IOWA DEPARTMENT OF NATURAL RESOURCES

Petroleum Contaminated Soil
Single Use Landfarm Early Closure Form

Single-use landfarming agencies shall submit the following closure form to the department and department field office with jurisdiction over the landfarm if the single use landfarm is to be closed before 3 years after the last application date.

Send the completed application with attached information to:

Solid Waste Section
Land Quality Bureau
Iowa Department of Natural Resources
502 E 9th St
Des Moines IA 50319
Fax: (515) 725-8202

Visit www.IowaDNR.gov/fieldoffice for a listing of field offices addresses and jurisdictions

Questions contact Matt Graesch at (515) 725-8331 or matt.graesch@dnr.iowa.gov

For information on Emergency Response Spills, call (515) 725-8694 or visit http://www.iowadnr.gov/About-DNR/DNR-Staff-Offices/Environmental-Field-Offices/Emergency-Response-Unit

SECTION 1. CONTACT INFORMATION

Provide the name, address and telephone number for the following:

Landfarming Agency Owner(s)

Name: American Backhoe Company

Street Address: PO Box 335

City: Crescent **State:** Iowa **Zip Code:** 51526

Phone Number: 402-306-2084

DNR Existing Permit Number for Agency: 78 **- SDP-** 29-07 **-PCS**

PCS Landfarming/Storage Location Owner

Name: Three C Farms Inc.

Street Address: 429 1st Avenue W.

City: Newton **State:** Iowa **Zip Code:** 50208

Phone Number: 641-792-3662

Legal Description of Property that will be Utilized for Landfarming/Storage:
(you may attach a legal description from your county assessor)

SE	¼ of	NE	¼ of	NE	¼	16	85	N	23	☐ E ☒ W	Story
						Section	*Township*		*Range*		*County*

SECTION 2: LANDFARM CLOSURE INFORMATION

Date PCS was last land applied: 10/23/2024

Total area in square feet of landfarm plot to be closed: 69,975

SECTION 3. CLOSURE FORM CHECKLIST

Checking the appropriate boxes below certifies that the attachments submitted in conjunction with this closure form are complete and in compliance with the applicable chapters of the Iowa Administrative Code. While some of the attachments below may have been submitted previously, updated copies of each is required to be provided with the closure form.

Required Document

- ☒ Section A. Map of Landfarm
- ☒ Section B. Documentation that Landfarm is Eligible for Early Closure [IAC 567 Chapter 120.12(2)]
- ☒ **Section C. Chemical Analysis of Petroleum Contaminated Soil [IAC 567 Chapter 120.12(2)"a"]**

SECTION 4. LANDFARMING AGENCY OWNER CERTIFICATION FOR SINGLE USE LANDFARM CLOSURE

I certify under penalty of law that I am the owner or a authorized representative of the landfarming agency for which this Petroleum Contaminated Soil Closure Form is submitted, and that I have examined and am familiar with the closure requirements in accordance with Iowa Administrative Code 567-Chapter 120, and that the information I have provided is true, accurate and complete.

Signature: _____ Date: 5/29/2025

Printed Name: Greg Morris

SECTION 5. LANDFARMING SITE OWNER CERTIFICATION FOR LANDFARMING AND STORAGE OF PCS

I certify I own the application or storage site for the petroleum contaminated soil referenced above and I acknowledge the landfarming practices described in this closure form and the closure requirements contained in Iowa Administrative (IAC) Code 567-Chapter 120.

Signature: _____ Date: 06/02/25

Printed Name: Brad Lewis

DOCUMENTS TO BE ATTACHED

SECTION A. MAP OF LANDFARM

- ✓ Provide a map that show s the location of the landfarm plot to be closed. Clearly mark the following on the map:
  - **a.** Landfarm plot site boundary that is to be closed
  - **b.** Dimensions of landfarm plot to be closed
  - **c.** Other landfarm plots that have been utilized
  - **d.** Locations where the landfarm closure soil samples were obtained in the landfarm plot

SECTION B. DOCUMENTATION THAT LANDFARM IS ELIGIBLE FOR EARLY CLOSURE

- ✓ Provide documentation that landfarm has met the following requirements for early closure:
  - **a.** A minimum of 6 months has past since PCS has been land applied.

SECTION C. CHEMICAL ANALYSIS OF PETROLEUM CONTAMINATED SOIL [IAC 567 CHAPTER 120.12(2)"A"]

- ✓ The following analyses shall be performed. Samples shall be acquired, stored, handled, tested and reported in accordance with the required methodology and accepted scientific procedures. A laboratory certified for UST petroleum analyses pursuant to IAC 567-Chapter 83 shall test samples. The analysis shall utilize the most recent version of Method OA-1 and OA-2, "Method for Determination of Volatile Petroleum Hydrocarbons (Gasoline)," University of Iowa Hygienic Laboratory. A copy of the results including the chain of custody must be attached to this form.
  - **a.** BTEX testing. The landfarm plot shall be tested for benzene, toluene, and ethylbenzene.
  - **b.** TEH-diesel testing. The landfarm plot shall be tested for total extractable hydrocarbons.
  - **c.** MTBE testing. The landfarm plot shall be tested for methyl tertiary-butyl ether unless prior analysis of the soil has shown that MTBE is not present in the soil.

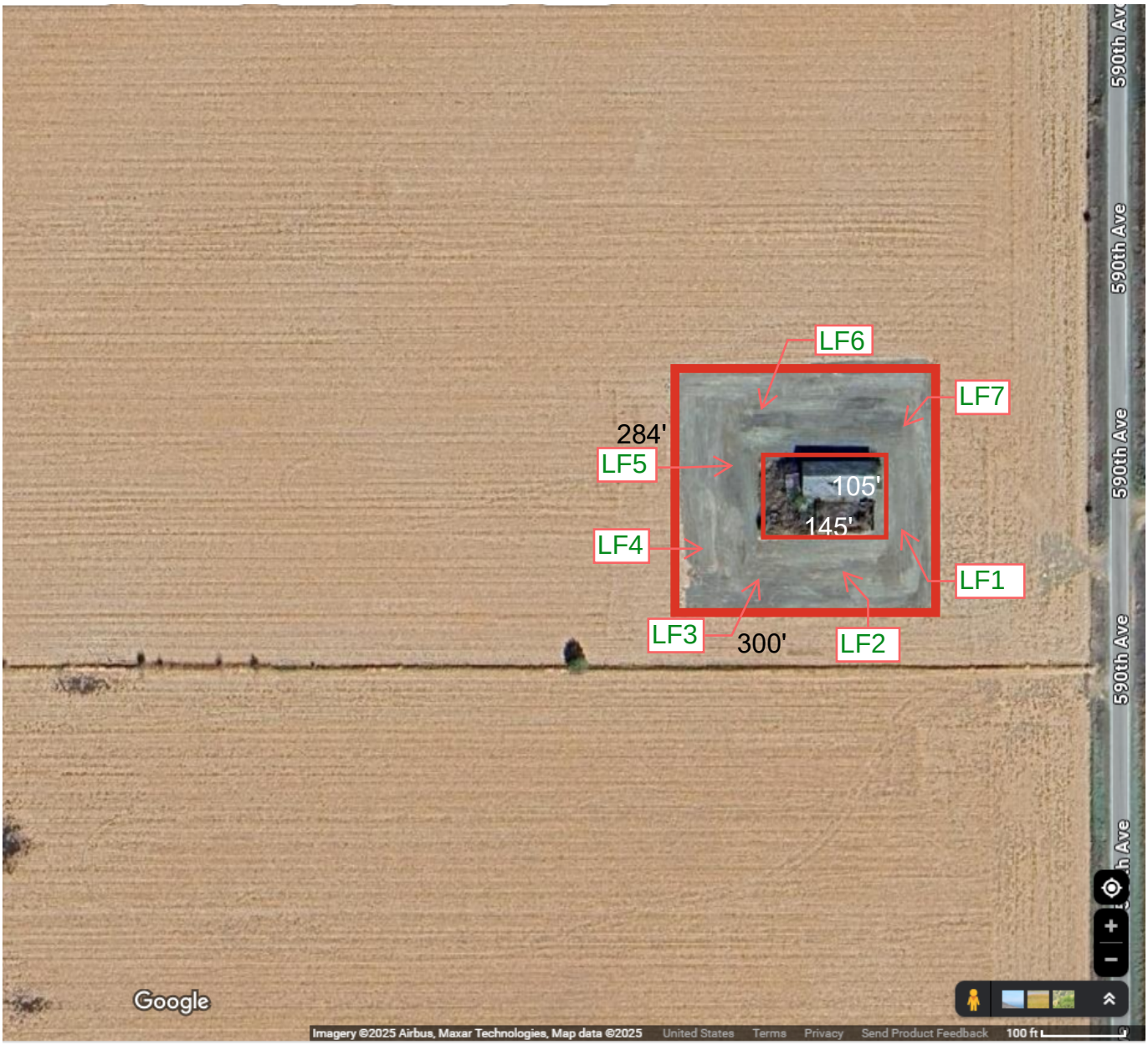
Limits to be met by each sample:

- Benzene – 0.54 mg/kg
- Toluene – 42 mg/kg
- Ethylbenzene – 15 mg/kg
- TEH-diesel – 3800 mg/kg
- MTBE – 0.02 mg/kg

One sample shall be taken from each 10,000 ft^2 (e.g., 100-foot x 100-foot area) of landfarm plot area and be analyzed for the above constituents. Soil samples shall be taken from the top 2 to 6 inches of soil. Place the results in the table below in milligrams per kilogram (mg/kg).

	Benzene	**Toluene**	**Ethylbenzene**	**TEH-diesel**	**MTBE**
Sample #1	<0.00908	<0.00908	<0.00908	<15.8	<0.00908
Sample #2	<0.0117	<0.0117	<0.0117	<9.93	<0.0117
Sample #3	<0.0115	<0.0115	<0.0115	<9.83	<0.0115
Sample #4	<0.0118	<0.0118	<0.0118	<9.74	<0.0118
Sample #5	<0.0101	<0.0101	<0.0101	<9.86	<0.0101
Sample #6	<0.0116	<0.0116	<0.0116	17.1	<0.0116
Sample #7	<0.0116	<0.0116	<0.0116	14.0	<0.0116
Sample #8					
Sample #9					
Sample #10					

SECTION A


LF6
LF7
284'
LF5
105'
145'
LF4
LF1
LF3
300'
LF2
590th Ave
590th Ave
590th Ave
590th Ave
Google
Imagery ©2025 Airbus, Maxar Technologies, Map data ©2025
United States
Terms
Privacy
Send Product Feedback
100 ft

SECTION B

Soil was last applied on October 23, 2024. April 23, 2025, was the six-month date. Soil sampling was completed on May 21, 2025 and all samples were less than target levels.

SECTION C

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jennifer Repp
Seneca Companies
PO BOX 3360
Des Moines, Iowa 50316

Generated 5/28/2025 3:58:51 PM

JOB DESCRIPTION

Kerr McGee Landfarm
6363555.2

JOB NUMBER

310-306876-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

Generated
5/28/2025 3:58:51 PM

Authorized for release by
Conner Calhoun, Client Service Manager
Conner.Calhoun@et.eurofinsus.com
Designee for
Charlotte Collins, Project Management Assistant I
Charlotte.Collins@et.eurofinsus.com
(319)595-2025

Table of Contents

Job Narrative
310-306876-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 5/21/2025 11:55 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.2°C.

GC/MS VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Diesel Range Organics
Method OA2: Due to the matrix, the initial volume(s) used for the following sample deviated from the standard procedure: LF-1 (310-306876-1). The reporting limits (RLs) have been adjusted proportionately.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: Seneca Companies
Project/Site: Kerr McGee Landfarm

Job ID: 310-306876-1
SDG: 6363555.2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-306876-1	LF-1	Solid	05/21/25 09:00	05/21/25 11:55
310-306876-2	LF-2	Solid	05/21/25 09:15	05/21/25 11:55
310-306876-3	LF-3	Solid	05/21/25 09:35	05/21/25 11:55
310-306876-4	LF-4	Solid	05/21/25 09:45	05/21/25 11:55
310-306876-5	LF-5	Solid	05/21/25 10:00	05/21/25 11:55
310-306876-6	LF-6	Solid	05/21/25 10:10	05/21/25 11:55
310-306876-7	LF-7	Solid	05/21/25 10:25	05/21/25 11:55

Detection Summary

Client: Seneca Companies
Project/Site: Kerr McGee Landfarm

Job ID: 310-306876-1
SDG: 6363555.2

Client Sample ID: LF-1 — Lab Sample ID: 310-306876-1

No Detections.

Client Sample ID: LF-2 — Lab Sample ID: 310-306876-2

No Detections.

Client Sample ID: LF-3 — Lab Sample ID: 310-306876-3

No Detections.

Client Sample ID: LF-4 — Lab Sample ID: 310-306876-4

No Detections.

Client Sample ID: LF-5 — Lab Sample ID: 310-306876-5

No Detections.

Client Sample ID: LF-6 — Lab Sample ID: 310-306876-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel	17.1		10.0		mg/Kg	1		OA-2	Total/NA
Waste Oil	18.8		10.0		mg/Kg	1		OA-2	Total/NA

Client Sample ID: LF-7 — Lab Sample ID: 310-306876-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel	14.0		9.91		mg/Kg	1		OA-2	Total/NA
Waste Oil	11.6		9.91		mg/Kg	1		OA-2	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Seneca Companies
Project/Site: Kerr McGee Landfarm

Job ID: 310-306876-1
SDG: 6363555.2

Client Sample ID: LF-1

Date Collected: 05/21/25 09:00
Date Received: 05/21/25 11:55

Lab Sample ID: 310-306876-1

Matrix: Solid

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00908		0.00908		mg/Kg		05/28/25 08:46	05/28/25 12:32	1
Ethylbenzene	<0.00908		0.00908		mg/Kg		05/28/25 08:46	05/28/25 12:32	1
Methyl tert-butyl ether	<0.00908		0.00908		mg/Kg		05/28/25 08:46	05/28/25 12:32	1
Toluene	<0.00908		0.00908		mg/Kg		05/28/25 08:46	05/28/25 12:32	1
Xylenes, Total	<0.0182		0.0182		mg/Kg		05/28/25 08:46	05/28/25 12:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*77 - 120*	*05/28/25 08:46*	*05/28/25 12:32*	*1*
Dibromofluoromethane (Surr)	*108*		*80 - 128*	*05/28/25 08:46*	*05/28/25 12:32*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*	*05/28/25 08:46*	*05/28/25 12:32*	*1*

Method: Iowa DNR OA-2 - Iowa - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	<15.8		15.8		mg/Kg		05/22/25 08:25	05/23/25 03:03	1
Diesel	<15.8		15.8		mg/Kg		05/22/25 08:25	05/23/25 03:03	1
Waste Oil	<15.8		15.8		mg/Kg		05/22/25 08:25	05/23/25 03:03	1
Total Extractable Hydrocarbons	<23.7		23.7		mg/Kg		05/22/25 08:25	05/23/25 03:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*47*		*12 - 150*	*05/22/25 08:25*	*05/23/25 03:03*	*1*

Client Sample Results

Client: Seneca Companies
Project/Site: Kerr McGee Landfarm

Job ID: 310-306876-1
SDG: 6363555.2

Client Sample ID: LF-2

Date Collected: 05/21/25 09:15
Date Received: 05/21/25 11:55

Lab Sample ID: 310-306876-2

Matrix: Solid

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0117		0.0117		mg/Kg		05/28/25 08:46	05/28/25 12:57	1
Ethylbenzene	<0.0117		0.0117		mg/Kg		05/28/25 08:46	05/28/25 12:57	1
Methyl tert-butyl ether	<0.0117		0.0117		mg/Kg		05/28/25 08:46	05/28/25 12:57	1
Toluene	<0.0117		0.0117		mg/Kg		05/28/25 08:46	05/28/25 12:57	1
Xylenes, Total	<0.0233		0.0233		mg/Kg		05/28/25 08:46	05/28/25 12:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*77 - 120*	*05/28/25 08:46*	*05/28/25 12:57*	*1*
Dibromofluoromethane (Surr)	*109*		*80 - 128*	*05/28/25 08:46*	*05/28/25 12:57*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*	*05/28/25 08:46*	*05/28/25 12:57*	*1*

Method: Iowa DNR OA-2 - Iowa - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	<9.93		9.93		mg/Kg		05/22/25 08:25	05/23/25 03:28	1
Diesel	<9.93		9.93		mg/Kg		05/22/25 08:25	05/23/25 03:28	1
Waste Oil	<9.93		9.93		mg/Kg		05/22/25 08:25	05/23/25 03:28	1
Total Extractable Hydrocarbons	<14.9		14.9		mg/Kg		05/22/25 08:25	05/23/25 03:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*43*		*12 - 150*	*05/22/25 08:25*	*05/23/25 03:28*	*1*

Client: Seneca Companies
Project/Site: Kerr McGee Landfarm

Job ID: 310-306876-1
SDG: 6363555.2

Client Sample ID: LF-3

Date Collected: 05/21/25 09:35
Date Received: 05/21/25 11:55

Lab Sample ID: 310-306876-3

Matrix: Solid

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0115		0.0115		mg/Kg		05/28/25 08:46	05/28/25 13:21	1
Ethylbenzene	<0.0115		0.0115		mg/Kg		05/28/25 08:46	05/28/25 13:21	1
Methyl tert-butyl ether	<0.0115		0.0115		mg/Kg		05/28/25 08:46	05/28/25 13:21	1
Toluene	<0.0115		0.0115		mg/Kg		05/28/25 08:46	05/28/25 13:21	1
Xylenes, Total	<0.0230		0.0230		mg/Kg		05/28/25 08:46	05/28/25 13:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*77 - 120*	*05/28/25 08:46*	*05/28/25 13:21*	*1*
Dibromofluoromethane (Surr)	*108*		*80 - 128*	*05/28/25 08:46*	*05/28/25 13:21*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*	*05/28/25 08:46*	*05/28/25 13:21*	*1*

Method: Iowa DNR OA-2 - Iowa - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	<9.83		9.83		mg/Kg		05/22/25 08:25	05/23/25 04:17	1
Diesel	<9.83		9.83		mg/Kg		05/22/25 08:25	05/23/25 04:17	1
Waste Oil	<9.83		9.83		mg/Kg		05/22/25 08:25	05/23/25 04:17	1
Total Extractable Hydrocarbons	<14.7		14.7		mg/Kg		05/22/25 08:25	05/23/25 04:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*77*		*12 - 150*	*05/22/25 08:25*	*05/23/25 04:17*	*1*

Client: Seneca Companies
Project/Site: Kerr McGee Landfarm

Job ID: 310-306876-1
SDG: 6363555.2

Client Sample ID: LF-4

Date Collected: 05/21/25 09:45
Date Received: 05/21/25 11:55

Lab Sample ID: 310-306876-4

Matrix: Solid

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0118		0.0118		mg/Kg		05/28/25 08:46	05/28/25 13:46	1
Ethylbenzene	<0.0118		0.0118		mg/Kg		05/28/25 08:46	05/28/25 13:46	1
Methyl tert-butyl ether	<0.0118		0.0118		mg/Kg		05/28/25 08:46	05/28/25 13:46	1
Toluene	<0.0118		0.0118		mg/Kg		05/28/25 08:46	05/28/25 13:46	1
Xylenes, Total	<0.0236		0.0236		mg/Kg		05/28/25 08:46	05/28/25 13:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*77 - 120*	*05/28/25 08:46*	*05/28/25 13:46*	*1*
Dibromofluoromethane (Surr)	*105*		*80 - 128*	*05/28/25 08:46*	*05/28/25 13:46*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*	*05/28/25 08:46*	*05/28/25 13:46*	*1*

Method: Iowa DNR OA-2 - Iowa - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	<9.74		9.74		mg/Kg		05/22/25 08:25	05/23/25 04:42	1
Diesel	<9.74		9.74		mg/Kg		05/22/25 08:25	05/23/25 04:42	1
Waste Oil	<9.74		9.74		mg/Kg		05/22/25 08:25	05/23/25 04:42	1
Total Extractable Hydrocarbons	<14.6		14.6		mg/Kg		05/22/25 08:25	05/23/25 04:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*47*		*12 - 150*	*05/22/25 08:25*	*05/23/25 04:42*	*1*

Client: Seneca Companies
Project/Site: Kerr McGee Landfarm

Job ID: 310-306876-1
SDG: 6363555.2

Client Sample ID: LF-5

Date Collected: 05/21/25 10:00
Date Received: 05/21/25 11:55

Lab Sample ID: 310-306876-5

Matrix: Solid

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0101		0.0101		mg/Kg		05/28/25 08:46	05/28/25 14:10	1
Ethylbenzene	<0.0101		0.0101		mg/Kg		05/28/25 08:46	05/28/25 14:10	1
Methyl tert-butyl ether	<0.0101		0.0101		mg/Kg		05/28/25 08:46	05/28/25 14:10	1
Toluene	<0.0101		0.0101		mg/Kg		05/28/25 08:46	05/28/25 14:10	1
Xylenes, Total	<0.0202		0.0202		mg/Kg		05/28/25 08:46	05/28/25 14:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*77 - 120*	*05/28/25 08:46*	*05/28/25 14:10*	*1*
Dibromofluoromethane (Surr)	*108*		*80 - 128*	*05/28/25 08:46*	*05/28/25 14:10*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*	*05/28/25 08:46*	*05/28/25 14:10*	*1*

Method: Iowa DNR OA-2 - Iowa - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	<9.86		9.86		mg/Kg		05/28/25 09:22	05/28/25 12:22	1
Diesel	<9.86		9.86		mg/Kg		05/28/25 09:22	05/28/25 12:22	1
Waste Oil	<9.86		9.86		mg/Kg		05/28/25 09:22	05/28/25 12:22	1
Total Extractable Hydrocarbons	<14.8		14.8		mg/Kg		05/28/25 09:22	05/28/25 12:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*42*		*12 - 150*	*05/28/25 09:22*	*05/28/25 12:22*	*1*

Client: Seneca Companies
Project/Site: Kerr McGee Landfarm

Job ID: 310-306876-1
SDG: 6363555.2

Client Sample ID: LF-6

Date Collected: 05/21/25 10:10
Date Received: 05/21/25 11:55

Lab Sample ID: 310-306876-6

Matrix: Solid

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0116		0.0116		mg/Kg		05/28/25 08:46	05/28/25 14:34	1
Ethylbenzene	<0.0116		0.0116		mg/Kg		05/28/25 08:46	05/28/25 14:34	1
Methyl tert-butyl ether	<0.0116		0.0116		mg/Kg		05/28/25 08:46	05/28/25 14:34	1
Toluene	<0.0116		0.0116		mg/Kg		05/28/25 08:46	05/28/25 14:34	1
Xylenes, Total	<0.0232		0.0232		mg/Kg		05/28/25 08:46	05/28/25 14:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*77 - 120*	*05/28/25 08:46*	*05/28/25 14:34*	*1*
Dibromofluoromethane (Surr)	*112*		*80 - 128*	*05/28/25 08:46*	*05/28/25 14:34*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*	*05/28/25 08:46*	*05/28/25 14:34*	*1*

Method: Iowa DNR OA-2 - Iowa - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	<10.0		10.0		mg/Kg		05/28/25 09:22	05/28/25 12:47	1
Diesel	**17.1**		10.0		mg/Kg		05/28/25 09:22	05/28/25 12:47	1
Waste Oil	**18.8**		10.0		mg/Kg		05/28/25 09:22	05/28/25 12:47	1
Total Extractable Hydrocarbons	<15.0		15.0		mg/Kg		05/28/25 09:22	05/28/25 12:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*50*		*12 - 150*	*05/28/25 09:22*	*05/28/25 12:47*	*1*

Client: Seneca Companies
Project/Site: Kerr McGee Landfarm

Job ID: 310-306876-1
SDG: 6363555.2

Client Sample ID: LF-7

Date Collected: 05/21/25 10:25
Date Received: 05/21/25 11:55

Lab Sample ID: 310-306876-7

Matrix: Solid

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0116		0.0116		mg/Kg		05/28/25 08:46	05/28/25 14:59	1
Ethylbenzene	<0.0116		0.0116		mg/Kg		05/28/25 08:46	05/28/25 14:59	1
Methyl tert-butyl ether	<0.0116		0.0116		mg/Kg		05/28/25 08:46	05/28/25 14:59	1
Toluene	<0.0116		0.0116		mg/Kg		05/28/25 08:46	05/28/25 14:59	1
Xylenes, Total	<0.0233		0.0233		mg/Kg		05/28/25 08:46	05/28/25 14:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*77 - 120*	*05/28/25 08:46*	*05/28/25 14:59*	*1*
Dibromofluoromethane (Surr)	*108*		*80 - 128*	*05/28/25 08:46*	*05/28/25 14:59*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*	*05/28/25 08:46*	*05/28/25 14:59*	*1*

Method: Iowa DNR OA-2 - Iowa - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	<9.91		9.91		mg/Kg		05/28/25 09:22	05/28/25 13:12	1
Diesel	**14.0**		9.91		mg/Kg		05/28/25 09:22	05/28/25 13:12	1
Waste Oil	**11.6**		9.91		mg/Kg		05/28/25 09:22	05/28/25 13:12	1
Total Extractable Hydrocarbons	<14.9		14.9		mg/Kg		05/28/25 09:22	05/28/25 13:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*80*		*12 - 150*	*05/28/25 09:22*	*05/28/25 13:12*	*1*

Definitions/Glossary

Client: Seneca Companies
Project/Site: Kerr McGee Landfarm

Job ID: 310-306876-1
SDG: 6363555.2

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Surrogate Summary

Client: Seneca Companies
Project/Site: Kerr McGee Landfarm

Job ID: 310-306876-1
SDG: 6363555.2

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(80-128)	(80-120)
310-306876-1	LF-1	99	108	94
310-306876-2	LF-2	95	109	93
310-306876-3	LF-3	95	108	94
310-306876-4	LF-4	96	105	94
310-306876-5	LF-5	96	108	93
310-306876-6	LF-6	94	112	92
310-306876-7	LF-7	95	108	94
LCS 310-455880/2-A	Lab Control Sample	101	103	97
MB 310-455880/1-A	Method Blank	99	104	92

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: OA-2 - Iowa - Extractable Petroleum Hydrocarbons (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		OTCN
Lab Sample ID	Client Sample ID	(12-150)
310-306876-1	LF-1	47
310-306876-2	LF-2	43
310-306876-3	LF-3	77
310-306876-4	LF-4	47
310-306876-5	LF-5	42
310-306876-6	LF-6	50
310-306876-7	LF-7	80
LCS 310-455435/2-A	Lab Control Sample	43
LCS 310-455888/2-A	Lab Control Sample	94
MB 310-455435/1-A	Method Blank	47
MB 310-455888/1-A	Method Blank	51

Surrogate Legend

OTCN = n-Octacosane

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 310-455880/1-A
Matrix: Solid
Analysis Batch: 455893

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 455880

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00917		0.00917		mg/Kg		05/28/25 08:46	05/28/25 11:19	1
Ethylbenzene	<0.00917		0.00917		mg/Kg		05/28/25 08:46	05/28/25 11:19	1
Methyl tert-butyl ether	<0.00917		0.00917		mg/Kg		05/28/25 08:46	05/28/25 11:19	1
Toluene	<0.00917		0.00917		mg/Kg		05/28/25 08:46	05/28/25 11:19	1
Xylenes, Total	<0.0183		0.0183		mg/Kg		05/28/25 08:46	05/28/25 11:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*77 - 120*	*05/28/25 08:46*	*05/28/25 11:19*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 128*	*05/28/25 08:46*	*05/28/25 11:19*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*	*05/28/25 08:46*	*05/28/25 11:19*	*1*

Lab Sample ID: LCS 310-455880/2-A
Matrix: Solid
Analysis Batch: 455893

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 455880

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.0785	0.06871		mg/Kg		88	76 - 130
Ethylbenzene	0.0785	0.06782		mg/Kg		86	74 - 123
Methyl tert-butyl ether	0.0785	0.07601		mg/Kg		97	66 - 143
Toluene	0.0785	0.06789		mg/Kg		87	74 - 122
Xylenes, Total	0.157	0.1387		mg/Kg		88	72 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*77 - 120*
Dibromofluoromethane (Surr)	*103*		*80 - 128*
Toluene-d8 (Surr)	*97*		*80 - 120*

Method: OA-2 - Iowa - Extractable Petroleum Hydrocarbons (GC)

Lab Sample ID: MB 310-455435/1-A
Matrix: Solid
Analysis Batch: 455424

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 455435

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	<9.65		9.65		mg/Kg		05/22/25 08:25	05/22/25 20:29	1
Diesel	<9.65		9.65		mg/Kg		05/22/25 08:25	05/22/25 20:29	1
Waste Oil	<9.65		9.65		mg/Kg		05/22/25 08:25	05/22/25 20:29	1
Total Extractable Hydrocarbons	<14.5		14.5		mg/Kg		05/22/25 08:25	05/22/25 20:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*47*		*12 - 150*	*05/22/25 08:25*	*05/22/25 20:29*	*1*

Lab Sample ID: LCS 310-455435/2-A
Matrix: Solid
Analysis Batch: 455424

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 455435

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel	128	77.80		mg/Kg		61	54 - 121

Method: OA-2 - Iowa - Extractable Petroleum Hydrocarbons (GC) (Continued)

Surrogate	LCS %Recovery	LCS Qualifier	Limits
n-Octacosane	43		12 - 150

Lab Sample ID: MB 310-455888/1-A
Matrix: Solid
Analysis Batch: 455857

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 455888

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	<9.56		9.56		mg/Kg		05/28/25 09:22	05/28/25 13:36	1
Diesel	<9.56		9.56		mg/Kg		05/28/25 09:22	05/28/25 13:36	1
Waste Oil	<9.56		9.56		mg/Kg		05/28/25 09:22	05/28/25 13:36	1
Total Extractable Hydrocarbons	<14.3		14.3		mg/Kg		05/28/25 09:22	05/28/25 13:36	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane	51		12 - 150	05/28/25 09:22	05/28/25 13:36	1

Lab Sample ID: LCS 310-455888/2-A
Matrix: Solid
Analysis Batch: 455857

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 455888

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel			129	120.3		mg/Kg		93	54 - 121		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
n-Octacosane	94		12 - 150

QC Association Summary

Client: Seneca Companies
Project/Site: Kerr McGee Landfarm

Job ID: 310-306876-1
SDG: 6363555.2

GC/MS VOA

Prep Batch: 455880

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-306876-1	LF-1	Total/NA	Solid	5035	
310-306876-2	LF-2	Total/NA	Solid	5035	
310-306876-3	LF-3	Total/NA	Solid	5035	
310-306876-4	LF-4	Total/NA	Solid	5035	
310-306876-5	LF-5	Total/NA	Solid	5035	
310-306876-6	LF-6	Total/NA	Solid	5035	
310-306876-7	LF-7	Total/NA	Solid	5035	
MB 310-455880/1-A	Method Blank	Total/NA	Solid	5035	
LCS 310-455880/2-A	Lab Control Sample	Total/NA	Solid	5035	

Analysis Batch: 455893

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-306876-1	LF-1	Total/NA	Solid	8260D	455880
310-306876-2	LF-2	Total/NA	Solid	8260D	455880
310-306876-3	LF-3	Total/NA	Solid	8260D	455880
310-306876-4	LF-4	Total/NA	Solid	8260D	455880
310-306876-5	LF-5	Total/NA	Solid	8260D	455880
310-306876-6	LF-6	Total/NA	Solid	8260D	455880
310-306876-7	LF-7	Total/NA	Solid	8260D	455880
MB 310-455880/1-A	Method Blank	Total/NA	Solid	8260D	455880
LCS 310-455880/2-A	Lab Control Sample	Total/NA	Solid	8260D	455880

GC Semi VOA

Analysis Batch: 455424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-306876-1	LF-1	Total/NA	Solid	OA-2	455435
310-306876-2	LF-2	Total/NA	Solid	OA-2	455435
310-306876-3	LF-3	Total/NA	Solid	OA-2	455435
310-306876-4	LF-4	Total/NA	Solid	OA-2	455435
MB 310-455435/1-A	Method Blank	Total/NA	Solid	OA-2	455435
LCS 310-455435/2-A	Lab Control Sample	Total/NA	Solid	OA-2	455435

Prep Batch: 455435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-306876-1	LF-1	Total/NA	Solid	3546	
310-306876-2	LF-2	Total/NA	Solid	3546	
310-306876-3	LF-3	Total/NA	Solid	3546	
310-306876-4	LF-4	Total/NA	Solid	3546	
MB 310-455435/1-A	Method Blank	Total/NA	Solid	3546	
LCS 310-455435/2-A	Lab Control Sample	Total/NA	Solid	3546	

Analysis Batch: 455857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-306876-5	LF-5	Total/NA	Solid	OA-2	455888
310-306876-6	LF-6	Total/NA	Solid	OA-2	455888
310-306876-7	LF-7	Total/NA	Solid	OA-2	455888
MB 310-455888/1-A	Method Blank	Total/NA	Solid	OA-2	455888
LCS 310-455888/2-A	Lab Control Sample	Total/NA	Solid	OA-2	455888

QC Association Summary

Client: Seneca Companies
Project/Site: Kerr McGee Landfarm

Job ID: 310-306876-1
SDG: 6363555.2

GC Semi VOA

Prep Batch: 455888

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-306876-5	LF-5	Total/NA	Solid	3546	
310-306876-6	LF-6	Total/NA	Solid	3546	
310-306876-7	LF-7	Total/NA	Solid	3546	
MB 310-455888/1-A	Method Blank	Total/NA	Solid	3546	
LCS 310-455888/2-A	Lab Control Sample	Total/NA	Solid	3546	

Lab Chronicle

Client: Seneca Companies
Project/Site: Kerr McGee Landfarm

Job ID: 310-306876-1
SDG: 6363555.2

Client Sample ID: LF-1
Date Collected: 05/21/25 09:00
Date Received: 05/21/25 11:55

Lab Sample ID: 310-306876-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			455880	MZR8	EET CF	05/28/25 08:46
Total/NA	Analysis	8260D		1	455893	MZR8	EET CF	05/28/25 12:32
Total/NA	Prep	3546			455435	RHL8	EET CF	05/22/25 08:25
Total/NA	Analysis	OA-2		1	455424	D2YP	EET CF	05/23/25 03:03

Client Sample ID: LF-2
Date Collected: 05/21/25 09:15
Date Received: 05/21/25 11:55

Lab Sample ID: 310-306876-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			455880	MZR8	EET CF	05/28/25 08:46
Total/NA	Analysis	8260D		1	455893	MZR8	EET CF	05/28/25 12:57
Total/NA	Prep	3546			455435	RHL8	EET CF	05/22/25 08:25
Total/NA	Analysis	OA-2		1	455424	D2YP	EET CF	05/23/25 03:28

Client Sample ID: LF-3
Date Collected: 05/21/25 09:35
Date Received: 05/21/25 11:55

Lab Sample ID: 310-306876-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			455880	MZR8	EET CF	05/28/25 08:46
Total/NA	Analysis	8260D		1	455893	MZR8	EET CF	05/28/25 13:21
Total/NA	Prep	3546			455435	RHL8	EET CF	05/22/25 08:25
Total/NA	Analysis	OA-2		1	455424	D2YP	EET CF	05/23/25 04:17

Client Sample ID: LF-4
Date Collected: 05/21/25 09:45
Date Received: 05/21/25 11:55

Lab Sample ID: 310-306876-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			455880	MZR8	EET CF	05/28/25 08:46
Total/NA	Analysis	8260D		1	455893	MZR8	EET CF	05/28/25 13:46
Total/NA	Prep	3546			455435	RHL8	EET CF	05/22/25 08:25
Total/NA	Analysis	OA-2		1	455424	D2YP	EET CF	05/23/25 04:42

Client Sample ID: LF-5
Date Collected: 05/21/25 10:00
Date Received: 05/21/25 11:55

Lab Sample ID: 310-306876-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			455880	MZR8	EET CF	05/28/25 08:46
Total/NA	Analysis	8260D		1	455893	MZR8	EET CF	05/28/25 14:10
Total/NA	Prep	3546			455888	BDJ4	EET CF	05/28/25 09:22
Total/NA	Analysis	OA-2		1	455857	C3AA	EET CF	05/28/25 12:22

Lab Chronicle

Client: Seneca Companies
Project/Site: Kerr McGee Landfarm

Job ID: 310-306876-1
SDG: 6363555.2

Client Sample ID: LF-6

Lab Sample ID: 310-306876-6

Date Collected: 05/21/25 10:10
Matrix: Solid
Date Received: 05/21/25 11:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			455880	MZR8	EET CF	05/28/25 08:46
Total/NA	Analysis	8260D		1	455893	MZR8	EET CF	05/28/25 14:34
Total/NA	Prep	3546			455888	BDJ4	EET CF	05/28/25 09:22
Total/NA	Analysis	OA-2		1	455857	C3AA	EET CF	05/28/25 12:47

Client Sample ID: LF-7

Lab Sample ID: 310-306876-7

Date Collected: 05/21/25 10:25
Matrix: Solid
Date Received: 05/21/25 11:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			455880	MZR8	EET CF	05/28/25 08:46
Total/NA	Analysis	8260D		1	455893	MZR8	EET CF	05/28/25 14:59
Total/NA	Prep	3546			455888	BDJ4	EET CF	05/28/25 09:22
Total/NA	Analysis	OA-2		1	455857	C3AA	EET CF	05/28/25 13:12

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

Accreditation/Certification Summary

Client: Seneca Companies
Project/Site: Kerr McGee Landfarm

Job ID: 310-306876-1
SDG: 6363555.2

Laboratory: Eurofins Cedar Falls

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-25

Method Summary

Client: Seneca Companies
Project/Site: Kerr McGee Landfarm

Job ID: 310-306876-1
SDG: 6363555.2

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CF
OA-2	Iowa - Extractable Petroleum Hydrocarbons (GC)	Iowa DNR	EET CF
3546	Microwave Extraction	SW846	EET CF
5035	Purge and Trap for Solids	SW846	EET CF

Protocol References:

Iowa DNR = Iowa Department of Natural Resources

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

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310-306876 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: Seneca			
City/State: CITY Dubuque	STATE IA	Project: Kerr McGee	
Receipt Information			
Date/Time Received: DATE 5/27/25	TIME 1155	Received By: TO	
Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee ☐ Lab Courier ☐ Lab Field Services ☑ Client Drop-off ☐ Other:_____			
Condition of Cooler/Containers			
Sample(s) received in Cooler? ☑ Yes ☐ No	*If yes:* Cooler ID:		
Multiple Coolers? ☐ Yes ☑ No	*If yes:* Cooler # _____ of _____		
Cooler Custody Seals Present? ☐ Yes ☑ No	*If yes:* Cooler custody seals intact? ☐ Yes ☐ No		
Sample Custody Seals Present? ☐ Yes ☑ No	*If yes:* Sample custody seals intact? ☐ Yes ☐ No		
Trip Blank Present? ☐ Yes ☑ No	*If yes:* Which VOA samples are in cooler? ↓		
Temperature Record			
Coolant: ☑ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other._____ ☐ NONE			
Thermometer ID: AA	Correction Factor (°C): 0.0		
• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C): 0.2	Corrected Temp (°C): 0.2		
• **Sample Container Temperature**			
Container(s) used:	CONTAINER 1	CONTAINER 2	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No			
NOTE If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			

eurofins

Environment Testing
America

Cedar Falls Division
3019 Venture Way
Cedar Falls, IA 50613

Phone: 319 - 277 - 2401 or 1 - 800 - 750 - 2401
Fax: 319 - 277 - 2425

Company: Seneca Companies, Inc.
Send Report To: Leslie Nagel
Address: 4140 E. 14th Street
City/State/Zip Code: Des Moines, IA
Telephone Number: 515-262-3500 Cell:
Email Address for Reports to be sent: lnagel@senecaco.com
Sampled By: (Print Name) DAVID PHIPPS
(Signature)

Your PO #: P-ORD026122
Invoice To: accountspayable@senecaco com
Quote #:
Project Name: Kerr McGee Landfarm
12200 590th Ave.
Roland IA
Project Number: 6363555.2
Project Manager: Leslie Nagel

Sample ID	Date Sampled	Time Sampled	# of containers shipped	Grab	Composite	Field Filtered	Preservative: Ice	HNO3 (Red & White Label)	HCl (Blue & White Label)	NaOH (Orange & White Label)	H2SO4 Plastic (Yellow & White Label)	H2SO4 Glass(Yellow & White Label)	None (Black & White Label)	Other (Specify)	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other Specify	Analyze For: OA1/OA2 and MTBE	RUSH TAT (Must call ahead!)	Standard TAT	E-mail results	Fax Results
LF-1	5/21/25	9:00	1	x			x						x						x		x	x		x	
LF-2		9.15	1	x			x						x						x		x	x		x	
LF-3		9.35	1	x			x						x						x		x	x		x	
LF-4		9.45	1	x			x						x						x		x	x		x	
LF-5		10.00	1	x			x						x						x		x	x		x	
LF-6		10.10	1	x			x						x						x		x	x		x	
LF-7	↓	10.25	1	x			x						x						x		x	x		x	

NOTICE: **Pre-Arrangements must be made *AT LEAST 48 Hours in ADVANCE* to receive results with these turn around time commitments; Additional Charges may be assessed.**

Notes: PLEASE RUSH!

Relinquished by:	Date	Time	Received by:	Date	Time	Relinquished by:	Date	Time
	5/21/25	11:55						
Received for TestAmerica by:	**Date**	**Time**	**COC Seals Present and Intact? Yes No**	**Laboratory Comments**				
	5/21/25	11:55	Shipped via					

5/28/2025

Login Sample Receipt Checklist

Client: Seneca Companies

Job Number: 310-306876-1
SDG Number: 6363555.2

Login Number: 306876
List Number: 1
Creator: Homolar, Dana J

List Source: Eurofins Cedar Falls

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	