Tank System Removal Form

Site Name: Custer DOT Facility

Street Address: 115 Centennial Drive City: Custer

Owner: SD DOT Phone Number: 605-773-4114

Tank No.	Capacity (gallons)	Contents at the Time of Removal	Condition
1	2,000-diesel	Empty	Excellent
2	2,000-gasoline	Empty	Excellent

Piping

Was the piping removed at this site? Yes ____ No X Length of piping removed: ____

Dispensers

Number of dispensers at the site: **2** Number of islands removed: **1**

If the dispensers were not removed, explain why.

Was groundwater encountered in the excavation? Yes ____ No __x__ If yes, at what depth? NA

Was free product encountered in the excavation? Yes ____ No __x___ If yes, describe the extent of the problem:

Loose cubic yards of soil hauled to the land farm/landfill: **0**

Loose cubic yards of fill used: **Approximately 10 cubic yards**

Briefly describe the lithology of the tank basin and any special circumstances relating to the site:
Tanks were removed on June 9, 2025. The gasoline tank was rendered inert using approximately 20lbs of dry ice until the oxygen contents were reduced to approximately 5.2%.

UST Bedding Material, Excavation Sidewalls and Floor
The tanks were in excellent condition. Tanks were bedded in sandy gravel bedding material. The excavation was backfilled using clean, compacted engineered fill to ground surface. Surface covering will be replaced by SD DOT contractor. No significant organic vapors were measured in the former UST basin.

Soil samples were collected by: Environmental Contractor: American Engineering Testing, Inc.

Name: Robert Prann Signature:  Date: 07-08-2025

Attach: A detailed site map. The map must be drawn to scale (not surveyed) to show dimensions of the excavation and the location, depth, and PID readings of the soil samples. The map must show the location of any nearby roads, buildings, basements, wells, and utilities. If known, the depth to any underground utilities must be indicated.
Attach: Analytical soil sample test results in tabular form.

ENVIRONMENTAL FIELD SOIL SCREENING RESULTS

Sample No.	Depth[1] (ft.)	Sample Location	PID Reading[2] (ppm)
SS-1	1.5	Below Diesel Dispenser	ND
SS-2	1.5	Below Gasoline Dispenser	2.0
SS-3	4	North End Gas UST	ND
SS-4	6	West Side Gas UST	ND
SS-5	4	Below Gas Dispenser	ND
SS-6	9	North End Gas UST	ND
SS-7	9	South End Gas UST	ND
SS-8	6	North Excavation Sidewall	ND
SS-9	6	Northeast Excavation Sidewall	ND
SS-10	4	South End Diesel UST	3.5
SS-11	9	North End Diesel UST	ND
SS-12	9	South End Diesel UST	ND
SS-13	6	Southwest Excavation Sidewall	ND
SS-14	6	South End Excavation Sidewall	ND
SS-15	6	Southeast Excavation Sidewall	ND

[1] Depth measured in feet below grade.
[2] Organic vapor concentration presented in ppm equivalents.
[3] "ND" – Organic vapors not measured over 1.0ppm

SOIL SAMPLE ANALYTICAL RESULTS[1]

Sample # / Location	Depth[2]	TPH-G	Benzene	Toluene	Ethyl-benzene	Xylenes	Naph.	TPH-D
SS-1/Below Diesel Dispenser	1.5	-	-	-	-	-	<0.500	41.5
SS-2/Below Gasoline Dispenser	1.5	11.7	<0.050	<0.100	<0.100	0.232	-	-
SS-6/Below Gas UST – North	9.0	<10.0	<0.050	<0.100	<0.100	<0.200	-	-
SS-7/Below Gas UST – South	9.0	<10.0	<0.050	<0.100	<0.100	<0.200	-	-
SS-11/Below Diesel UST – North	9.0	-	-	-	-	-	<0.500	<10.0
SS-12/Below Diesel UST – South	9.0	-	-	-	-	-	<0.500	<10.0
RBCA Tier 1 Trigger/Action Levels		**500[3]**	**0.2**	**15**	**10**	**300**	**25**	**500[3]**

[1] All values are in mg/kg, which is equivalent to parts per million, unless otherwise noted.
[2] Depths measured in feet below grade.
[3] TPH value is considered a "trigger level" requiring more thorough evaluation of the site and is not intended to be a Tier 1 cleanup goal.
Analytes which meet or exceed the SD DANR Tier 1 Action/Trigger levels are shown in ***bold italics.***



SCALE
(FEET)

0 2,000

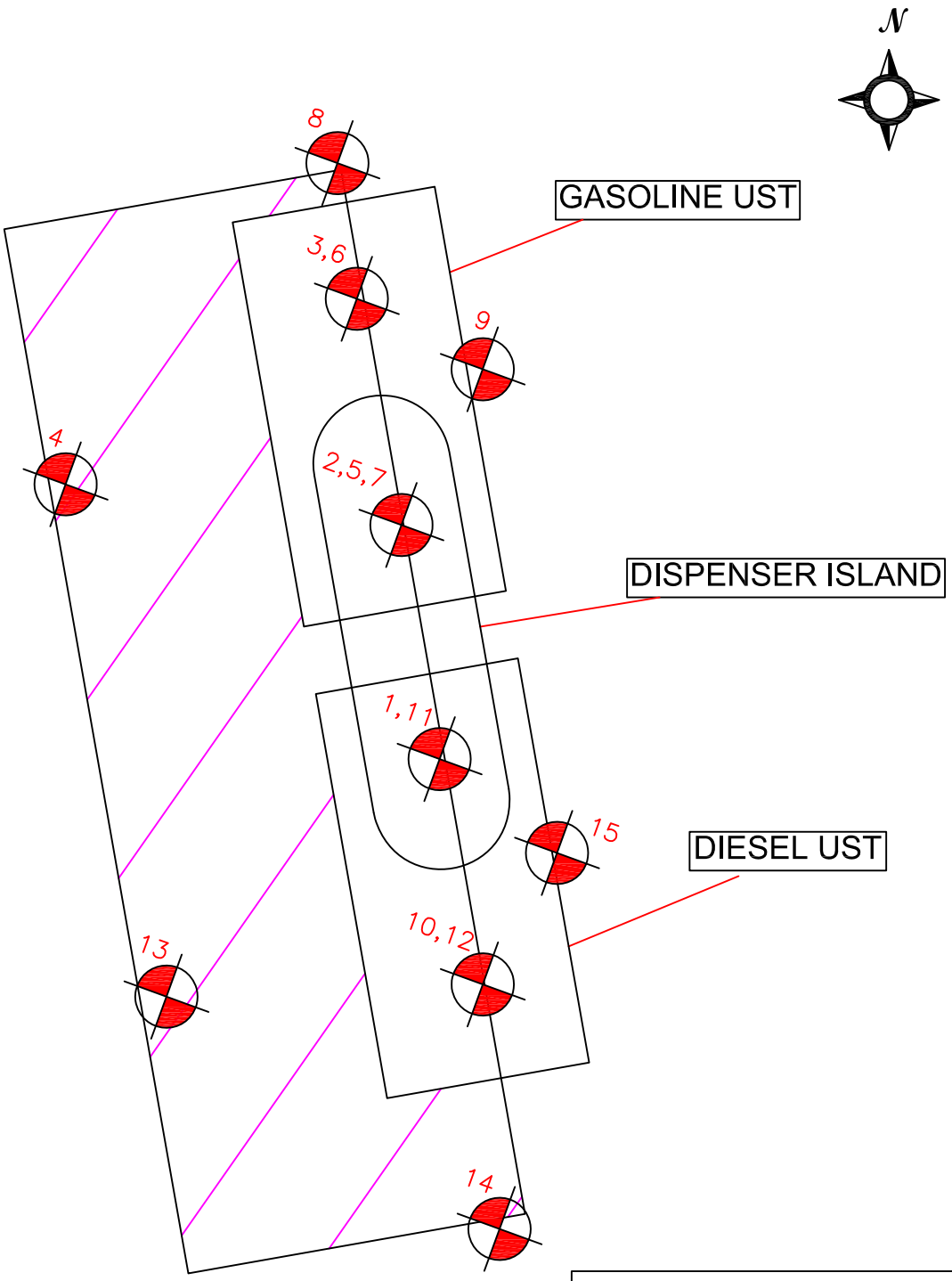
USGS TOPOGRAPHIC MAP
PROVIDED BY US TOPO
SCALE: 1:24,000

AMERICAN
ENGINEERING TESTING

PROJECT: DANR ATP – CUSTER DOT FACILITY CUSTER, SOUTH DAKOTA		PROJECT NO.: P–0032425
SUBJECT: SITE LOCATION TOPO MAP	DRAWN BY: RAP	DATE: JULY 8, 2025
SCALE: 1 INCH = 2,000 FEET	REVIEWED BY: JJH	FIGURE: 1



AMERICAN ENGINEERING TESTING	PROJECT: DANR ATP – CUSTER DOT FACILITY CUSTER, SOUTH DAKOTA		PROJECT NO.: P–0032425
	SUBJECT: AERIAL PHOTOGRAPH WITH UST BASIN LOCATION	DRAWN BY: RAP	DATE: JULY 8, 2025
	SCALE: 1 INCH = 50 FEET	REVIEWED BY: JJH	FIGURE: 2



SCALE (FEET)

0 5

LEGEND

Excavation Location

10 Soil Sample Location

AMERICAN ENGINEERING TESTING

PROJECT: DANR ATP – CUSTER DOT FACILITY CUSTER, SOUTH DAKOTA		PROJECT NO.: P–0032425
SUBJECT: SITE SKETCH with EXCAVATION AND SOIL SAMPLE LOCATIONS	DRAWN BY: RAP	DATE: JULY 8, 2025
SCALE: 1 INCH = 5 FEET	REVIEWED BY: JJH	FIGURE: 3

MIDCONTINENT
TESTING LABORATORIES, INC.

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

REVIEWED
By Robert Prann at 1:53 pm, Jun 30, 2025

AET
1745 SAMCO ROAD
RAPID CITY, SD 57702

Sample Site:	S Dispenser
Project Name:	Custer DOT ATP
Project Number:	P-0032425
Sampled:	06/09/25 at 12:45 PM by Matt Carreiro
Sample Matrix:	Soil
Lab ID#:	20250609541
Received:	06/09/25 at 03:45 PM by Josh Bucknall
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	06/19/25
TPH Diesel	41.5	mg/kg	1	1.30	10.0	SW846 8015B-S	SAC	06/19/25
Extraction								
Extraction TPH/SOC	1.00	none	1			SW846 3550	SAC	06/17/25

Report Approved By:



Report Approved On: 6/30/2025 1:40:20 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: N Dispenser
Project Name: Custer DOT ATP
Project Number: P-0032425
Sampled: 06/09/25 at 12:50 PM
by Matt Carreiro
Sample Matrix: Soil

AET
1745 SAMCO ROAD
RAPID CITY, SD 57702

Lab ID#: 20250609542
Received: 06/09/25 at 03:45 PM
by Josh Bucknall
Account: W1202 - AET - Rapid City

Parameter	Result	Units	DF	MDL	PQL	Method	Analyst/Date
Volatile							
Benzene	< 0.050	mg/kg	1	0.018	0.050	SW846 8021B-S	SAC 06/12/25
Ethylbenzene	< 0.100	mg/kg	1	0.016	0.100	SW846 8021B-S	SAC 06/12/25
Methyl tertiary-Butyl Ether	< 0.100	mg/kg	1	0.023	0.100	SW846 8021B-S	SAC 06/12/25
Toluene	< 0.100	mg/kg	1	0.015	0.100	SW846 8021B-S	SAC 06/12/25
Xylenes(o,m,p)	0.232	mg/kg	1	0.060	0.200	SW846 8021B-S	SAC 06/12/25
Total Volatile Hydrocarbons							
TPH as Gasoline	11.7	mg/kg	1	0.689	10.0	SW846 8015B-S	SAC 06/12/25

Quality Control Data

Parameter	Result	Limits	DF	Method	Analyst/Date
Surrogate Recovery-Volatile					
4-Bromofluorobenzene	101.0 %	(56.24) - (145.8)	1	SW846 8021B QC	SAC 06/12/25

Report Approved By:

Report Approved On: 6/30/2025 1:40:20 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: N Tank N
Project Name: Custer DOT ATP
Project Number: P-0032425
Sampled: 06/09/25 at 01:40 PM
by Matt Carreiro
Sample Matrix: Soil

AET
1745 SAMCO ROAD
RAPID CITY, SD 57702

Lab ID#: 20250609543
Received: 06/09/25 at 03:45 PM
by Josh Bucknall
Account: W1202 - AET - Rapid City

Parameter	Result	Units	DF	MDL	PQL	Method	Analyst/Date
Volatile							
Benzene	< 0.050	mg/kg	1	0.018	0.050	SW846 8021B-S	SAC 06/12/25
Ethylbenzene	< 0.100	mg/kg	1	0.016	0.100	SW846 8021B-S	SAC 06/12/25
Methyl tertiary-Butyl Ether	< 0.100	mg/kg	1	0.023	0.100	SW846 8021B-S	SAC 06/12/25
Toluene	< 0.100	mg/kg	1	0.015	0.100	SW846 8021B-S	SAC 06/12/25
Xylenes(o,m,p)	< 0.200	mg/kg	1	0.060	0.200	SW846 8021B-S	SAC 06/12/25
Total Volatile Hydrocarbons							
TPH as Gasoline	< 10.0	mg/kg	1	0.689	10.0	SW846 8015B-S	SAC 06/12/25

Quality Control Data

Parameter	Result	Limits	DF	Method	Analyst/Date
Surrogate Recovery-Volatile					
4-Bromofluorobenzene	101.5 %	(56.24) - (145.8)	1	SW846 8021B QC	SAC 06/12/25

Report Approved By:

Report Approved On: 6/30/2025 1:40:20 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: N Tank S
Project Name: Custer DOT ATP
Project Number: P-0032425
Sampled: 06/09/25 at 01:42 PM
by Matt Carreiro
Sample Matrix: Soil

AET
1745 SAMCO ROAD
RAPID CITY, SD 57702

Lab ID#: 20250609544
Received: 06/09/25 at 03:45 PM
by Josh Bucknall
Account: W1202 - AET - Rapid City

Parameter	Result	Units	DF	MDL	PQL	Method	Analyst	Date
Volatile								
Benzene	< 0.050	mg/kg	1	0.018	0.050	SW846 8021B-S	SAC	06/12/25
Ethylbenzene	< 0.100	mg/kg	1	0.016	0.100	SW846 8021B-S	SAC	06/12/25
Methyl tertiary-Butyl Ether	< 0.100	mg/kg	1	0.023	0.100	SW846 8021B-S	SAC	06/12/25
Toluene	< 0.100	mg/kg	1	0.015	0.100	SW846 8021B-S	SAC	06/12/25
Xylenes(o,m,p)	< 0.200	mg/kg	1	0.060	0.200	SW846 8021B-S	SAC	06/12/25
Total Volatile Hydrocarbons								
TPH as Gasoline	< 10.0	mg/kg	1	0.689	10.0	SW846 8015B-S	SAC	06/12/25

Quality Control Data

Parameter	Result	Limits	DF	Method	Analyst	Date
Surrogate Recovery-Volatile						
4-Bromofluorobenzene	95.2 %	(56.24) - (145.8)	1	SW846 8021B QC	SAC	06/12/25

Report Approved By:

Report Approved On: 6/30/2025 1:40:20 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 Tank N
Project Name:	Custer DOT ATP
Project Number:	P-0032425
Sampled:	06/09/25 at 02:10 PM by Matt Carreiro
Sample Matrix:	Soil

AET
1745 SAMCO ROAD
RAPID CITY, SD 57702

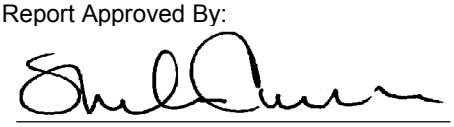
Lab ID#:	20250609545
Received:	06/09/25 at 03:45 PM by Josh Bucknall
Account:	W1202 - AET - Rapid City

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 06/19/25
TPH Diesel	< 10.0	mg/kg	1	1.30	10.0	SW846 8015B-S	SAC 06/19/25
Extraction							
Extraction TPH/SOC	1.00	none	1			SW846 3550	SAC 06/17/25

Quality Control Data

Parameter	Result	Limits	DF	Method	Analyst/Date
Surrogate Recovery-SV					
Ortho-Terphenyl	111.3 %	(66.51) - (143.0)	1	SW846 8015-S QC	SAC 06/19/25

Report Approved By:



Report Approved On: 6/30/2025 1:40:20 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 Tank S
Project Name:	Custer DOT ATP
Project Number:	P-0032425
Sampled:	06/09/25 at 02:10 PM by Matt Carreiro
Sample Matrix:	Soil

AET
1745 SAMCO ROAD
RAPID CITY, SD 57702

Lab ID#:	20250609546
Received:	06/09/25 at 03:45 PM by Josh Bucknall
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 06/19/25
TPH Diesel	< 10.0	mg/kg	1	1.30	10.0	SW846 8015B-S	SAC 06/19/25
Extraction							
Extraction TPH/SOC	1.00	none	1			SW846 3550	SAC 06/17/25

Quality Control Data

Parameter	Result	Limits	DF	Method	Analyst/Date
Surrogate Recovery-SV					
Ortho-Terphenyl	116.2 %	(66.51) - (143.0)	1	SW846 8015-S QC	SAC 06/19/25

Report Approved By:

Report Approved On: 6/30/2025 1:40:20 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: 20250609541 - 20250609546

QC Sample Report

Parameter	Lab#	QC Value	Smp Value	Spike	DF	Result	Limits	Method
Spike								
Benzene	0609542	0.961	< 0.050	1.00	1	96.1 %	(67.26) - (115.3)	SW846 8021B-S
Ethylbenzene	0609542	0.975	< 0.100	1.00	1	97.5 %	(80.98) - (111.1)	SW846 8021B-S
MTBE	0609542	0.950	< 0.100	1.00	1	95.0 %	(64.47) - (111.9)	SW846 8021B-S
Toluene	0609542	0.981	< 0.100	1.00	1	98.1 %	(73.57) - (113.9)	SW846 8021B-S
Xylenes(o,m,p)	0609542	2.96	0.232	3.00	1	91.0 %	(74.86) - (117.9)	SW846 8021B-S
TPH Gas	0609543	89.6	< 10.0	100	1	89.6 %	(54.60) - (129.8)	SW846 8015B-S
TPH-Diesel	0609545	272	< 10.0	300	1	90.5 %	(55.63) - (103.7)	SW846 8015B-S
Matrix Spike Duplicate								
Benzene	0609542	0.935	0.961		1	-2.74%	(-14.44) - (12.01)	SW846 8021B-S
Ethylbenzene	0609542	0.940	0.975		1	-3.66%	(-17.41) - (14.72)	SW846 8021B-S
MTBE	0609542	0.913	0.950		1	-3.97%	(-12.76) - (11.01)	SW846 8021B-S
Toluene	0609542	0.952	0.981		1	-3.00%	(-15.63) - (13.19)	SW846 8021B-S
Xylenes(o,m,p)	0609542	2.87	2.96		1	-3.22%	(-15.28) - (13.93)	SW846 8021B-S
TPH Gas	0609543	90.4	89.6		1	0.950%	(-18.82) - (14.24)	SW846 8015B-S
TPH-Diesel		267	272		1	-1.82%	(-26.16) - (25.60)	SW846 8015B-S
Initial Calibration Verification								
TPH-Diesel		1010	1000		1	1.00%	(-29.40) - (32.49)	SW846 8015B-S
Continuing Calibration Verification								
Benzene		23.3	25.0		1	-6.80%	(-17.02) - (21.90)	SW846 8021B
Benzene		23.7	25.0		1	-5.16%	(-18.47) - (22.17)	SW846 8021B
Ethylbenzene		23.6	25.0		1	-5.78%	(-15.10) - (19.95)	SW846 8021B
Ethylbenzene		23.8	25.0		1	-4.70%	(-16.30) - (19.95)	SW846 8021B
MTBE		23.6	25.0		1	-5.66%	(-18.57) - (26.07)	SW846 8021B
MTBE		23.7	25.0		1	-5.28%	(-19.77) - (25.73)	SW846 8021B
Toluene		23.8	25.0		1	-4.73%	(-16.40) - (29.28)	SW846 8021B
Toluene		24.2	25.0		1	-3.27%	(-18.18) - (29.66)	SW846 8021B
Xylenes(o,m,p)		71.4	75.0		1	-4.78%	(-13.90) - (24.99)	SW846 8021B
Xylenes(o,m,p)		72.7	75.0		1	-3.09%	(-15.64) - (25.50)	SW846 8021B
TPH Gas		1830	2000		1	-8.47%	(-18.12) - (5.530)	SW846 8015B
TPH Gas		1750	2000		1	-12.5 %	(-18.26) - (5.543)	SW846 8015B
TPH-Diesel		982	1000		1	-1.80%	(-8.939) - (32.73)	SW846 8015B-S
TPH-Diesel		895	1000		1	-10.5 %	(-11.36) - (34.07)	SW846 8015B-S

- Recovery was within 20% of expected value

Lab Numbers: **20250609541 - 20250609546**

Parameter	Lab#	QC Value	Smp Value	Spike	DF	Result	Limits	Method	
Lab Control Spike									
Benzene		1.00	0.00	1.00	1	100.0 %	(82.69) - (127.2)	SW846 8021B-S	
Ethylbenzene		1.01	0.00	1.00	1	101.3 %	(85.66) - (128.3)	SW846 8021B-S	
MTBE		1.01	0.00	1.00	1	101.3 %	(75.10) - (134.8)	SW846 8021B-S	
Toluene		1.02	0.00	1.00	1	102.3 %	(84.57) - (132.4)	SW846 8021B-S	
Xylenes(o,m,p)		3.07	0.00	3.00	1	102.4 %	(85.74) - (132.8)	SW846 8021B-S	
TPH Gas		90.3	0.00	100	1	90.3 %	(67.10) - (113.1)	SW846 8015B-S	
TPH-Diesel		172	0.00	200	1	86.0 %	(67.80) - (102.2)	SW846 8015B-S	
Lab Reagent Blank									
Benzene		0.00	0.00		1	0	(0.000) - (0.000)	SW846 8021B-S	
Ethylbenzene		0.00	0.00		1	0	(0.000) - (0.000)	SW846 8021B-S	
MTBE		0.034	0.00		1	0.03438	(-0.0155) - (0.0937)	SW846 8021B-S	
Toluene		0.00	0.00		1	0	(-0.0310) - (0.0419)	SW846 8021B-S	
Xylenes(o,m,p)		0.00	0.00		1	0	(-0.0714) - (0.1554)	SW846 8021B-S	
TPH Gas		1.86	0.00		1	1.85603	(-0.9841) - (1.641)	SW846 8015B-S	X
- Blank value is less than half of the reporting limit									
TPH-Diesel		0.00	0.00		1	0	(-6.943) - (9.491)	SW846 8015B-S	

Approved By: 

Approved On: 06/30/2025 01:40 PM

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 Rd.
Rapid City, SD 57702

PHONE:

16278

PAGE 1 OF 1

AET PROJECT NUMBER P-0032425

PROJECT NAME/LOCATION Custer DOT ATP / Custer, SD

AET PROJECT MANAGER Bob Prann

SEND REPORT TO rprann@TeamAET.com

PO# 18-1149

SAMPLED BY (PRINT) Matt Carreiro

SAMPLER SIGNATURE

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: TPH-G, BTEX, MTBE	ANALYSIS: TPH-D, Naphthalene	REMARKS
1	S. Dispenser	6/9	1245	Soil	1	x							x	20250609 541
2	N Dispenser	6/9	1250	Soil	1	x						x		542
3	N Tank N	6/9	1340	Soil	1	x						x		543
4	N Tank S	6/9	1342	Soil	1	x						x		544
5	S Tank N	6/9	1410	Soil	1	x							x	545
6	S Tank S	6/9	1410	Soil	1	x							x	546

NOTE:

19.4°C
on ice

ITEM NUMBER	RELINQUISHED BY/AFFILIATION	ACCEPTED BY/AFFILIATION	DATE	TIME
1-6	AET		6/9	1545

MIDCONTINENT TESTING LABORATORIES

SAMPLE RECEIPT CHECKLIST

Company Name AET

Date/Time Received 6/9/25 (Date) / 1545 (Time)

Project CustoDOT ATP

Received by Josh

Lab Number(s) 2025060954l-546

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. 19.4°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: _____

American Engineering Testing, Inc.
Rapid City
1745 Samco Road
Rapid City, SD 57702
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Proctor Report

Report No: PTR:AET-220091-S1
Issue No: 1

Client: South Dakota Dept. of Agriculture & Nat. Resources **CC:**

Project: DANR ATP - Custer DOT

115 Centennial Drive
Custer SD
Job No: P-0032425

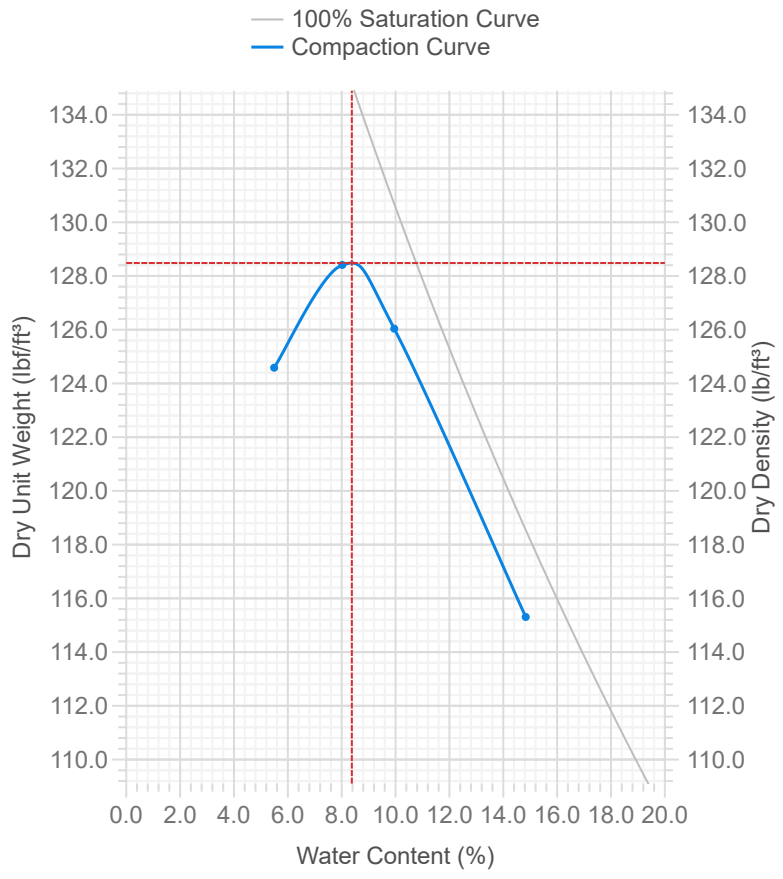
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Date of Issue: 6/6/2025
Reviewed By: Kally Knutson
Geologist I

Sample Details

Sample ID: AET-220091-S1
Date Sampled: 6/3/2025
Material: Sandy Gravel, tan
Location: Black Hills Gravel- Pringle
Sampled By: Client

Dry Unit Weight - Water Content Relationship



Test Results

ASTM D698

Std. Maximum Dry Unit Weight (lbf/ft³):	**128.5**
Std. Optimum Water Content (%):	**8.4**
Retained on 3/4″ Sieve (%):	1
Passing 3/4″ Sieve (%):	99
Cumulative Retained on 3/8″ Sieve (%):	23
Retained on 3/8″ Sieve (%):	22
Passing 3/8″ Sieve (%):	77
Method:	C
Preparation Method:	Moist
Test Portion Specific Gravity:	2.65
Determined By:	Estimated
Tested By:	Christine Olson
Date Tested:	6/6/2025

Comments

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Field Density Test Report

Report No: ND:AET-220839
Issue No: 1

Client: South Dakota Dept. of Agriculture & Nat. Resources **CC:**

Project: DANR ATP - Custer DOT

115 Centennial Drive
Custer SD

Job No: P-0032425

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Date of Issue: 6/12/2025
Reviewed By: David Franz
Engineering Technician II

Testing Details

Tested By:	David Franz	**Date Tested:**	6/10/2025
Field Methods:	ASTM D 6938		
Gauge Make/Model:	Troxler 3440 (NUCLEAR DENSITY GAGE)	**Test Mode:**	Direct Transmission
Standard Count: Density:	2446	**Serial Number:**	70006
Standard Count: Moisture:	706		

Proctor Information

Sample ID	Material	Method	MDD (lb/ft³)	OWC (%)
AET-220091-S1	Sandy Gravel, tan	ASTM D698 (C)	128.5	8.4

Test Results

Test No.	Method	Proctor Sample ID	Probe Depth (in.)	Wet Density (lb/ft³)	Water Content (%)	OWC Var (%)	OWC Var Spec (%)	Dry Density (lb/ft³)	Comp (%)	Comp Spec (%)	Results
1	D 6938	AET-220091-S1	8	129.0	5.5	-2.9	–3 – +3	122.3	**95.2**	≥95	OK

Location

General Location: Tank Removal Excavation Backfill

Test No.	Location	Test Elev/Depth (ft)	
1	Center of Excavation	1' below grade	Engineered Fill

Comments

Our compaction testing was done on an on-call basis; therefore, AET cannot comment on the materials used or preparation of the fill, the lift thicknesses, or the compactive effort applied. Our tests only provide the percent compaction level and soil type data at the specific locations and elevations tested.
My test met project specifications.

Legend

OWC = Optimum Water Content
MDD = Maximum Dry Density
OK = All Results Meet Specification

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