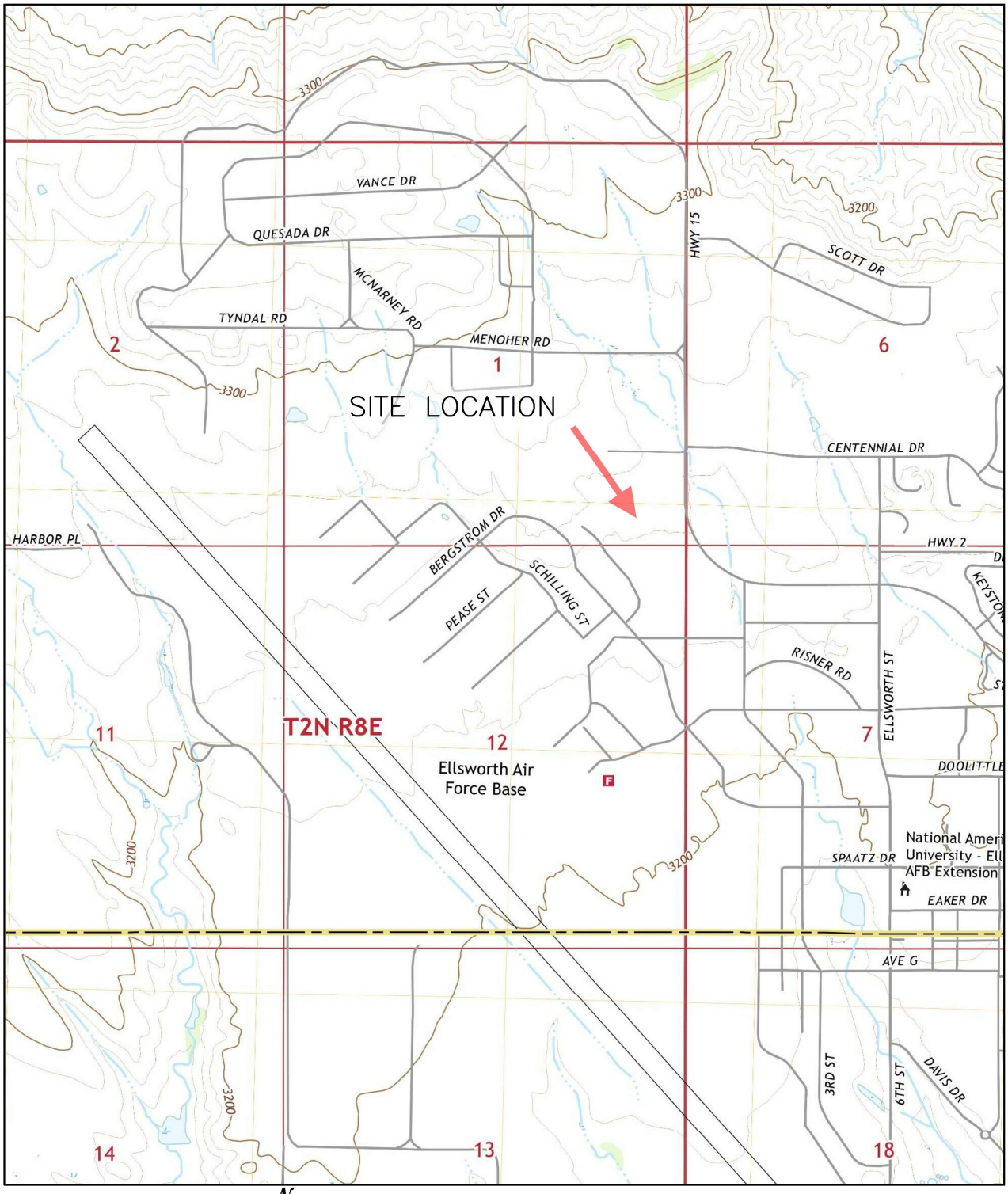
Jeremy J. Huot, CPRR
Environmental Geologist

This report was reviewed by:



Bradley P. Bishop, CPRR
Senior Environmental Project Manager

APPENDIX A
Figures



SCALE (FEET)
0 2,000

N

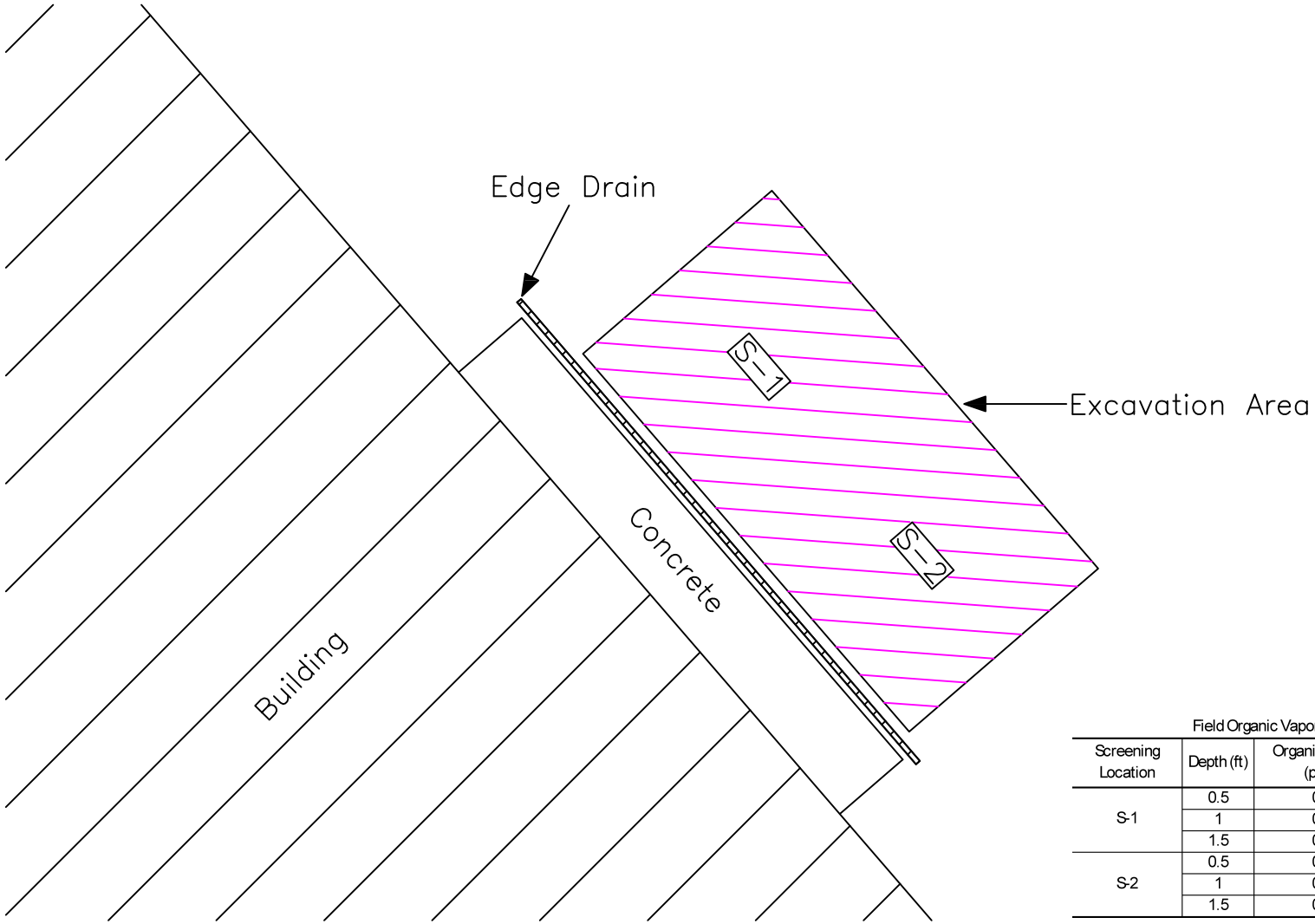
USGS TOPOGRAPHIC MAP
PROVIDED BY USGS DATABASE
DATED: 2021 SCALE: 1:24,000

AMERICAN ENGINEERING TESTING

PROJECT: EAFB FLIGHT SIM BUILDING RELEASE		PROJECT NO.: P–0040721
SUBJECT: SITE LOCATION TOPO MAP	DRAWN BY: JH	DATE: APRIL 22, 2025
SCALE: 1 INCH = 2,000 FEET	REVIEWED BY: BB	FIGURE: 1



AMERICAN ENGINEERING TESTING	PROJECT: EAFB FLIGHT SIM PETROLEUM RELEASE ELLSWORTH AIR FORCE BASE, SOUTH DAKOTA		PROJECT NO. P–0040721
	SUBJECT: SITE LOCATION AERIAL	DRAWN BY: JJH	DATE: MAY 8, 2025
	SCALE: 1 INCH = 100 FEET	REVIEWED BY: BPB	FIGURE: 2



Field Organic Vapor Screening Results

Screening Location	Depth (ft)	Organic Vapors (ppm)	Staining (Y/N)	Lab Analyzed (Y/N)
S-1	0.5	0.0	N	N
	1	0.0	N	N
	1.5	0.0	N	Y
S-2	0.5	0.0	N	N
	1	0.0	N	N
	1.5	0.0	N	Y

Note: Depicted locations and dimensions are approximate.

AMERICAN ENGINEERING TESTING

PROJECT: EAFB FLIGHT SIM PETROLEUM RELEASE ELLSWORTH AIR FORCE BASE, SOUTH DAKOTA		PROJECT NO. P–0040721
SUBJECT: SITE SKETCH WITH EXCAVATION EXTENTS	DRAWN BY: JJH	DATE: MAY 8, 2025
SCALE: 1 INCH = 6 FEET	REVIEWED BY: BPB	FIGURE: 3

APPENDIX B
Methodologies

METHODOLOGIES

Soil Sample Screening

Soil samples are screened for the presence of organic vapors as indications of hydrocarbon contamination using an Ion Science PhoCheck TIGER photoionization detector (PID). This instrument provides readings in parts per million (ppm) equivalents of the calibration gas. The lower detectable limit is approximately 1 ppm. Erratic responses were discounted as a result of high organic vapor concentrations or conditions of elevated headspace moisture. Occasionally, vapor interference may also be encountered from the plastic sample bags utilized for headspace analysis. The PID is calibrated on-site using the concentration (as recommended by the manufacturer) of Isobutylene gas with a 10.6 eV lamp source. Headspace vapor readings are obtained by partially filling a sealable plastic sample bag. The sample bag is agitated, and the soil is allowed to warm within the sealed container. The probe of the PID is inserted through the top of the sample container to obtain a headspace reading. Concentrations are recorded as the maximum level reached after insertion of the probe.

Chemical Analysis

The soil samples collected for analysis are analyzed in a certified laboratory. The composite soil sample for landfill disposal approval is analyzed for the presence and concentration of TEH, naphthalene, and TCLP RCRA 8 metals; the clearance samples are analyzed for TEH and naphthalene. The samples are analyzed according to the appropriate Environmental Protection Agency and/or California/United States Geological Survey methods for the given analytes.

Chain of Custody

Upon collection of a sample to be analyzed in the laboratory, a chain of custody log is initiated. The chain of custody log includes the following information: project name, project number, shipped by, shipped to, project manager, sampling point, location, field identification number, date taken, sample type, number of containers, analysis required and sampler's signature. The chain of custody log is shipped with the samples to the laboratory. On arrival at the laboratory, the samples are checked in and signed over to the appropriate laboratory personnel. A copy of the chain of custody log is maintained by the project manager.

Reporting

Reports are prepared that 1) present and summarize the results of the work conducted, 2) include site location and study area maps, 3) give our opinion regarding the presence of petroleum hydrocarbons and the necessity for additional work, and 4) if the results of the study warrant additional work, recommend the scope of additional work.

APPENDIX C
Landfill Soil Disposal Ticket

10203658
Rapid City Solid Waste
5555 S Highway 79
Rapid City, SD 57701
Phone: (605) 394-4197

Ticket: 10203658
Date: 4/9/2025
Time: 11:22:08 - 11:34:39

Customer: 900922001/Lind-Exco
Truck: 28345C
Truck Type: NA/Not Applicable
Comment: EAFB- 6512

Gross: 51140 LB In Scale 1
Tare: 30680 LB Out Scale 2
Net: 20460 LB
Tons: 10.23

Materials & Services

Origin: NA/Not Applicable
Material: 007/hydrocarbon soil
Quantity: 10.23 Ton
Rate: $30.00/TON
Amount: $ 306.90

Total Taxes: $ 19.03
Total Amount: $ 325.93

Weighmaster: Linda H.

Driver:
****

APPENDIX D
Analytical Laboratory Reports

MIDCONTINENT
TESTING LABORATORIES, INC.

2381 South Plaza Drive P.O. Box 3388 Rapid City, SD 57709
(605) 348-0111 -- www.thechemistrylab.com

REVIEWED
By Jeremy Huot at 8:22 am, May 13, 2025

AET
1745 SAMCO ROAD
RAPID CITY, SD 57702

Sample Site:	Landfill Disposal
Project Name:	EAFB Flight Sim Excavation
Project Number:	P-0040721
Sampled:	03/17/25 at 12:00 PM by Jeremy Huot
Sample Matrix:	Soil
Lab ID#:	20250319541
Received:	03/19/25 at 09:14 AM by Shela Carpenter
Account:	W1202 - AET - Rapid City

Parameter	Result	Units	DF	MDL	PQL	Method	Analyst	Date
Metals - TCLP								
Arsenic (As)	< 0.005	mg/L	10	0.00036	0.005	EPA SW846 6020	TNA	03/31/25
Barium (Ba)	1.47	mg/L	10	0.00073	0.005	EPA SW846 6020	TNA	03/31/25
Cadmium (Cd)	0.003	mg/L	10	0.000303	0.001	EPA SW846 6020	TNA	03/31/25
Chromium (Cr)	< 0.001	mg/L	10	0.000109	0.001	EPA SW846 6020 DRC	TNA	03/31/25
Lead (Pb)	< 0.001	mg/L	10	0.00015	0.001	EPA SW846 6020	TNA	03/31/25
Mercury (Hg)	< 0.0002	mg/L	1	0.000045	0.0002	EPA SW846 7471B	GRT	04/02/25
Selenium (Se)	< 0.005	mg/L	10	0.001	0.005	EPA SW846 6020	TNA	03/31/25
Silver (Ag)	< 0.001	mg/L	10	0.00014	0.001	EPA SW846 6020	TNA	03/31/25
Semi-Volatile								
Naphthalene-soc	< 25.0	mg/kg	150	10.5	75.0	SW846 8100-S	SAC	03/21/25
TPH(Total Extractable Hydrocarbons)	11300	mg/kg	1	1.29	10.0	SW846 8015B-S	SAC	03/21/25
Extraction								
Extraction TPH/SOC	1.00	none	1			SW846 3550	SAC	03/19/25

Notes:
GC/FID profile indicated the predominant presence of hydrocarbons in the motor oil range reported as Total Extractable Hydrocarbons.

Report Approved By:



Report Approved On: 4/3/2025 10:18:13 AM

MIDCONTINENT
TESTING LABORATORIES, INC.

2381 South Plaza Drive P.O. Box 3388 Rapid City, SD 57709
(605) 348-0111 -- www.thechemistrylab.com

Lab Numbers: 20250319541 - 20250319541

QC Sample Report

Parameter	Lab#	QC Value	Smp Value	Spike	DF	Result	Limits	Method
Spike								
Mercury - D	0331201	0.0020	< 0.0002	0.002	1	100.5 %	(87.59) - (117.2)	EPA 245.1
Silver - D	0321704	7.47	4.90	0.025	100	102.7 %	(69.47) - (116.5)	EPA 200.8
Arsenic - T	0313907	0.228	< 0.005	0.025	10	91.4 %	(76.14) - (118.2)	EPA 200.8
Barium - T	0313907	0.295	0.060	0.025	10	93.9 %	(74.19) - (116.3)	EPA 200.8
Cadmium - T	0313907	0.233	< 0.001	0.025	10	93.2 %	(84.01) - (108.2)	EPA 200.8
Chromium - T	0313907	0.255	< 0.001	0.025	10	101.9 %	(84.46) - (111.4)	EPA 200.8 DRC
Lead - T	0313907	0.2446	< 0.0010	0.025	10	97.9 %	(84.68) - (114.6)	EPA 200.8
Mercury - T	0331301	0.0020	< 0.0002	0.002	1	97.5 %	(86.58) - (115.4)	EPA 245.1
Mercury - T	0331209	0.0020	< 0.0002	0.002	1	100.5 %	(86.58) - (115.4)	EPA 245.1
Selenium - T	0313907	1.17	< 0.005	0.125	10	93.4 %	(77.00) - (115.6)	EPA 200.8
Silver - T	0313907	0.2357	< 0.0010	0.025	10	94.3 %	(79.01) - (112.8)	EPA 200.8
Arsenic - TR	0331210	0.255	< 0.005	0.025	10	102.1 %	(88.20) - (103.1)	EPA 200.8
Arsenic - TR	0331211	0.238	< 0.005	0.025	10	95.2 %	(88.20) - (103.1)	EPA 200.8
Barium - TR	0331210	0.293	0.047	0.025	10	98.4 %	(86.24) - (99.80)	EPA 200.8
Barium - TR	0331211	0.288	0.052	0.025	10	94.4 %	(86.24) - (99.80)	EPA 200.8
Cadmium - TR	0331210	0.251	< 0.000	0.025	10	100.4 %	(88.24) - (105.3)	EPA 200.8
Cadmium - TR	0331211	0.246	< 0.000	0.025	10	98.4 %	(88.24) - (105.3)	EPA 200.8
Chromium - TR	0331210	0.2540	< 0.0010	0.025	10	101.6 %	(85.12) - (109.1)	EPA 200.8 DRC
Chromium - TR	0331211	0.2519	< 0.0010	0.025	10	100.8 %	(85.12) - (109.1)	EPA 200.8 DRC
Lead - TR	0331210	0.2528	< 0.0010	0.025	10	101.1 %	(87.90) - (106.5)	EPA 200.8
Lead - TR	0331211	0.2450	< 0.0010	0.025	10	98.0 %	(87.90) - (106.5)	EPA 200.8
Selenium - TR	0331211	1.18	< 0.002	0.125	10	94.3 %	(85.00) - (108.2)	EPA 200.8
Selenium - TR	0331210	1.27	< 0.002	0.125	10	101.5 %	(85.00) - (108.2)	EPA 200.8
Silver - TR	0331211	0.2472	< 0.0010	0.025	10	98.9 %	(77.89) - (108.4)	EPA 200.8
Silver - TR	0331210	0.2532	< 0.0010	0.025	10	101.3 %	(77.89) - (108.4)	EPA 200.8
Matrix Spike Duplicate								
Mercury - D	0331201	0.0020	0.0020		1	-0.499%	(-10.94) - (11.59)	EPA 245.1
Silver - D	0321704	7.24	7.47		100	-3.06%	(-5.033) - (6.052)	EPA 200.8
Arsenic - T	0313907	0.231	0.228		10	1.29%	(-6.392) - (7.273)	EPA 200.8
Barium - T	0313907	0.299	0.295		10	1.38%	(-5.396) - (7.908)	EPA 200.8
Cadmium - T	0313907	0.235	0.233		10	0.944%	(-5.800) - (7.482)	EPA 200.8
Chromium - T	0313907	0.257	0.255		10	0.763%	(-6.151) - (7.338)	EPA 200.8 DRC
Lead - T	0313907	0.2470	0.2446		10	0.948%	(-5.666) - (6.756)	EPA 200.8
Mercury - T	0331301	0.0019	0.0020		1	-1.55%	(-11.58) - (7.499)	EPA 245.1
Mercury - T	0331209	0.0020	0.0020		1	-2.01%	(-11.58) - (7.499)	EPA 245.1
Selenium - T	0313907	1.16	1.17		10	-0.365%	(-6.024) - (7.394)	EPA 200.8
Silver - T	0313907	0.2376	0.2357		10	0.820%	(-5.625) - (8.418)	EPA 200.8

Lab Numbers: **20250319541 - 20250319541**

Parameter	Lab#	QC Value	Smp Value	Spike	DF	Result	Limits	Method
Matrix Spike Duplicate								
Arsenic - TR	0331210	0.255	0.255		10	0.004%	(-5.792) - (6.160)	EPA 200.8
Arsenic - TR	0331211	0.242	0.238		10	1.46%	(-5.792) - (6.160)	EPA 200.8
Barium - TR	0331211	0.292	0.288		10	1.12%	(-3.321) - (4.879)	EPA 200.8
Barium - TR	0331210	0.296	0.293		10	0.917%	(-3.321) - (4.879)	EPA 200.8
Cadmium - TR	0331210	0.252	0.251		10	0.302%	(-4.325) - (5.663)	EPA 200.8
Cadmium - TR	0331211	0.246	0.246		10	0.061%	(-4.325) - (5.663)	EPA 200.8
Chromium - TR	0331211	0.2620	0.2519		10	3.90%	(-5.063) - (7.391)	EPA 200.8 DRC
Chromium - TR	0331210	0.2452	0.2540		10	-3.55%	(-5.063) - (7.391)	EPA 200.8 DRC
Lead - TR	0331211	0.2469	0.2450		10	0.773%	(-3.501) - (4.535)	EPA 200.8
Lead - TR	0331210	0.2521	0.2528		10	-0.309%	(-3.501) - (4.535)	EPA 200.8
Selenium - TR	0331211	1.22	1.18		10	3.74%	(-5.082) - (5.754)	EPA 200.8
Selenium - TR	0331210	1.26	1.27		10	-0.738%	(-5.082) - (5.754)	EPA 200.8
Silver - TR	0331210	0.2544	0.2532		10	0.465%	(-5.279) - (7.790)	EPA 200.8
Silver - TR	0331211	0.2456	0.2472		10	-0.674%	(-5.279) - (7.790)	EPA 200.8
Initial Calibration Verification								
Arsenic - D		0.050	0.050		1	0.500%	(-10.79) - (8.434)	EPA 200.8
Barium - D		0.050	0.050		1	0.00%	(-8.025) - (7.193)	EPA 200.8
Cadmium - D		0.050	0.050		1	0.640%	(-8.888) - (9.052)	EPA 200.8
Chromium - D		0.047	0.050		1	-5.42%	(-7.440) - (11.20)	EPA 200.8 DRC
Lead - D		0.0511	0.0500		1	2.26%	(-7.438) - (10.73)	EPA 200.8
Selenium - D		0.250	0.250		1	0.100%	(-11.32) - (9.226)	EPA 200.8
Silver - D		0.051	0.050		1	2.34%	(-5.642) - (9.470)	EPA 200.8
Mercury - T		0.0030	0.0030		1	-1.00%	(-7.993) - (11.49)	EPA 245.1
TPH-Diesel		1010	1000		1	1.30%	(-26.32) - (30.17)	SW846 8015B-S
Continuing Calibration Verification								
Arsenic - D		0.047	0.050		1	-5.60%	(-14.81) - (9.596)	EPA 200.8
Arsenic - D		0.047	0.050		1	-6.14%	(-14.81) - (9.596)	EPA 200.8
Arsenic - D		0.049	0.050		1	-2.12%	(-14.81) - (9.596)	EPA 200.8
Arsenic - D		0.045	0.050		1	-9.16%	(-14.81) - (9.596)	EPA 200.8
Arsenic - D		0.046	0.050		1	-7.24%	(-14.81) - (9.596)	EPA 200.8
Arsenic - D		0.050	0.050		1	-0.080%	(-14.81) - (9.596)	EPA 200.8
Arsenic - D		0.050	0.050		1	0.540%	(-14.81) - (9.596)	EPA 200.8
Barium - D		0.048	0.050		1	-4.88%	(-11.28) - (9.078)	EPA 200.8
Barium - D		0.048	0.050		1	-4.28%	(-11.28) - (9.078)	EPA 200.8
Barium - D		0.050	0.050		1	0.020%	(-11.28) - (9.078)	EPA 200.8
Barium - D		0.049	0.050		1	-1.12%	(-11.28) - (9.078)	EPA 200.8
Barium - D		0.049	0.050		1	-1.54%	(-11.28) - (9.078)	EPA 200.8
Barium - D		0.048	0.050		1	-3.32%	(-11.28) - (9.078)	EPA 200.8
Barium - D		0.050	0.050		1	0.400%	(-11.28) - (9.078)	EPA 200.8
Cadmium - D		0.049	0.050		1	-2.98%	(-8.754) - (6.456)	EPA 200.8
Cadmium - D		0.047	0.050		1	-5.54%	(-8.754) - (6.456)	EPA 200.8
Cadmium - D		0.049	0.050		1	-2.18%	(-8.754) - (6.456)	EPA 200.8
Cadmium - D		0.050	0.050		1	0.360%	(-8.754) - (6.456)	EPA 200.8
Cadmium - D		0.049	0.050		1	-1.32%	(-8.754) - (6.456)	EPA 200.8

Lab Numbers: **20250319541 - 20250319541**

Parameter	Lab#	QC Value	Smp Value	Spike	DF	Result	Limits	Method	
Continuing Calibration Verification									
Cadmium - D		0.050	0.050		1	0.240%	(-8.754) - (6.456)	EPA 200.8	
Cadmium - D		0.049	0.050		1	-2.90%	(-8.754) - (6.456)	EPA 200.8	
Chromium - D		0.051	0.050		1	1.66%	(-12.12) - (7.895)	EPA 200.8 DRC	
Chromium - D		0.051	0.050		1	1.40%	(-12.12) - (7.895)	EPA 200.8 DRC	
Chromium - D		0.051	0.050		1	1.66%	(-12.12) - (7.895)	EPA 200.8 DRC	
Chromium - D		0.053	0.050		1	5.96%	(-12.12) - (7.895)	EPA 200.8 DRC	
Chromium - D		0.053	0.050		1	5.00%	(-12.12) - (7.895)	EPA 200.8 DRC	
Chromium - D		0.052	0.050		1	2.94%	(-12.12) - (7.895)	EPA 200.8 DRC	
Chromium - D		0.051	0.050		1	2.56%	(-12.12) - (7.895)	EPA 200.8 DRC	
Lead - D		0.0504	0.0500		1	0.800%	(-6.712) - (7.988)	EPA 200.8	
Lead - D		0.0494	0.0500		1	-1.22%	(-6.712) - (7.988)	EPA 200.8	
Lead - D		0.0495	0.0500		1	-1.06%	(-6.712) - (7.988)	EPA 200.8	
Lead - D		0.0498	0.0500		1	-0.380%	(-6.712) - (7.988)	EPA 200.8	
Lead - D		0.0478	0.0500		1	-4.34%	(-6.712) - (7.988)	EPA 200.8	
Lead - D		0.0490	0.0500		1	-1.98%	(-6.712) - (7.988)	EPA 200.8	
Lead - D		0.0501	0.0500		1	0.120%	(-6.712) - (7.988)	EPA 200.8	
Selenium - D		0.237	0.250		1	-5.20%	(-13.08) - (6.186)	EPA 200.8	
Selenium - D		0.246	0.250		1	-1.41%	(-13.08) - (6.186)	EPA 200.8	
Selenium - D		0.240	0.250		1	-3.88%	(-13.08) - (6.186)	EPA 200.8	
Selenium - D		0.247	0.250		1	-1.09%	(-13.08) - (6.186)	EPA 200.8	
Selenium - D		0.232	0.250		1	-7.09%	(-13.08) - (6.186)	EPA 200.8	
Selenium - D		0.228	0.250		1	-8.75%	(-13.08) - (6.186)	EPA 200.8	
Selenium - D		0.248	0.250		1	-0.688%	(-13.08) - (6.186)	EPA 200.8	
Silver - D		0.049	0.050		1	-3.06%	(-13.28) - (9.723)	EPA 200.8	
Silver - D		0.050	0.050		1	0.600%	(-13.28) - (9.723)	EPA 200.8	
Silver - D		0.050	0.050		1	-0.600%	(-13.28) - (9.723)	EPA 200.8	
Silver - D		0.048	0.050		1	-3.16%	(-13.28) - (9.723)	EPA 200.8	
Silver - D		0.047	0.050		1	-5.30%	(-13.28) - (9.723)	EPA 200.8	
Silver - D		0.048	0.050		1	-3.28%	(-13.28) - (9.723)	EPA 200.8	
Silver - D		0.049	0.050		1	-1.30%	(-13.28) - (9.723)	EPA 200.8	
Silver - D		0.051	0.050		1	1.10%	(-13.28) - (9.723)	EPA 200.8	
Silver - D		0.050	0.050		1	-0.220%	(-13.28) - (9.723)	EPA 200.8	
Mercury - T		0.0019	0.0020		1	-3.50%	(-5.117) - (4.577)	EPA 245.1	
Mercury - T		0.0018	0.0020		1	-8.50%	(-5.117) - (4.577)	EPA 245.1	X
- Recovery was within 10% of expected value									
Mercury - T		0.0010	0.0010		1	1.00%	(-5.117) - (4.577)	EPA 245.1	
Mercury - T		0.0019	0.0020		1	-4.50%	(-5.117) - (4.577)	EPA 245.1	
Mercury - T		0.0019	0.0020		1	-3.50%	(-5.117) - (4.577)	EPA 245.1	
Mercury - T		0.0050	0.0050		1	0.400%	(-5.117) - (4.577)	EPA 245.1	
Mercury - T		0.0020	0.0020		1	-2.00%	(-5.117) - (4.577)	EPA 245.1	
Mercury - T		0.0020	0.0020		1	-1.50%	(-5.117) - (4.577)	EPA 245.1	
Mercury - T		0.0019	0.0020		1	-4.00%	(-5.117) - (4.577)	EPA 245.1	
Naphthalene-soc		23.2	25.0		1	-7.20%	(-41.10) - (29.14)	SW846 8100-S	
Naphthalene-soc		20.0	25.0		1	-20.0 %	(-41.24) - (28.68)	SW846 8100-S	
TPH-Diesel		1050	1000		1	5.40%	(-15.57) - (22.16)	SW846 8015B-S	
TPH-Diesel		976	1000		1	-2.40%	(-15.33) - (22.36)	SW846 8015B-S	

Lab Numbers: **20250319541 - 20250319541**

Parameter	Lab#	QC Value	Smp Value	Spike	DF	Result	Limits	Method	
Lab Control Spike									
Naphthalene-soc		1.99	0.00	2.50	1	79.6 %	(49.86) - (85.90)	SW846 8100-S	
TPH-Diesel		174	0.00	200	1	87.0 %	(58.65) - (103.9)	SW846 8015B-S	
Initial Calibration Blank									
Mercury - T		0.0000	0.000		1	0.00001	(-0.0003) - (0.0002)	EPA 245.1	
Continuing Calibration Blank									
Arsenic - D		0.000	0.00		1	0.00003	(-0.0001) - (0.0001)	EPA 200.8	
Barium - D		0.000	0.00		1	0.00002	(0.0000) - (0.0000)	EPA 200.8	
Cadmium - D		0.000	0.00		1	0.00004	(0.0000) - (0.0000)	EPA 200.8	X
- Blank value is less than half of the reporting limit									
Chromium - D		0.000	0.00		1	0.00004	(0.0000) - (0.0001)	EPA 200.8 DRC	
Lead - D		0.0000	0.000		1	0.00002	(0.0000) - (0.0000)	EPA 200.8	
Selenium - D		0.000	0.00		1	0.00021	(-0.0001) - (0.0005)	EPA 200.8	
Silver - D		0.000	0.00		1	0.00002	(0.0000) - (0.0000)	EPA 200.8	
Mercury - T		0.000	0.000		1	0	(-0.0001) - (0.0001)	EPA 245.1	
Mercury - T		0.0000	0.000		1	-0.00004	(-0.0001) - (0.0001)	EPA 245.1	
Mercury - T		0.000	0.000		1	0	(-0.0001) - (0.0001)	EPA 245.1	
Mercury - T		0.0000	0.000		1	0.00001	(-0.0001) - (0.0001)	EPA 245.1	
Mercury - T		0.0000	0.000		1	0.00001	(-0.0001) - (0.0001)	EPA 245.1	
Mercury - T		0.0000	0.000		1	-0.00003	(-0.0001) - (0.0001)	EPA 245.1	
Lab Reagent Blank									
Naphthalene-soc		0.00	0.00		1	0	(0.000) - (0.000)	SW846 8100-S	
TPH-Diesel		0.00	0.00		1	0	(-6.889) - (9.430)	SW846 8015B-S	

Approved By: 

Approved On: 04/03/2025 10:18 AM

AMERICAN ENGINEERING TESTING, INC.

☐ St. Paul Office
550 Cleveland Ave. N.
St. Paul, MN 55114
651-659-9001
651-659-1379 (fax)

☒ OTHER Rapid City Office

ADDRESS: 1745 Samco Road
Rapid City, SD

PHONE: 605-388-0029

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PAGE 1 OF 1

AET PROJECT NUMBER P-0040721 P.O.# 18-1123

PROJECT NAME/LOCATION EAFB Flight Sim Excavation

AET PROJECT MANAGER Jeremy Huot

SEND REPORT TO Jeremy Huot & Brad Bishop

SAMPLED BY (PRINT) Jeremy Huot

SAMPLER SIGNATURE

REQUESTED TURNAROUND TIME: ☒ NORMAL ☐ RUSH

DATE NEEDED BY: April 3, 2025

ITEM#	SAMPLE DESCRIPTION	DATE	TIME	SAMPLE TYPE	NO. OF CONTAINERS	PRESERVATIVES: UNPRESERVED	PRESERVATIVES: MeOH	PRESERVATIVES: HCL	PRESERVATIVES: H_2SO_4	PRESERVATIVES: HNO_3	FIELD FILTERED Y/N	ANALYSIS: TPH-TEH	ANALYSIS: Naphthalene	ANALYSIS: TCLP 8 RCRA Metals	REMARKS
1	Landfill Disposal	3/17/25	12:00	Soil	2	X					N	X	X		20250319541

NOTE: 4.5°C

ITEM NUMBER	RELINQUISHED BY/AFFILIATION	ACCEPTED BY/AFFILIATION	DATE	TIME
1	AET		3/19/25	9:14

MIDCONTINENT TESTING LABORATORIES

SAMPLE RECEIPT CHECKLIST

Company Name AET

Date/Time Received 3/19/25 (Date) 0914 (Time)

Project EAFB Flight Sim Excavation

Received by Sheila

Lab Number(s) 20250319541

Carrier Name Hand Delivered

UNPACKING

Yes	No		Initials
☑	☐	1. Shipping container in good condition?	
☐	☑	2. Custody seals present on shipping container? Condition: Intact ☐ Broken ☐	
☑	☐	3. Ice / Blue Ice (circle one) present in shipping container? Container(s) Temp. 1. 4.5°C 2. _____ 3. _____ 4. _____	
☐	☑	4. Bottles broken and/or leaking? (Photograph broken bottles.)	
☐	☑	5. Custody seals on sample bottles? Condition: Intact ☐ Broken ☐	

LABELING

Yes	No		Initials
☑	☐	6. Chain of custody Present?	
☑	☐	7. Chain of custody includes signatures, dates, and times when relinquished and received?	
☑	☐	8. Chain of custody agrees with bottle count?	
☑	☐	9. Chain of custody agrees with labels?	
☑	☐	10. Samples received within holding times?	
☑	☐	11. Samples in proper container?	
☑	☐	12. Sufficient sample volume for indicated tests?	

PRESERVATIVE

Yes	No		Initials	Yes	No		Initials
☐	☐	13. Metals bottle(s) pH < 2?		☐	☐	17. TOC bottle(s) pH < 2?	
☐	☐	14. Nutrient bottle(s) pH < 2?		☐	☐	18. Oil & Grease bottle(s) pH < 2?	
☐	☐	15. Cyanide bottle(s) pH > 12?		☐	☐	19. Volatiles pH < 2?	
☐	☐	16. Sulfide bottle(s) pH > 9?					

COMMENTS:

MIDCONTINENT
TESTING LABORATORIES, INC.

2381 South Plaza Drive P.O. Box 3388 Rapid City, SD 57709
(605) 348-0111 -- www.thechemistrylab.com

REVIEWED
By Jeremy Huot at 8:21 am, May 13, 2025

AET
1745 SAMCO ROAD
RAPID CITY, SD 57702

Sample Site:	S-1
Project Name:	EAFB Flight Sim Excavation
Project Number:	P-0040721
Sampled:	04/09/25 at 10:45 AM by Jeremy Huot
Sample Matrix:	Soil
Lab ID#:	20250409541
Received:	04/09/25 at 01:07 PM by Dean Aurand
Account:	W1202 - AET - Rapid City

Parameter	Result	Units	DF	MDL	PQL	Method	Analyst	Date
Semi-Volatile								
Naphthalene-soc	< 0.500	mg/kg	1	0.070	0.500	SW846 8100-S	SAC	04/25/25
TPH(Total Extractable Hydrocarbons)	< 10.0	mg/kg	1	1.29	10.0	SW846 8015B-S	SAC	04/25/25
Extraction								
Extraction TPH/SOC	1.00	none	1			SW846 3550	SAC	04/23/25

Quality Control Data

Parameter	Result	Limits	DF	Method	Analyst	Date
Surrogate Recovery-SV						
Ortho-Terphenyl	97.8 %	(77.02) - (126.3)	1	SW846 8015-S QC	SAC	04/25/25

Report Approved By:

Report Approved On: 5/7/2025 3:03:54 PM

MIDCONTINENT
TESTING LABORATORIES, INC.

2381 South Plaza Drive P.O. Box 3388 Rapid City, SD 57709
(605) 348-0111 -- www.thechemistrylab.com

Sample Site:	S-2
Project Name:	EAFB Flight Sim Excavation
Project Number:	P-0040721
Sampled:	04/09/25 at 10:40 AM by Jeremy Huot
Sample Matrix:	Soil

AET
1745 SAMCO ROAD
RAPID CITY, SD 57702

Lab ID#:	20250409542
Received:	04/09/25 at 01:07 PM by Dean Aurand
Account:	W1202 - AET - Rapid City

Parameter	Result	Units	DF	MDL	PQL	Method	Analyst/Date
Semi-Volatile							
Naphthalene-soc	< 0.500	mg/kg	1	0.070	0.500	SW846 8100-S	SAC 04/25/25
TPH(Total Extractable Hydrocarbons)	< 10.0	mg/kg	1	1.29	10.0	SW846 8015B-S	SAC 04/25/25
Extraction							
Extraction TPH/SOC	1.00	none	1			SW846 3550	SAC 04/23/25

Quality Control Data

Parameter	Result	Limits	DF	Method	Analyst/Date
Surrogate Recovery-SV					
Ortho-Terphenyl	102.3 %	(77.02) - (126.3)	1	SW846 8015-S QC	SAC 04/25/25

Report Approved By:

Report Approved On: 5/7/2025 3:03:54 PM

MIDCONTINENT
TESTING LABORATORIES, INC.

2381 South Plaza Drive P.O. Box 3388 Rapid City, SD 57709
(605) 348-0111 -- www.thechemistrylab.com

Lab Numbers: 20250409541 - 20250409542

QC Sample Report

Parameter	Lab#	QC Value	Smp Value	Spike	DF	Result	Limits	Method
Spike								
TPH-Diesel	0409542	164	< 10.0	200	1	82.0 %	(55.43) - (103.4)	SW846 8015B-S
Matrix Spike Duplicate								
TPH-Diesel	0409542	175	164		1	6.55%	(-26.05) - (25.32)	SW846 8015B-S
Initial Calibration Verification								
TPH-Diesel		1080	1000		1	8.00%	(-26.04) - (30.13)	SW846 8015B-S
Continuing Calibration Verification								
Naphthalene-soc		23.4	25.0		1	-6.40%	(-44.98) - (33.26)	SW846 8100-S
Naphthalene-soc		28.0	25.0		1	12.0 %	(-44.98) - (33.26)	SW846 8100-S
Naphthalene-soc		26.7	25.0		1	6.80%	(-44.98) - (33.26)	SW846 8100-S
TPH-Diesel		929	1000		1	-7.10%	(-10.40) - (23.59)	SW846 8015B-S
TPH-Diesel		1190	1000		1	18.7 %	(-13.30) - (24.67)	SW846 8015B-S
TPH-Diesel		1110	1000		1	11.1 %	(-13.30) - (24.67)	SW846 8015B-S
Lab Control Spike								
Naphthalene-soc		2.22	0.00	2.50	1	88.8 %	(45.71) - (92.93)	SW846 8100-S
TPH-Diesel		79.6	0.00	100	1	79.6 %	(57.43) - (109.8)	SW846 8015B-S
Lab Reagent Blank								
Naphthalene-soc		0.00	0.00		1	0	(0.000) - (0.000)	SW846 8100-S
TPH-Diesel		1.46	0.00		1	1.46	(-6.995) - (9.413)	SW846 8015B-S

Approved By: 

Approved On: 05/07/2025 02:56 PM

AMERICAN ENGINEERING TESTING, INC.

☐ St. Paul Office
550 Cleveland Ave. N.
St. Paul, MN 55114
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☒ OTHER Rapid City Office

ADDRESS: 1745 Samco Rd.
Rapid City, SD 57702

PHONE: 605-388-0029

15982

PAGE 1 OF 1

AET PROJECT NUMBER P-0040721

PROJECT NAME/LOCATION EAFB Flight Sim Excavation

AET PROJECT MANAGER Jeremy Huot

SEND REPORT TO JHuot@TeamAET.com

Matt Carreiro
SAMPLED BY (PRINT)

SAMPLER SIGNATURE BPB

REQUESTED TURNAROUND TIME: ☒ NORMAL ☐ RUSH

DATE NEEDED BY: _____

ITEM#	SAMPLE DESCRIPTION	DATE	TIME	SAMPLE TYPE	NO. OF CONTAINERS	PRESERVATIVES: UNPRESERVED	PRESERVATIVES: MeOH	PRESERVATIVES: HCL	PRESERVATIVES: H_2SO_4	PRESERVATIVES: HNO_3	FIELD FILTERED Y/N	ANALYSIS: TEH, naphthalene	REMARKS
1	S-1	4/9	1045	Soil	1	X						X	202504095 41
2	S-2	4/9	1040	Soil	1	X						X	+ 542

NOTE:

PO # 18-1132
10.6°C
on ice

ITEM NUMBER	RELINQUISHED BY/AFFILIATION	ACCEPTED BY/AFFILIATION	DATE	TIME
1-2	AET	AET	4/9/25	1:07

MIDCONTINENT
TESTING LABORATORIES

SAMPLE RECEIPT CHECKLIST

Company Name AET

Date/Time Received 4/9/25 (Date) / 1307 (Time)

Project EAFB Flight Sim Exc.

Received by Dean

Lab Number(s) 2025040954l-542

Carrier Name Hand Delivered

UNPACKING

Yes	No		Initials
☑	☐	1. Shipping container in good condition?	
☐	☑	2. Custody seals present on shipping container? Condition: Intact ☐ Broken ☐	
☑	☐	3. (Ice) / Blue Ice (circle one) present in shipping container? Container(s) Temp. 1. 10.6°C 2. _____ 3. _____ 4. _____	
☐	☑	4. Bottles broken and/or leaking? (Photograph broken bottles.)	
☐	☑	5. Custody seals on sample bottles? Condition: Intact ☐ Broken ☐	

LABELING

Yes	No		Initials
☑	☐	6. Chain of custody Present?	
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PRESERVATIVE

Yes	No		Initials	Yes	No		Initials
☐	☐	13. Metals bottle(s) pH < 2?		☐	☐	17. TOC bottle(s) pH < 2?	
☐	☐	14. Nutrient bottle(s) pH < 2?		☐	☐	18. Oil & Grease bottle(s) pH < 2?	
☐	☐	15. Cyanide bottle(s) pH > 12?		☐	☐	19. Volatiles pH < 2?	
☐	☐	16. Sulfide bottle(s) pH > 9?					

COMMENTS: