

SOLID BY-PRODUCT MANAGEMENT PLAN

NEAL ENERGY CENTER

NEAL NORTH GENERATING
STATION
1151 260th STREET
SERGEANT BLUFF, IA 51054
TELEPHONE: 712-277-5232

NEAL SOUTH GENERATING
STATION
2761 PORT NEAL CIRCLE
SALIX, IA 51052
TELEPHONE: 712-277-5232

Introduction

This management plan is prepared for coal combustion residue generated at the Neal Energy Center (NEC) in accordance with 567 Iowa Administrative Code (IAC), Chapter 108.6(2), which establishes requirements for the beneficial use of solid by-products.

Management Plan

1. Facility Information

The facility is a pulverized coal-fired steam electric plant with two operational units. Coal burned at this facility is the sub-bituminous type mined in Wyoming's Powder River Basin. MidAmerican Energy Company (MidAmerican) is the majority owner and operator of the facility. MidAmerican retains a contractor to manage and market coal combustion residue (CCR) generated at this location.

Units 3 and 4 use electrostatic precipitators to collect fly ash. The Unit 3 and 4 fly ash is conveyed pneumatically from the precipitators to storage silos, where it is then loaded into trucks by the ash contractor. Fly ash is transported off-site for beneficial re-use or is transported to the Neal North Monofil for disposal. Dry flue gas desulfurization (FGD) scrubber systems are installed on both Units 3 and 4. Bag houses are used to collect waste ash which is conveyed pneumatically to a storage silo where it is then loaded into trucks and transported to the monofil for disposal.

The units described above are located on two physically separate plant sites just a few miles apart. Neal North now consists of only one operational unit, Unit 3, along with two decommissioned units, Units 1 and 2. As of April 2016, Units 1 and 2 are no longer in service at the Neal North facility.

The physical street address for Neal North (Unit 3) is 1151 260th Street, Sergeant Bluff, Iowa 51054. The physical street address for Neal South (Unit 4) is 2761 Port Neal Circle, Salix, Iowa 51052.

2. Periodic Testing Procedures

As per IAC 567 Chapter 108, NEC conducts semi-annual TCLP, SPLP, and total metals testing for fly ash, to confirm compliance with Iowa's beneficial use regulations and NEC monofil permits. Records of all tests are retained in the NEC files.

3. CCR Management and Storage Procedures

(A) Storage and disposal

Inactive impoundments 1, 2, and 3A at Neal North were closed in December of 2017, in accordance with 40 CFR 257. Fly ash from Unit 3 that cannot be sold for beneficial use, bottom ash and waste ash are disposed of in the Neal North CCR monofil. As of June 2016, C-Stone from the Neal North Monofil is no longer reclaimed for beneficial use. In May 2018, Unit 3 was converted to dry ash handling, and in June of 2018 Impoundment 3B at Neal North initiated closure. In 2019, NEC ceased the sales of all bottom ash produced at both the Neal North and Neal South generation facilities; Units 3 and 4 no longer sell bottom ash for beneficial use purposes. During the summer of 2020, a project was started to consolidate the materials from impoundments 1,2, & 3A into 3B and completed in November of 2022. The consolidation project was combined with a final cover system installed over the CCR in Impoundment 3B as a closure. The Closure Plan is posted on the NNEC CCR web site.

Units 3 and 4 both manage bottom ash, fly ash, and waste ash dry; again, only fly ash is sold for beneficial use or it is taken to the Neal North CCR monofil for disposal. As of January 2019, the Neal South Monofil was permanently closed to CCR operations. The last receipt of CCR to this landfill occurred on September 26, 2018.

Coal combustion residue moved off-site from both NEC units is weighed and a record of the scale tickets are filed by the ash contractor, along with a reference to the customer receiving the coal combustion residue. The ash contractor provides copies of the following records to the facility manager and MidAmerican's Generation Services and Environmental Services departments:

- Scale tickets showing weight of coal combustion residue moved off-site.
- Customers, addresses and tons moved per customer; and
- Analytical records.

NEC collects fly ash from operational Units 3 and 4 and offers it for sale as a concrete supplement. MidAmerican continues to explore additional beneficial re-use markets for fly ash generated at the facility.

(B) Measures to minimize uncontrolled dispersion of CCPs

NEC's ash contractor takes appropriate precautions to minimize dust created during fly ash loading and unloading activities. The unloading process involves the use of a double spout (constructed as a pipe within a pipe) that is inserted into the fill port of the receiving ash truck. The inner spout drops ash into the truck and the outer spout pulls a vacuum to collect and transport dust back into the fly ash silo. Fly ash trucks are the belly-dump type while bottom ash trucks are the side-dump type. All ash haul roads at Neal North and Neal South are paved. Neal North and Neal South utilize a street sweeper on all paved ash haul roads that is certified to achieve pickup efficiency of 80%, as specified in the Title V construction permit. Any fly ash disposed of in the monofil is hydrated during unloading.

(C) Maximum anticipated inventory

The Neal North Monofil, permitted in 1997, had a total capacity of approximately 1,400,000 cubic yards of CCR. This monofil reached full capacity in 2010 and was capped and closed in the fall of 2010. The monofil was expanded in 2009 and 2013, with the addition of cells 1 and 2, respectively. The expansion cells were constructed according to RCRA Subtitle D requirements. The first phase of the expansion, cells 1 through 3, is designed to contain approximately 1,700,000 cubic yards of CCR material.

The Neal North Monofil permit was amended on December 23, 2014, to also allow disposal of CCR generated at Neal South (Unit 4) in the Neal North Monofil. From October of 2015 through September 26, 2018, the majority of the waste ash from Neal South was disposed of in the Neal North Monofil along with all of the bottom ash. After September 26, 2018, all waste ash generated at NEC's two units is disposed of in the Neal North Monofil.

(D) Run-on and run-off controls

NEC controls storm water run-on and run-off from materials disposed of in the Neal North monofil. Surface water is diverted around the fill area of the monofil and surface drainage is provided at the toe of the working face. NEC also operates a leachate control system in accordance with its approved Leachate Control Plan. NEC manages CCR stockpiles within the monofil boundaries with storm water controls pursuant to the NPDES permit for the facility and the corresponding Stormwater Pollution Prevention Plan for the monofil and facility as a whole.

Installation of an impermeable rain flap, engineered to cover roughly 5.5 acres in cell 2, was completed in December 2019. The grading plan and rain flap, currently promotes storm water

runoff to the southeast corner of the cell and helps to significantly reduce leachate generation at the monofil. Future rain flap installations are planned, as phasing sequencing goals related to CCR fill rates are reached. This leachate reduction strategy is now a permanent part of the Neal North Monofil management and cell progression plan moving forward.

(E) Maximum storage time

NEC does not store CCR material for beneficial use at the monofils.

4. Record Keeping and Reporting

The facility will maintain a copy of all records related to the solid by-product management plan, for a minimum of five years, as mandated in 567 IAC 108.7(2).

A copy of this plan and subsequent revisions will be provided to the Iowa Department of Natural Resources and the field office with jurisdiction over the facility, whenever the plan is revised or within 60 days of the end of the calendar year; whichever is earlier.

5. Summary of Beneficial Use – January 1, 2025 through December 31, 2025

Facility	Cement Replacement (tons)	Direct Soil Stabilization (tons)	Bottom Ash (tons)	C-Stone (tons)	Total Beneficial Use (tons)
Neal North	30,732.47	0	0	0	30,732.47
Neal South	26,349.99	0	0	0	26,349.99

6. Facility Contacts and Responsibilities

Name	Title	Responsibilities	Telephone
Shannon Brown	General Manager, NEC	Safe and efficient operation of plant	712-277-5225
Kenna Anderson	Environmental Analyst, NEC	Daily operation and maintenance of all monofils surface impoundments (both active and inactive) and all other ash management areas at NEC.	712-277-5215
Josh Love	Environmental Program and Compliance Manager-Supply	Point of contact between the plants and agencies. Provides updates to facilities concerning changes in regulatory requirements.	712-277-6367



Iowa Department of Natural Resources

Beneficial Use Determination: Solid By-Product Management Plan Analytical Testing Report

Beneficial Use ID#: 97 -BUD- 12 - 95DNR Certified Lab: Eurofins Test AmericaLab Report Date: 07/16/2025By-Product Generator: Neal Energy Center NorthCity: Sergeant Bluff State: IA Zip: 51054By-Product Name: Neal 3 Fly Ash (North) / 310-309903-1

Send completed report form(s), laboratory analytics, and supplemental Solid By-Product Management Plan (SBMP) documentation to:

Iowa Department of Natural Resources
Land Quality Bureau
Solid Waste Section
502 E 9th St
Des Moines, IA 50319-0034

For questions concerning this report form please contact the DNR at (515) 201-8272.

ANALYTICAL TESTING RESULTS

Test Methods for Evaluating Solid Waste: Physical/Chemical Methods (SW-846).

Required		Synthetic Precipitation Leaching Procedure (EPA Test Method 1312)			Total Metals		
*	Contaminant	MCL	10 X MCL	Test Result	Regulatory Limit	Test Result	
☐	Antimony	0.006 mg/L	0.06 mg/L	0.0200 mg/L	31 mg/kg	0.675	mg/kg
☐	Arsenic	0.010 mg/L	0.10 mg/L	0.0110 mg/L	17 mg/kg	14.7	mg/kg
☐	Barium	2.0 mg/L	20.0 mg/L	11.4 mg/L	15,000 mg/kg	1440	mg/kg
☐	Beryllium	0.004 mg/L	0.04 mg/L	0.00660 mg/L	110 mg/kg	3.73	mg/kg
☐	Boron				16,000 mg/kg		mg/kg
☐	Cadmium	0.005 mg/L	0.05 mg/L	0.00200 mg/L	70 mg/kg	0.975	mg/kg
☐	Chromium	0.1 mg/L	1.0 mg/L	0.0360 mg/L	** (Total)	57.8	mg/kg
					(Hexavalent - VI) 210 mg/kg		mg/kg
					(Trivalent - III) 97,000 mg/kg		mg/kg
☐	Cobalt				23 mg/kg	18.2	mg/kg
☐	Copper	1.3 mg/L	13.0 mg/L	0.0640 mg/L	15,000 mg/kg	148	mg/kg
☐	Fluoride	4.0 mg/L	40.0 mg/L	5.82 mg/L	4,700 mg/kg		mg/kg
☐	Lead	0.015 mg/L	0.15 mg/L	0.00660 mg/L	400 mg/kg	22.1	mg/kg
☐	Lithium				160 mg/kg		mg/kg
☐	Manganese				10,000 mg/kg	527	mg/kg
☐	Mercury	0.002 mg/L	0.02 mg/L	0.00120 mg/L	23 mg/kg	0.152	mg/kg
☐	Molybdenum				390 mg/kg	7.28	mg/kg
☐	Nickel				1,500 mg/kg	42.5	mg/kg
☐	Selenium	0.05 mg/L	0.5 mg/L	0.0280 mg/L	390 mg/kg	15.3	mg/kg
☐	Silver				370 mg/kg	0.359	mg/kg
☐	Thallium	0.002 mg/L	0.02 mg/L	0.0110 mg/L	0.78 mg/kg	1.49	mg/kg
☐	Vanadium				350 mg/kg	209	mg/kg
☐	Zinc				23,000 mg/kg	46.9	mg/kg

*Required contaminant

**If Total Chromium >= 210 mg/kg, further analysis shall be conducted to determine hexavalent and trivalent results.

Toxicity Characteristic Leaching Procedure (EPA Test Method 1311) - Regulatory Limits

Metals					Volatile Organic Compounds				
*	Contaminant	Regulatory Limit	Test Result		*	Contaminant	Regulatory Limit	Test Result	
☐	Arsenic	5.0 mg/L	0.0300	mg/L	☐	Benzene	0.5 mg/L		mg/L
☐	Barium	100.0 mg/L	10.2	mg/L	☐	Carbon Tetrachloride	0.5 mg/L		mg/L
☐	Cadmium	1.0 mg/L	0.00390	mg/L	☐	Chlorobenzene	100.0 mg/L		mg/L
☐	Chromium	5.0 mg/L	0.0206	mg/L	☐	Chloroform	6.0 mg/L		mg/L
☐	Lead	5.0 mg/L	0.0370	mg/L	☐	1,2-Dichloroethane	0.5 mg/L		mg/L
☐	Mercury	0.2 mg/L	0.00120	mg/L	☐	1,1-Dichloroethylene	0.7 mg/L		mg/L
☐	Selenium	1.0 mg/L	0.0290	mg/L	☐	Methyl ethyl ketone	200.0 mg/L		mg/L
☐	Silver	5.0 mg/L	0.0160	mg/L	☐	Tetrachloroethylene	0.7 mg/L		mg/L
					☐	Trichloroethylene	0.5 mg/L		mg/L
					☐	Vinyl Chloride	0.2 mg/L		mg/L
Pesticides					Semi-Volatile Organic Compounds				
*	Contaminant	Regulatory Limit	Test Result		*	Contaminant	Regulatory Limit	Test Result	
☐	Chlordane	0.03 mg/L		mg/L	☐	o-Cresol	200.0 mg/L		mg/L
☐	Endrin	0.02 mg/L		mg/L	☐	m-Cresol	200.0 mg/L		mg/L
☐	Heptachlor (and its epoxide)	0.008 mg/L		mg/L	☐	p-Cresol	200.0 mg/L		mg/L
☐	Lindane	0.4 mg/L		mg/L	☐	Cresol	200.0 mg/L		mg/L
☐	Methoxychlor	10.0 mg/L		mg/L	☐	1,4-Dichlorobenzene	7.5 mg/L		mg/L
☐	Toxaphene	0.5 mg/L		mg/L	☐	2,4-Dinitrotoluene	0.13 mg/L		mg/L
					☐	Hexachlorobenzene	0.13 mg/L		mg/L
					☐	Hexachlorobutadiene	0.5 mg/L		mg/L
					☐	Hexachloroethane	3.0 mg/L		mg/L
Herbicides					☐	Nitrobenzene	2.0 mg/L		mg/L
*	Contaminant	Regulatory Limit	Test Result		☐	Pentachlorophenol	100.0 mg/L		mg/L
☐	2,4-D	10.0 mg/L		mg/L	☐	Pyridine	5.0 mg/L		mg/L
☐	2,4,5-TP (Silvex)	1.0 mg/L		mg/L	☐	2,4,5-Trichlorophenol	400.0 mg/L		mg/L
					☐	2,4,6-Trichlorophenol	2.0 mg/L		mg/L

*Required contaminant

BY-PRODUCT GENERATOR CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

Signature:

Kenna Anderson

Date:

2-11-2026

Printed Name:

Kenna Anderson

Title:

Environmental Analyst

Spring



Iowa Department of Natural Resources

Beneficial Use Determination: Solid By-Product Management Plan Analytical Testing Report

Beneficial Use ID#: 97 -BUD- 13 - 98DNR Certified Lab: Eurofins Test AmericaLab Report Date: 07/16/2025By-Product Generator: Neal Energy Center SouthCity: Salix State: IA Zip: 51052By-Product Name: Neal 4 Fly Ash (South) / 310-309903-2

Send completed report form(s), laboratory analytics, and supplemental Solid By-Product Management Plan (SBMP) documentation to:

Iowa Department of Natural Resources
Land Quality Bureau
Solid Waste Section
502 E 9th St
Des Moines, IA 50319-0034

For questions concerning this report form please contact the DNR at (515) 201-8272.

ANALYTICAL TESTING RESULTS

Test Methods for Evaluating Solid Waste: Physical/Chemical Methods (SW-846).

Required		Synthetic Precipitation Leaching Procedure (EPA Test Method 1312)			Total Metals		
*	Contaminant	MCL	10 X MCL	Test Result	Regulatory Limit	Test Result	
☐	Antimony	0.006 mg/L	0.06 mg/L	0.0200 mg/L	31 mg/kg	0.619	mg/kg
☐	Arsenic	0.010 mg/L	0.10 mg/L	0.0110 mg/L	17 mg/kg	13.8	mg/kg
☐	Barium	2.0 mg/L	20.0 mg/L	11.2 mg/L	15,000 mg/kg	4590	mg/kg
☐	Beryllium	0.004 mg/L	0.04 mg/L	0.00660 mg/L	110 mg/kg	3.37	mg/kg
☐	Boron				16,000 mg/kg	611	mg/kg
☐	Cadmium	0.005 mg/L	0.05 mg/L	0.00200 mg/L	70 mg/kg	0.948	mg/kg
☐	Chromium	0.1 mg/L	1.0 mg/L	0.0360 mg/L	** (Total)	52.9	mg/kg
					(Hexavalent - VI) 210 mg/kg		mg/kg
					(Trivalent - III) 97,000 mg/kg		mg/kg
☐	Cobalt				23 mg/kg	16.9	mg/kg
☐	Copper	1.3 mg/L	13.0 mg/L	0.0640 mg/L	15,000 mg/kg	132	mg/kg
☐	Fluoride	4.0 mg/L	40.0 mg/L	1.34 mg/L	4,700 mg/kg		mg/kg
☐	Lead	0.015 mg/L	0.15 mg/L	0.00660 mg/L	400 mg/kg	21.0	mg/kg
☐	Lithium				160 mg/kg	29.3	mg/kg
☐	Manganese				10,000 mg/kg	407	mg/kg
☐	Mercury	0.002 mg/L	0.02 mg/L	0.00120 mg/L	23 mg/kg	0.0975	mg/kg
☐	Molybdenum				390 mg/kg	7.56	mg/kg
☐	Nickel				1,500 mg/kg	40.6	mg/kg
☐	Selenium	0.05 mg/L	0.5 mg/L	0.0280 mg/L	390 mg/kg	13.4	mg/kg
☐	Silver				370 mg/kg	0.288	mg/kg
☐	Thallium	0.002 mg/L	0.02 mg/L	0.0110 mg/L	0.78 mg/kg	1.79	mg/kg
☐	Vanadium				350 mg/kg	171	mg/kg
☐	Zinc				23,000 mg/kg	52.8	mg/kg

*Required contaminant

**If Total Chromium >= 210 mg/kg, further analysis shall be conducted to determine hexavalent and trivalent results.

Toxicity Characteristic Leaching Procedure (EPA Test Method 1311) - Regulatory Limits

Metals					Volatile Organic Compounds				
*	Contaminant	Regulatory Limit	Test Result		*	Contaminant	Regulatory Limit	Test Result	
☐	Arsenic	5.0 mg/L	0.0300	mg/L	☐	Benzene	0.5 mg/L		mg/L
☐	Barium	100.0 mg/L	5.95	mg/L	☐	Carbon Tetrachloride	0.5 mg/L		mg/L
☐	Cadmium	1.0 mg/L	0.00390	mg/L	☐	Chlorobenzene	100.0 mg/L		mg/L
☐	Chromium	5.0 mg/L	0.145	mg/L	☐	Chloroform	6.0 mg/L		mg/L
☐	Lead	5.0 mg/L	0.0370	mg/L	☐	1,2-Dichloroethane	0.5 mg/L		mg/L
☐	Mercury	0.2 mg/L	0.00120	mg/L	☐	1,1-Dichloroethylene	0.7 mg/L		mg/L
☐	Selenium	1.0 mg/L	0.0885	mg/L	☐	Methyl ethyl ketone	200.0 mg/L		mg/L
☐	Silver	5.0 mg/L	0.0160	mg/L	☐	Tetrachloroethylene	0.7 mg/L		mg/L
					☐	Trichloroethylene	0.5 mg/L		mg/L
					☐	Vinyl Chloride	0.2 mg/L		mg/L
Pesticides					Semi-Volatile Organic Compounds				
*	Contaminant	Regulatory Limit	Test Result		*	Contaminant	Regulatory Limit	Test Result	
☐	Chlordane	0.03 mg/L		mg/L	☐	o-Cresol	200.0 mg/L		mg/L
☐	Endrin	0.02 mg/L		mg/L	☐	m-Cresol	200.0 mg/L		mg/L
☐	Heptachlor (and its epoxide)	0.008 mg/L		mg/L	☐	p-Cresol	200.0 mg/L		mg/L
☐	Lindane	0.4 mg/L		mg/L	☐	Cresol	200.0 mg/L		mg/L
☐	Methoxychlor	10.0 mg/L		mg/L	☐	1,4-Dichlorobenzene	7.5 mg/L		mg/L
☐	Toxaphene	0.5 mg/L		mg/L	☐	2,4-Dinitrotoluene	0.13 mg/L		mg/L
					☐	Hexachlorobenzene	0.13 mg/L		mg/L
					☐	Hexachlorobutadiene	0.5 mg/L		mg/L
					☐	Hexachloroethane	3.0 mg/L		mg/L
Herbicides					☐	Nitrobenzene	2.0 mg/L		mg/L
*	Contaminant	Regulatory Limit	Test Result		☐	Pentachlorophenol	100.0 mg/L		mg/L
☐	2,4-D	10.0 mg/L		mg/L	☐	Pyridine	5.0 mg/L		mg/L
☐	2,4,5-TP (Silvex)	1.0 mg/L		mg/L	☐	2,4,5-Trichlorophenol	400.0 mg/L		mg/L
					☐	2,4,6-Trichlorophenol	2.0 mg/L		mg/L

*Required contaminant

BY-PRODUCT GENERATOR CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

Signature: Kenna Anderson Date: 2-11-2026
 Printed Name: Kenna Anderson Title: Environmental Analyst



Iowa Department of Natural Resources

Beneficial Use Determination: Solid By-Product Management Plan Analytical Testing Report



Beneficial Use ID#: 97 -BUD- 12 - 95

DNR Certified Lab: Eurofins Test America

Lab Report Date: 12/23/2025

By-Product Generator: Neal Energy Center North

City: Sergeant Bluff State: IA Zip: 51054

By-Product Name: Neal 3 Fly Ash (North) / 310-322256-1

Send completed report form(s), laboratory analytics, and supplemental Solid By-Product Management Plan (SBMP) documentation to:

Iowa Department of Natural Resources
Land Quality Bureau
Solid Waste Section
502 E 9th St
Des Moines, IA 50319-0034

For questions concerning this report form please contact the DNR at (515) 201-8272.

ANALYTICAL TESTING RESULTS

Test Methods for Evaluating Solid Waste: Physical/Chemical Methods (SW-846).

Required		Synthetic Precipitation Leaching Procedure (EPA Test Method 1312)			Total Metals		
*	Contaminant	MCL	10 X MCL	Test Result	Regulatory Limit	Test Result	
☐	Antimony	0.006 mg/L	0.06 mg/L	0.0200 mg/L	31 mg/kg	0.680	mg/kg
☐	Arsenic	0.010 mg/L	0.10 mg/L	0.0110 mg/L	17 mg/kg	15.3	mg/kg
☐	Barium	2.0 mg/L	20.0 mg/L	15.9 mg/L	15,000 mg/kg	878	mg/kg
☐	Beryllium	0.004 mg/L	0.04 mg/L	0.00660 mg/L	110 mg/kg	2.56	mg/kg
☐	Boron				16,000 mg/kg		mg/kg
☐	Cadmium	0.005 mg/L	0.05 mg/L	0.00200 mg/L	70 mg/kg	0.799	mg/kg
☐	Chromium	0.1 mg/L	1.0 mg/L	0.0360 mg/L	** (Total)	57.3	mg/kg
					(Hexavalent - VI) 210 mg/kg		mg/kg
					(Trivalent - III) 97,000 mg/kg		mg/kg
☐	Cobalt				23 mg/kg	16.5	mg/kg
☐	Copper	1.3 mg/L	13.0 mg/L	0.0640 mg/L	15,000 mg/kg	132	mg/kg
☐	Fluoride	4.0 mg/L	40.0 mg/L	5.84 mg/L	4,700 mg/kg		mg/kg
☐	Lead	0.015 mg/L	0.15 mg/L	0.00660 mg/L	400 mg/kg	20.7	mg/kg
☐	Lithium				160 mg/kg		mg/kg
☐	Manganese				10,000 mg/kg	747	mg/kg
☐	Mercury	0.002 mg/L	0.02 mg/L	0.00120 mg/L	23 mg/kg	0.184	mg/kg
☐	Molybdenum				390 mg/kg	6.61	mg/kg
☐	Nickel				1,500 mg/kg	36.2	mg/kg
☐	Selenium	0.05 mg/L	0.5 mg/L	0.0280 mg/L	390 mg/kg	17.7	mg/kg
☐	Silver				370 mg/kg	0.255	mg/kg
☐	Thallium	0.002 mg/L	0.02 mg/L	0.0110 mg/L	0.78 mg/kg	0.365	mg/kg
☐	Vanadium				350 mg/kg	172	mg/kg
☐	Zinc				23,000 mg/kg	48.5	mg/kg

*Required contaminant

**If Total Chromium >= 210 mg/kg, further analysis shall be conducted to determine hexavalent and trivalent results.

Toxicity Characteristic Leaching Procedure (EPA Test Method 1311) - Regulatory Limits

Metals					Volatile Organic Compounds				
*	Contaminant	Regulatory Limit	Test Result		*	Contaminant	Regulatory Limit	Test Result	
☐	Arsenic	5.0 mg/L	0.0300	mg/L	☐	Benzene	0.5 mg/L		mg/L
☐	Barium	100.0 mg/L	12.0	mg/L	☐	Carbon Tetrachloride	0.5 mg/L		mg/L
☐	Cadmium	1.0 mg/L	0.00390	mg/L	☐	Chlorobenzene	100.0 mg/L		mg/L
☐	Chromium	5.0 mg/L	0.0175	mg/L	☐	Chloroform	6.0 mg/L		mg/L
☐	Lead	5.0 mg/L	0.0370	mg/L	☐	1,2-Dichloroethane	0.5 mg/L		mg/L
☐	Mercury	0.2 mg/L	0.00120	mg/L	☐	1,1-Dichloroethylene	0.7 mg/L		mg/L
☐	Selenium	1.0 mg/L	0.0290	mg/L	☐	Methyl ethyl ketone	200.0 mg/L		mg/L
☐	Silver	5.0 mg/L	0.0160	mg/L	☐	Tetrachloroethylene	0.7 mg/L		mg/L
					☐	Trichloroethylene	0.5 mg/L		mg/L
					☐	Vinyl Chloride	0.2 mg/L		mg/L
Pesticides					Semi-Volatile Organic Compounds				
*	Contaminant	Regulatory Limit	Test Result		*	Contaminant	Regulatory Limit	Test Result	
☐	Chlordane	0.03 mg/L		mg/L	☐	o-Cresol	200.0 mg/L		mg/L
☐	Endrin	0.02 mg/L		mg/L	☐	m-Cresol	200.0 mg/L		mg/L
☐	Heptachlor (and its epoxide)	0.008 mg/L		mg/L	☐	p-Cresol	200.0 mg/L		mg/L
☐	Lindane	0.4 mg/L		mg/L	☐	Cresol	200.0 mg/L		mg/L
☐	Methoxychlor	10.0 mg/L		mg/L	☐	1,4-Dichlorobenzene	7.5 mg/L		mg/L
☐	Toxaphene	0.5 mg/L		mg/L	☐	2,4-Dinitrotoluene	0.13 mg/L		mg/L
					☐	Hexachlorobenzene	0.13 mg/L		mg/L
					☐	Hexachlorobutadiene	0.5 mg/L		mg/L
					☐	Hexachloroethane	3.0 mg/L		mg/L
Herbicides					☐	Nitrobenzene	2.0 mg/L		mg/L
*	Contaminant	Regulatory Limit	Test Result		☐	Pentachlorophenol	100.0 mg/L		mg/L
☐	2,4-D	10.0 mg/L		mg/L	☐	Pyridine	5.0 mg/L		mg/L
☐	2,4,5-TP (Silvex)	1.0 mg/L		mg/L	☐	2,4,5-Trichlorophenol	400.0 mg/L		mg/L
					☐	2,4,6-Trichlorophenol	2.0 mg/L		mg/L

*Required contaminant

BY-PRODUCT GENERATOR CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

Signature: Kenna Anderson Date: 2-11-2026
 Printed Name: Kenna Anderson Title: Environmental Analyst



Iowa Department of Natural Resources

Beneficial Use Determination: Solid By-Product Management Plan Analytical Testing Report



Beneficial Use ID#: 97 -BUD- 13 - 98

DNR Certified Lab: Eurofins Test America

Lab Report Date: 12/23/2025

By-Product Generator: Neal Energy Center South

City: Salix State: IA Zip: 51052

By-Product Name: Neal 4 Fly Ash (South) / 310-322256-2

Send completed report form(s), laboratory analytics, and supplemental Solid By-Product Management Plan (SBMP) documentation to:

Iowa Department of Natural Resources
Land Quality Bureau
Solid Waste Section
502 E 9th St
Des Moines, IA 50319-0034

For questions concerning this report form please contact the DNR at (515) 201-8272.

ANALYTICAL TESTING RESULTS

Test Methods for Evaluating Solid Waste: Physical/Chemical Methods (SW-846).

Required		Synthetic Precipitation Leaching Procedure (EPA Test Method 1312)			Total Metals		
*	Contaminant	MCL	10 X MCL	Test Result	Regulatory Limit	Test Result	
☐	Antimony	0.006 mg/L	0.06 mg/L	0.0200 mg/L	31 mg/kg	0.569	mg/kg
☐	Arsenic	0.010 mg/L	0.10 mg/L	0.0110 mg/L	17 mg/kg	12.8	mg/kg
☐	Barium	2.0 mg/L	20.0 mg/L	11.9 mg/L	15,000 mg/kg	1260	mg/kg
☐	Beryllium	0.004 mg/L	0.04 mg/L	0.00660 mg/L	110 mg/kg	2.36	mg/kg
☐	Boron				16,000 mg/kg		mg/kg
☐	Cadmium	0.005 mg/L	0.05 mg/L	0.00200 mg/L	70 mg/kg	0.670	mg/kg
☐	Chromium	0.1 mg/L	1.0 mg/L	0.0360 mg/L	** (Total)	45.5	mg/kg
					(Hexavalent - VI) 210 mg/kg		mg/kg
					(Trivalent - III) 97,000 mg/kg		mg/kg
☐	Cobalt				23 mg/kg	15.0	mg/kg
☐	Copper	1.3 mg/L	13.0 mg/L	0.0640 mg/L	15,000 mg/kg	113	mg/kg
☐	Fluoride	4.0 mg/L	40.0 mg/L	5.06 mg/L	4,700 mg/kg		mg/kg
☐	Lead	0.015 mg/L	0.15 mg/L	0.00660 mg/L	400 mg/kg	17.7	mg/kg
☐	Lithium				160 mg/kg		mg/kg
☐	Manganese				10,000 mg/kg	623	mg/kg
☐	Mercury	0.002 mg/L	0.02 mg/L	0.00120 mg/L	23 mg/kg	0.0630	mg/kg
☐	Molybdenum				390 mg/kg	5.57	mg/kg
☐	Nickel				1,500 mg/kg	32.5	mg/kg
☐	Selenium	0.05 mg/L	0.5 mg/L	0.0280 mg/L	390 mg/kg	14.3	mg/kg
☐	Silver				370 mg/kg	0.208	mg/kg
☐	Thallium	0.002 mg/L	0.02 mg/L	0.0110 mg/L	0.78 mg/kg	0.213	mg/kg
☐	Vanadium				350 mg/kg	149	mg/kg
☐	Zinc				23,000 mg/kg	38.5	mg/kg

*Required contaminant

**If Total Chromium >= 210 mg/kg, further analysis shall be conducted to determine hexavalent and trivalent results.

Toxicity Characteristic Leaching Procedure (EPA Test Method 1311) - Regulatory Limits

Metals					Volatile Organic Compounds				
*	Contaminant	Regulatory Limit	Test Result		*	Contaminant	Regulatory Limit	Test Result	
☐	Arsenic	5.0 mg/L	0.0300	mg/L	☐	Benzene	0.5 mg/L		mg/L
☐	Barium	100.0 mg/L	9.84	mg/L	☐	Carbon Tetrachloride	0.5 mg/L		mg/L
☐	Cadmium	1.0 mg/L	0.00390	mg/L	☐	Chlorobenzene	100.0 mg/L		mg/L
☐	Chromium	5.0 mg/L	0.0345	mg/L	☐	Chloroform	6.0 mg/L		mg/L
☐	Lead	5.0 mg/L	0.0370	mg/L	☐	1,2-Dichloroethane	0.5 mg/L		mg/L
☐	Mercury	0.2 mg/L	0.00120	mg/L	☐	1,1-Dichloroethylene	0.7 mg/L		mg/L
☐	Selenium	1.0 mg/L	0.0290	mg/L	☐	Methyl ethyl ketone	200.0 mg/L		mg/L
☐	Silver	5.0 mg/L	0.0160	mg/L	☐	Tetrachloroethylene	0.7 mg/L		mg/L
					☐	Trichloroethylene	0.5 mg/L		mg/L
					☐	Vinyl Chloride	0.2 mg/L		mg/L
Pesticides					Semi-Volatile Organic Compounds				
*	Contaminant	Regulatory Limit	Test Result		*	Contaminant	Regulatory Limit	Test Result	
☐	Chlordane	0.03 mg/L		mg/L	☐	o-Cresol	200.0 mg/L		mg/L
☐	Endrin	0.02 mg/L		mg/L	☐	m-Cresol	200.0 mg/L		mg/L
☐	Heptachlor (and its epoxide)	0.008 mg/L		mg/L	☐	p-Cresol	200.0 mg/L		mg/L
☐	Lindane	0.4 mg/L		mg/L	☐	Cresol	200.0 mg/L		mg/L
☐	Methoxychlor	10.0 mg/L		mg/L	☐	1,4-Dichlorobenzene	7.5 mg/L		mg/L
☐	Toxaphene	0.5 mg/L		mg/L	☐	2,4-Dinitrotoluene	0.13 mg/L		mg/L
					☐	Hexachlorobenzene	0.13 mg/L		mg/L
					☐	Hexachlorobutadiene	0.5 mg/L		mg/L
					☐	Hexachloroethane	3.0 mg/L		mg/L
Herbicides					☐	Nitrobenzene	2.0 mg/L		mg/L
*	Contaminant	Regulatory Limit	Test Result		☐	Pentachlorophenol	100.0 mg/L		mg/L
☐	2,4-D	10.0 mg/L		mg/L	☐	Pyridine	5.0 mg/L		mg/L
☐	2,4,5-TP (Silvex)	1.0 mg/L		mg/L	☐	2,4,5-Trichlorophenol	400.0 mg/L		mg/L
					☐	2,4,6-Trichlorophenol	2.0 mg/L		mg/L

*Required contaminant

BY-PRODUCT GENERATOR CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

Signature: Kenna Ah Date: 2-11-2026
 Printed Name: Kenna Anderson Title: Environmental Analyst

ANALYTICAL REPORT

PREPARED FOR

Attn: Kenna Anderson
MidAmerican Energy Company
1151 260th Street
Sergeant Bluff, Iowa 51054

Generated 2/11/2026 2:43:35 PM Revision 1

JOB DESCRIPTION

MAE - Salix Beneficial Use

JOB NUMBER

310-309903-1

Eurofins Cedar Falls

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



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Revision 1



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Case Narrative

Client: MidAmerican Energy Company
Project: MAE - Salix Beneficial Use

Job ID: 310-309903-1

Job ID: 310-309903-1

Eurofins Cedar Falls

Job Narrative 310-309903-1

REVISION

The report being provided is a revision of the original report sent on 7/16/2025. The report (revision 1) is being revised due to Client requested results for Lithium and Boron.

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 7/1/2025 8:30 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice.

Metals

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

General Chemistry

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

Eurofins Cedar Falls

Sample Summary

Client: MidAmerican Energy Company
Project/Site: MAE - Salix Beneficial Use

Job ID: 310-309903-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
310-309903-1	Neal 3 Fly Ash (North)	Solid	06/30/25 00:00	07/01/25 08:30	Iowa
310-309903-2	Neal 4 Fly Ash (South)	Solid	06/30/25 00:00	07/01/25 08:30	Iowa

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Client Sample Results

Client: MidAmerican Energy Company
Project/Site: MAE - Salix Beneficial Use

Job ID: 310-309903-1

Client Sample ID: Neal 3 Fly Ash (North)

Lab Sample ID: 310-309903-1

Date Collected: 06/30/25 00:00

Matrix: Solid

Date Received: 07/01/25 08:30

Method: SW846 6010D - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0300		0.100	0.0300	mg/L		07/10/25 09:00	07/11/25 10:53	1
Barium	10.2		0.200	0.0400	mg/L		07/10/25 09:00	07/11/25 10:53	1
Cadmium	<0.00390		0.0200	0.00390	mg/L		07/10/25 09:00	07/11/25 10:53	1
Chromium	0.0206		0.0200	0.00600	mg/L		07/10/25 09:00	07/11/25 10:53	1
Lead	<0.0370		0.100	0.0370	mg/L		07/10/25 09:00	07/11/25 10:53	1
Selenium	<0.0290		0.100	0.0290	mg/L		07/10/25 09:00	07/11/25 10:53	1
Silver	<0.0160		0.0500	0.0160	mg/L		07/10/25 09:00	07/11/25 10:53	1

Method: SW846 6020B - Metals (ICP/MS) - SPLP West

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0200		0.0400	0.0200	mg/L		07/10/25 09:00	07/15/25 20:44	4
Arsenic	<0.0110		0.0400	0.0110	mg/L		07/10/25 09:00	07/14/25 18:50	4
Barium	11.4		0.200	0.0280	mg/L		07/10/25 09:00	07/14/25 18:50	4
Beryllium	<0.00660		0.0200	0.00660	mg/L		07/10/25 09:00	07/14/25 18:50	4
Cadmium	<0.00200		0.0100	0.00200	mg/L		07/10/25 09:00	07/14/25 18:50	4
Chromium	<0.0360		0.100	0.0360	mg/L		07/10/25 09:00	07/14/25 18:50	4
Copper	<0.0640		0.200	0.0640	mg/L		07/10/25 09:00	07/14/25 18:50	4
Lead	<0.00660		0.0200	0.00660	mg/L		07/10/25 09:00	07/14/25 18:50	4
Selenium	<0.0280		0.100	0.0280	mg/L		07/10/25 09:00	07/14/25 18:50	4
Thallium	<0.0110	F1	0.0200	0.0110	mg/L		07/10/25 09:00	07/15/25 20:44	4

Method: SW846 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00120		0.00200	0.00120	mg/L		07/09/25 12:41	07/10/25 09:22	1

Method: SW846 7470A - Mercury (CVAA) - SPLP West

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00120		0.00200	0.00120	mg/L		07/09/25 12:41	07/10/25 08:41	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	0.05		0.1	0.1	%			07/01/25 11:00	1
Percent Solids (EPA Moisture)	99.9		0.1	0.1	%			07/01/25 11:00	1

General Chemistry - SPLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (SW846 9214)	5.82		0.200	0.0790	mg/L			07/10/25 14:46	1

Client Sample ID: Neal 3 Fly Ash (North)

Lab Sample ID: 310-309903-1

Date Collected: 06/30/25 00:00

Matrix: Solid

Date Received: 07/01/25 08:30

Percent Solids: 99.9

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.675	J	0.785	0.353	mg/Kg	✱	07/09/25 09:00	07/09/25 17:31	5
Arsenic	14.7		0.785	0.330	mg/Kg	✱	07/09/25 09:00	07/09/25 17:31	5
Barium	1440		7.85	3.61	mg/Kg	✱	07/09/25 09:00	07/10/25 15:35	50
Beryllium	3.73	J	3.92	1.57	mg/Kg	✱	07/09/25 09:00	07/10/25 15:35	50
Cadmium	0.975		0.392	0.149	mg/Kg	✱	07/09/25 09:00	07/09/25 17:31	5
Chromium	57.8		1.18	0.408	mg/Kg	✱	07/09/25 09:00	07/09/25 17:31	5
Cobalt	18.2		0.392	0.141	mg/Kg	✱	07/09/25 09:00	07/09/25 17:31	5

Eurofins Cedar Falls

Client Sample Results

Client: MidAmerican Energy Company
Project/Site: MAE - Salix Beneficial Use

Job ID: 310-309903-1

Client Sample ID: Neal 3 Fly Ash (North)

Lab Sample ID: 310-309903-1

Date Collected: 06/30/25 00:00

Matrix: Solid

Date Received: 07/01/25 08:30

Percent Solids: 99.9

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	148		1.18	0.628	mg/Kg	☆	07/09/25 09:00	07/09/25 17:31	5
Lead	22.1		1.96	0.612	mg/Kg	☆	07/09/25 09:00	07/09/25 17:31	5
Manganese	527		1.96	0.942	mg/Kg	☆	07/09/25 09:00	07/09/25 17:31	5
Molybdenum	7.28		0.785	0.322	mg/Kg	☆	07/09/25 09:00	07/09/25 17:31	5
Nickel	42.5		1.18	0.471	mg/Kg	☆	07/09/25 09:00	07/09/25 17:31	5
Selenium	15.3		1.18	0.589	mg/Kg	☆	07/09/25 09:00	07/09/25 17:31	5
Silver	0.359 J		0.392	0.149	mg/Kg	☆	07/09/25 09:00	07/09/25 17:31	5
Thallium	<1.49		3.92	1.49	mg/Kg	☆	07/09/25 09:00	07/10/25 15:35	50
Vanadium	209		11.8	4.16	mg/Kg	☆	07/09/25 09:00	07/10/25 15:35	50
Zinc	46.9		3.92	2.59	mg/Kg	☆	07/09/25 09:00	07/09/25 17:31	5
Lithium	25.9		19.6	7.77	mg/Kg	☆	07/09/25 09:00	07/10/25 15:35	50
Boron	687		39.2	33.7	mg/Kg	☆	07/09/25 09:00	07/09/25 17:31	5

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.152		0.0185	0.00757	mg/Kg	☆	07/02/25 13:36	07/03/25 10:06	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (SW846 9214)	7.66	F1	0.984	0.482	mg/Kg	☆		07/03/25 16:12	1

Client Sample ID: Neal 4 Fly Ash (South)

Lab Sample ID: 310-309903-2

Date Collected: 06/30/25 00:00

Matrix: Solid

Date Received: 07/01/25 08:30

Method: SW846 6010D - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0300		0.100	0.0300	mg/L		07/10/25 09:00	07/11/25 11:09	1
Barium	5.95		0.200	0.0400	mg/L		07/10/25 09:00	07/11/25 11:09	1
Cadmium	<0.00390		0.0200	0.00390	mg/L		07/10/25 09:00	07/11/25 11:09	1
Chromium	0.145		0.0200	0.00600	mg/L		07/10/25 09:00	07/11/25 11:09	1
Lead	<0.0370		0.100	0.0370	mg/L		07/10/25 09:00	07/11/25 11:09	1
Selenium	0.0885 J		0.100	0.0290	mg/L		07/10/25 09:00	07/11/25 11:09	1
Silver	<0.0160		0.0500	0.0160	mg/L		07/10/25 09:00	07/11/25 11:09	1

Method: SW846 6020B - Metals (ICP/MS) - SPLP West

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0200		0.0400	0.0200	mg/L		07/10/25 09:00	07/15/25 20:49	4
Arsenic	<0.0110		0.0400	0.0110	mg/L		07/10/25 09:00	07/14/25 19:00	4
Barium	11.2		0.200	0.0280	mg/L		07/10/25 09:00	07/14/25 19:00	4
Beryllium	<0.00660		0.0200	0.00660	mg/L		07/10/25 09:00	07/14/25 19:00	4
Cadmium	<0.00200		0.0100	0.00200	mg/L		07/10/25 09:00	07/14/25 19:00	4
Chromium	<0.0360		0.100	0.0360	mg/L		07/10/25 09:00	07/14/25 19:00	4
Copper	<0.0640		0.200	0.0640	mg/L		07/10/25 09:00	07/14/25 19:00	4
Lead	<0.00660		0.0200	0.00660	mg/L		07/10/25 09:00	07/14/25 19:00	4
Selenium	<0.0280		0.100	0.0280	mg/L		07/10/25 09:00	07/14/25 19:00	4
Thallium	<0.0110		0.0200	0.0110	mg/L		07/10/25 09:00	07/15/25 20:49	4

Method: SW846 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00120		0.00200	0.00120	mg/L		07/09/25 12:41	07/10/25 09:24	1

Eurofins Cedar Falls

Client Sample Results

Client: MidAmerican Energy Company
Project/Site: MAE - Salix Beneficial Use

Job ID: 310-309903-1

Client Sample ID: Neal 4 Fly Ash (South)

Lab Sample ID: 310-309903-2

Date Collected: 06/30/25 00:00

Matrix: Solid

Date Received: 07/01/25 08:30

Method: SW846 7470A - Mercury (CVAA) - SPLP West

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00120		0.00200	0.00120	mg/L		07/09/25 12:41	07/10/25 08:50	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	0.06		0.1	0.1	%			07/01/25 11:00	1
Percent Solids (EPA Moisture)	99.9		0.1	0.1	%			07/01/25 11:00	1

General Chemistry - SPLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (SW846 9214)	1.34		0.200	0.0790	mg/L			07/10/25 15:03	1

Client Sample ID: Neal 4 Fly Ash (South)

Lab Sample ID: 310-309903-2

Date Collected: 06/30/25 00:00

Matrix: Solid

Date Received: 07/01/25 08:30

Percent Solids: 99.9

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	611		43.4	16.5	mg/Kg	☆	07/08/25 09:30	07/09/25 12:52	5
Lithium	29.3		10.8	6.50	mg/Kg	☆	07/08/25 09:30	07/09/25 12:52	5

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.619	J	0.784	0.353	mg/Kg	☆	07/09/25 09:00	07/09/25 17:33	5
Arsenic	13.8		0.784	0.329	mg/Kg	☆	07/09/25 09:00	07/09/25 17:33	5
Barium	4590		9.41	4.33	mg/Kg	☆	07/09/25 09:00	07/10/25 15:38	60
Beryllium	3.37	J	4.70	1.88	mg/Kg	☆	07/09/25 09:00	07/10/25 15:38	60
Cadmium	0.948		0.392	0.149	mg/Kg	☆	07/09/25 09:00	07/09/25 17:33	5
Chromium	52.9		1.18	0.408	mg/Kg	☆	07/09/25 09:00	07/09/25 17:33	5
Cobalt	16.9		0.392	0.141	mg/Kg	☆	07/09/25 09:00	07/09/25 17:33	5
Copper	132		1.18	0.627	mg/Kg	☆	07/09/25 09:00	07/09/25 17:33	5
Lead	21.0		1.96	0.612	mg/Kg	☆	07/09/25 09:00	07/09/25 17:33	5
Manganese	407		1.96	0.941	mg/Kg	☆	07/09/25 09:00	07/09/25 17:33	5
Molybdenum	7.56		0.784	0.322	mg/Kg	☆	07/09/25 09:00	07/09/25 17:33	5
Nickel	40.6		1.18	0.470	mg/Kg	☆	07/09/25 09:00	07/09/25 17:33	5
Selenium	13.4		1.18	0.588	mg/Kg	☆	07/09/25 09:00	07/09/25 17:33	5
Silver	0.288	J	0.392	0.149	mg/Kg	☆	07/09/25 09:00	07/09/25 17:33	5
Thallium	<1.79		4.70	1.79	mg/Kg	☆	07/09/25 09:00	07/10/25 15:38	60
Vanadium	171		1.18	0.416	mg/Kg	☆	07/09/25 09:00	07/09/25 17:33	5
Zinc	52.8		3.92	2.59	mg/Kg	☆	07/09/25 09:00	07/09/25 17:33	5

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0975		0.0172	0.00704	mg/Kg	☆	07/02/25 13:36	07/03/25 10:08	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (SW846 9214)	16.5		0.942	0.462	mg/Kg	☆		07/03/25 16:32	1

Eurofins Cedar Falls

Lab Chronicle

Client: MidAmerican Energy Company
Project/Site: MAE - Salix Beneficial Use

Job ID: 310-309903-1

Client Sample ID: Neal 3 Fly Ash (North)

Lab Sample ID: 310-309903-1

Date Collected: 06/30/25 00:00

Matrix: Solid

Date Received: 07/01/25 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
TCLP	Leach	1311			459820	U8FK	EET CF	07/08/25 15:00 - 07/09/25 07:00 ¹
TCLP	Prep	3010A			459942	WK2X	EET CF	07/10/25 09:00
TCLP	Analysis	6010D		1	460256	ZRI4	EET CF	07/11/25 10:53
SPLP West	Leach	1312			459817	U8FK	EET CF	07/08/25 15:00 - 07/09/25 07:00 ¹
SPLP West	Prep	3010A			459941	WK2X	EET CF	07/10/25 09:00
SPLP West	Analysis	6020B		4	460458	NFT2	EET CF	07/14/25 18:50
SPLP West	Leach	1312			459817	U8FK	EET CF	07/08/25 15:00 - 07/09/25 07:00 ¹
SPLP West	Prep	3010A			459941	WK2X	EET CF	07/10/25 09:00
SPLP West	Analysis	6020B		4	460614	NFT2	EET CF	07/15/25 20:44
SPLP West	Leach	1312			459817	U8FK	EET CF	07/08/25 15:00 - 07/09/25 07:00 ¹
SPLP West	Prep	7470A			459950	F5MW	EET CF	07/09/25 12:41
SPLP West	Analysis	7470A		1	460065	F5MW	EET CF	07/10/25 08:41
TCLP	Leach	1311			459820	U8FK	EET CF	07/08/25 15:00 - 07/09/25 07:00 ¹
TCLP	Prep	7470A			459949	F5MW	EET CF	07/09/25 12:41
TCLP	Analysis	7470A		1	460065	F5MW	EET CF	07/10/25 09:22
SPLP	Leach	1312			459814	U8FK	EET CF	07/08/25 15:00 - 07/09/25 07:00 ¹
SPLP	Analysis	9214		1	460151	T5AC	EET CF	07/10/25 14:46
Total/NA	Analysis	Moisture		1	459287	W9YR	EET CF	07/01/25 11:00

Client Sample ID: Neal 3 Fly Ash (North)

Lab Sample ID: 310-309903-1

Date Collected: 06/30/25 00:00

Matrix: Solid

Date Received: 07/01/25 08:30

Percent Solids: 99.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			459429	WK2X	EET CF	07/09/25 09:00
Total/NA	Analysis	6020B		5	460047	NFT2	EET CF	07/09/25 17:31
Total/NA	Prep	3050B			459429	WK2X	EET CF	07/09/25 09:00
Total/NA	Analysis	6020B		50	460204	ZRI4	EET CF	07/10/25 15:35
Total/NA	Prep	7471B			459296	F5MW	EET CF	07/02/25 13:36
Total/NA	Analysis	7471B		1	459558	F5MW	EET CF	07/03/25 10:06
Soluble	Leach	DI Leach			459584	T5AC	EET CF	07/03/25 13:04
Soluble	Analysis	9214		1	459624	T5AC	EET CF	07/03/25 16:12

Client Sample ID: Neal 4 Fly Ash (South)

Lab Sample ID: 310-309903-2

Date Collected: 06/30/25 00:00

Matrix: Solid

Date Received: 07/01/25 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
TCLP	Leach	1311			459820	U8FK	EET CF	07/08/25 15:00 - 07/09/25 07:00 ¹
TCLP	Prep	3010A			459942	WK2X	EET CF	07/10/25 09:00
TCLP	Analysis	6010D		1	460256	ZRI4	EET CF	07/11/25 11:09
SPLP West	Leach	1312			459817	U8FK	EET CF	07/08/25 15:00 - 07/09/25 07:00 ¹
SPLP West	Prep	3010A			459941	WK2X	EET CF	07/10/25 09:00
SPLP West	Analysis	6020B		4	460458	NFT2	EET CF	07/14/25 19:00

Eurofins Cedar Falls

Lab Chronicle

Client: MidAmerican Energy Company
Project/Site: MAE - Salix Beneficial Use

Job ID: 310-309903-1

Client Sample ID: Neal 4 Fly Ash (South)

Lab Sample ID: 310-309903-2

Date Collected: 06/30/25 00:00

Matrix: Solid

Date Received: 07/01/25 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
SPLP West	Leach	1312			459817	U8FK	EET CF	07/08/25 15:00 - 07/09/25 07:00 ¹
SPLP West	Prep	3010A			459941	WK2X	EET CF	07/10/25 09:00
SPLP West	Analysis	6020B		4	460614	NFT2	EET CF	07/15/25 20:49
SPLP West	Leach	1312			459817	U8FK	EET CF	07/08/25 15:00 - 07/09/25 07:00 ¹
SPLP West	Prep	7470A			459950	F5MW	EET CF	07/09/25 12:41
SPLP West	Analysis	7470A		1	460065	F5MW	EET CF	07/10/25 08:50
TCLP	Leach	1311			459820	U8FK	EET CF	07/08/25 15:00 - 07/09/25 07:00 ¹
TCLP	Prep	7470A			459949	F5MW	EET CF	07/09/25 12:41
TCLP	Analysis	7470A		1	460065	F5MW	EET CF	07/10/25 09:24
SPLP	Leach	1312			459814	U8FK	EET CF	07/08/25 15:00 - 07/09/25 07:00 ¹
SPLP	Analysis	9214		1	460151	T5AC	EET CF	07/10/25 15:03
Total/NA	Analysis	Moisture		1	459287	W9YR	EET CF	07/01/25 11:00

Client Sample ID: Neal 4 Fly Ash (South)

Lab Sample ID: 310-309903-2

Date Collected: 06/30/25 00:00

Matrix: Solid

Date Received: 07/01/25 08:30

Percent Solids: 99.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			459425	WK2X	EET CF	07/08/25 09:30
Total/NA	Analysis	6010D		5	460003	ZRI4	EET CF	07/09/25 12:52
Total/NA	Prep	3050B			459429	WK2X	EET CF	07/09/25 09:00
Total/NA	Analysis	6020B		5	460047	NFT2	EET CF	07/09/25 17:33
Total/NA	Prep	3050B			459429	WK2X	EET CF	07/09/25 09:00
Total/NA	Analysis	6020B		60	460204	ZRI4	EET CF	07/10/25 15:38
Total/NA	Prep	7471B			459296	F5MW	EET CF	07/02/25 13:36
Total/NA	Analysis	7471B		1	459558	F5MW	EET CF	07/03/25 10:08
Soluble	Leach	DI Leach			459584	T5AC	EET CF	07/03/25 13:04
Soluble	Analysis	9214		1	459624	T5AC	EET CF	07/03/25 16:32

¹ This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

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

Definitions/Glossary

Client: MidAmerican Energy Company
Project/Site: MAE - Salix Beneficial Use

Job ID: 310-309903-1

Qualifiers

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

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

Accreditation/Certification Summary

Client: MidAmerican Energy Company
Project/Site: MAE - Salix Beneficial Use

Job ID: 310-309903-1

Laboratory: Eurofins Cedar Falls

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	11-30-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
6020B	3050B	Solid	Lithium
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: MidAmerican Energy Company
Project/Site: MAE - Salix Beneficial Use

Job ID: 310-309903-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CF
6020B	Metals (ICP/MS)	SW846	EET CF
7470A	Mercury (CVAA)	SW846	EET CF
7471B	Mercury (CVAA)	SW846	EET CF
9214	Potentiometric Determination of Fluoride-Aqueous Smpls w/Ion-Selective Electrode	SW846	EET CF
Moisture	Percent Moisture	EPA	EET CF
1311	TCLP Extraction	SW846	EET CF
1312	SPLP Extraction	SW846	EET CF
3010A	Preparation, Total Metals	SW846	EET CF
3050B	Preparation, Metals	SW846	EET CF
7470A	Preparation, Mercury	SW846	EET CF
7471B	Preparation, Mercury	SW846	EET CF
DI Leach	Deionized Water Leaching Procedure	ASTM	EET CF

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

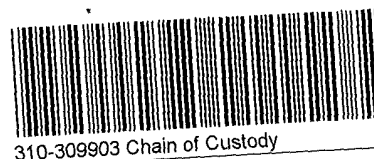
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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



Environment Testing
America



Cooler/Sample Receipt and Temperature Log Form

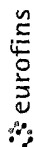
Client Information			
Client. <u>Midamerican</u>			
City/State:	CITY <u>Salix</u>	STATE <u>IA</u>	Project:
Receipt Information			
Date/Time Received.	DATE <u>7/1/25</u>	TIME <u>0830</u>	Received By <u>[Signature]</u>
Delivery Type: ☒ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee ☐ Lab Courier ☐ Lab 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:		Correction Factor (°C):	
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C):		Corrected Temp (°C):	
• 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			
<u>NO</u> <u>CAC</u>			

3019 Venture Way

Cedar Falls IA 50613

Phone (319) 277-2401 Phone (319) 277-2425

Chain of Custody Record



Environment Testing

Client Information			Lab P/W:		Carrier Tracking No(s).		GOC No:	
Client Contact			Calhoun		Conner M		310-12311-4985 1	
Kenna Anderson			Phone:		E-Mail:		Page:	
Company			MidAmerican Energy Company		Conner Calhoun@et.eurofinsus.com		Page 1 of 1	
Address:			2761 Port Neal Circle		State of Origin:		Job #:	
City:			Salix		Analysis Requested		Preservation Codes	
State Zip			IA, 51052		Compliance Project: ☐ Yes ☒ No		N - None	
Phone:			712-277-5215		PO #:		Other:	
Email:			Kenna.Anderson@midamerican.com		WO #:		Total Number of containers	
Project Name:			MAE - Salix Beneficial Use		Project #:		Special Instructions/Note	
Site			SSOW#:		31006797		If total Cr over 210mg/kg send out for Cr6 & Cr3	
Sample Identification			Sample Date		Sample Time		If total Cr over 210mg/kg send out for Cr6 & Cr3	
Neal 3 Fly Ash (North)								
Neal 4 Fly Ash (South)								
Possible Hazard Identification			☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		Archive For	
Deliverable Requested I II III IV Other (specify)					☐ Return To Client ☐ Disposal By Lab		Months	
Empty Kit Relinquished by:			Date:		Time:		Method of Shipment:	
Relinquished by:			Date/Time:		Received by:		Date/Time:	
Relinquished by:			Date/Time:		Received by:		Date/Time:	
Relinquished by:			Date/Time:		Received by:		Date/Time:	
Custody Seal No			Seals Intact		Cooler Temperature(s) °C and Other Remarks.			

Login Sample Receipt Checklist

Client: MidAmerican Energy Company

Job Number: 310-309903-1

SDG Number:

Login Number: 309903

List Number: 1

Creator: Homolar, Dana J

List Source: Eurofins Cedar Falls

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ 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.	False	Not in a cooler
Cooler Temperature is acceptable.	N/A	
Cooler Temperature is recorded.	N/A	
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.	False	No date or time on COC or sample containers
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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

PREPARED FOR

Attn: Kenna Anderson
MidAmerican Energy Company
1151 260th Street
Sergeant Bluff, Iowa 51054

Generated 2/11/2026 2:44:26 PM Revision 1

JOB DESCRIPTION

MAE - Salix - Beneficial Use

JOB NUMBER

310-322256-1

Eurofins Cedar Falls

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



Authorized for release by
Conner Calhoun, Client Service Manager
Conner.Calhoun@et.eurofinsus.com
(319)277-2401

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2/11/2026 2:44:26 PM
Revision 1

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Case Narrative

Client: MidAmerican Energy Company
Project: MAE - Salix - Beneficial Use

Job ID: 310-322256-1

Job ID: 310-322256-1

Eurofins Cedar Falls

**Job Narrative
310-322256-1**

REVISION

The report being provided is a revision of the original report sent on 12/23/2025. The report (revision 1) is being revised due to Client requested results for Lithium and Boron.

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 12/11/2025 8:30 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice.

Metals

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

General Chemistry

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

Eurofins Cedar Falls

Sample Summary

Client: MidAmerican Energy Company
Project/Site: MAE - Salix - Beneficial Use

Job ID: 310-322256-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
310-322256-1	Neal 3 Fly Ash (North)	Solid	12/09/25 13:00	12/11/25 08:30	Iowa
310-322256-2	Neal 4 Fly Ash (South)	Solid	12/09/25 13:00	12/11/25 08:30	Iowa

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Client Sample Results

Client: MidAmerican Energy Company
Project/Site: MAE - Salix - Beneficial Use

Job ID: 310-322256-1

Client Sample ID: Neal 3 Fly Ash (North)

Lab Sample ID: 310-322256-1

Date Collected: 12/09/25 13:00

Matrix: Solid

Date Received: 12/11/25 08:30

Method: SW846 6010D - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0300		0.100	0.0300	mg/L		12/16/25 09:00	12/17/25 14:12	1
Barium	12.0		0.200	0.0400	mg/L		12/16/25 09:00	12/17/25 14:12	1
Cadmium	<0.00390		0.0200	0.00390	mg/L		12/16/25 09:00	12/17/25 14:12	1
Chromium	0.0175	J	0.0200	0.00600	mg/L		12/16/25 09:00	12/17/25 14:12	1
Lead	<0.0370		0.100	0.0370	mg/L		12/16/25 09:00	12/17/25 14:12	1
Selenium	<0.0290		0.100	0.0290	mg/L		12/16/25 09:00	12/17/25 14:12	1
Silver	<0.0160		0.0500	0.0160	mg/L		12/16/25 09:00	12/17/25 14:12	1

Method: SW846 6020B - Metals (ICP/MS) - SPLP West

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0200		0.0400	0.0200	mg/L		12/16/25 09:00	12/17/25 15:55	4
Arsenic	<0.0110		0.0400	0.0110	mg/L		12/16/25 09:00	12/17/25 15:55	4
Barium	15.9		0.200	0.0280	mg/L		12/16/25 09:00	12/17/25 15:55	4
Beryllium	<0.00660		0.0200	0.00660	mg/L		12/16/25 09:00	12/17/25 15:55	4
Cadmium	<0.00200		0.0100	0.00200	mg/L		12/16/25 09:00	12/17/25 15:55	4
Chromium	<0.0360		0.100	0.0360	mg/L		12/16/25 09:00	12/17/25 15:55	4
Copper	<0.0640		0.200	0.0640	mg/L		12/16/25 09:00	12/17/25 15:55	4
Lead	<0.00660		0.0200	0.00660	mg/L		12/16/25 09:00	12/17/25 15:55	4
Selenium	<0.0280		0.100	0.0280	mg/L		12/16/25 09:00	12/17/25 15:55	4
Thallium	<0.0110		0.0200	0.0110	mg/L		12/16/25 09:00	12/18/25 13:44	4

Method: SW846 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00120		0.00200	0.00120	mg/L		12/16/25 10:55	12/17/25 10:54	1

Method: SW846 7470A - Mercury (CVAA) - SPLP West

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00120		0.00200	0.00120	mg/L		12/16/25 10:55	12/17/25 10:31	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	0.06		0.1	0.1	%			12/11/25 13:05	1
Percent Solids (EPA Moisture)	99.9		0.1	0.1	%			12/11/25 13:05	1

General Chemistry - SPLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (SW846 9214)	5.84		0.200	0.0790	mg/L			12/23/25 10:30	1

Client Sample ID: Neal 3 Fly Ash (North)

Lab Sample ID: 310-322256-1

Date Collected: 12/09/25 13:00

Matrix: Solid

Date Received: 12/11/25 08:30

Percent Solids: 99.9

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.680	J	0.782	0.352	mg/Kg	✱	12/16/25 08:15	12/17/25 17:04	5
Arsenic	15.3		0.782	0.329	mg/Kg	✱	12/16/25 08:15	12/17/25 17:04	5
Barium	878		3.13	1.44	mg/Kg	✱	12/16/25 08:15	12/18/25 14:03	20
Beryllium	2.56		0.391	0.156	mg/Kg	✱	12/16/25 08:15	12/17/25 17:04	5
Cadmium	0.799		0.391	0.149	mg/Kg	✱	12/16/25 08:15	12/17/25 17:04	5
Chromium	57.3		1.17	0.407	mg/Kg	✱	12/16/25 08:15	12/17/25 17:04	5
Cobalt	16.5		0.391	0.141	mg/Kg	✱	12/16/25 08:15	12/17/25 17:04	5

Eurofins Cedar Falls

Client Sample Results

Client: MidAmerican Energy Company
Project/Site: MAE - Salix - Beneficial Use

Job ID: 310-322256-1

Client Sample ID: Neal 3 Fly Ash (North)

Lab Sample ID: 310-322256-1

Date Collected: 12/09/25 13:00

Matrix: Solid

Date Received: 12/11/25 08:30

Percent Solids: 99.9

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	132		1.17	0.626	mg/Kg	☆	12/16/25 08:15	12/17/25 17:04	5
Lead	20.7		1.96	0.610	mg/Kg	☆	12/16/25 08:15	12/17/25 17:04	5
Manganese	747		1.96	0.939	mg/Kg	☆	12/16/25 08:15	12/17/25 17:04	5
Molybdenum	6.61		0.782	0.321	mg/Kg	☆	12/16/25 08:15	12/17/25 17:04	5
Nickel	36.2		1.17	0.469	mg/Kg	☆	12/16/25 08:15	12/17/25 17:04	5
Selenium	17.7		1.17	0.587	mg/Kg	☆	12/16/25 08:15	12/17/25 17:04	5
Silver	0.255 J		0.391	0.149	mg/Kg	☆	12/16/25 08:15	12/17/25 17:04	5
Thallium	0.365 J		0.391	0.149	mg/Kg	☆	12/16/25 08:15	12/18/25 14:01	5
Vanadium	172		1.17	0.415	mg/Kg	☆	12/16/25 08:15	12/17/25 17:04	5
Zinc	48.5		3.91	2.58	mg/Kg	☆	12/16/25 08:15	12/17/25 17:04	5
Lithium	17.8		7.82	3.10	mg/Kg	☆	12/16/25 08:15	12/18/25 14:03	20
Boron	563		156	135	mg/Kg	☆	12/16/25 08:15	12/18/25 14:03	20

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.184	F1	0.0197	0.00810	mg/Kg	☆	12/19/25 13:08	12/22/25 12:53	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (SW846 9214)	1.86	F1	0.945	0.463	mg/Kg	☆		12/12/25 14:23	1

Client Sample ID: Neal 4 Fly Ash (South)

Lab Sample ID: 310-322256-2

Date Collected: 12/09/25 13:00

Matrix: Solid

Date Received: 12/11/25 08:30

Method: SW846 6010D - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0300		0.100	0.0300	mg/L		12/16/25 09:00	12/17/25 14:13	1
Barium	9.84		0.200	0.0400	mg/L		12/16/25 09:00	12/17/25 14:13	1
Cadmium	<0.00390		0.0200	0.00390	mg/L		12/16/25 09:00	12/17/25 14:13	1
Chromium	0.0345		0.0200	0.00600	mg/L		12/16/25 09:00	12/17/25 14:13	1
Lead	<0.0370		0.100	0.0370	mg/L		12/16/25 09:00	12/17/25 14:13	1
Selenium	<0.0290		0.100	0.0290	mg/L		12/16/25 09:00	12/17/25 14:13	1
Silver	<0.0160		0.0500	0.0160	mg/L		12/16/25 09:00	12/17/25 14:13	1

Method: SW846 6020B - Metals (ICP/MS) - SPLP West

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0200		0.0400	0.0200	mg/L		12/16/25 09:00	12/17/25 16:02	4
Arsenic	<0.0110		0.0400	0.0110	mg/L		12/16/25 09:00	12/17/25 16:02	4
Barium	11.9		0.200	0.0280	mg/L		12/16/25 09:00	12/17/25 16:02	4
Beryllium	<0.00660		0.0200	0.00660	mg/L		12/16/25 09:00	12/17/25 16:02	4
Cadmium	<0.00200		0.0100	0.00200	mg/L		12/16/25 09:00	12/17/25 16:02	4
Chromium	<0.0360		0.100	0.0360	mg/L		12/16/25 09:00	12/17/25 16:02	4
Copper	<0.0640		0.200	0.0640	mg/L		12/16/25 09:00	12/17/25 16:02	4
Lead	<0.00660		0.0200	0.00660	mg/L		12/16/25 09:00	12/17/25 16:02	4
Selenium	<0.0280		0.100	0.0280	mg/L		12/16/25 09:00	12/17/25 16:02	4
Thallium	<0.0110		0.0200	0.0110	mg/L		12/16/25 09:00	12/18/25 13:49	4

Method: SW846 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00120		0.00200	0.00120	mg/L		12/16/25 10:55	12/17/25 10:56	1

Eurofins Cedar Falls

Client Sample Results

Client: MidAmerican Energy Company
Project/Site: MAE - Salix - Beneficial Use

Job ID: 310-322256-1

Client Sample ID: Neal 4 Fly Ash (South)

Lab Sample ID: 310-322256-2

Date Collected: 12/09/25 13:00

Matrix: Solid

Date Received: 12/11/25 08:30

Method: SW846 7470A - Mercury (CVAA) - SPLP West

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00120		0.00200	0.00120	mg/L		12/16/25 10:55	12/17/25 10:35	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	0.04		0.1	0.1	%			12/11/25 13:05	1
Percent Solids (EPA Moisture)	100		0.1	0.1	%			12/11/25 13:05	1

General Chemistry - SPLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (SW846 9214)	5.06		0.200	0.0790	mg/L			12/23/25 10:46	1

Client Sample ID: Neal 4 Fly Ash (South)

Lab Sample ID: 310-322256-2

Date Collected: 12/09/25 13:00

Matrix: Solid

Date Received: 12/11/25 08:30

Percent Solids: 100.0

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.569	J	0.788	0.354	mg/Kg	✱	12/16/25 08:15	12/17/25 17:07	5
Arsenic	12.8		0.788	0.331	mg/Kg	✱	12/16/25 08:15	12/17/25 17:07	5
Barium	1260		7.88	3.62	mg/Kg	✱	12/16/25 08:15	12/19/25 15:07	50
Beryllium	2.36		0.394	0.158	mg/Kg	✱	12/16/25 08:15	12/17/25 17:07	5
Cadmium	0.670		0.394	0.150	mg/Kg	✱	12/16/25 08:15	12/17/25 17:07	5
Chromium	45.5		1.18	0.410	mg/Kg	✱	12/16/25 08:15	12/17/25 17:07	5
Cobalt	15.0		0.394	0.142	mg/Kg	✱	12/16/25 08:15	12/17/25 17:07	5
Copper	113		1.18	0.630	mg/Kg	✱	12/16/25 08:15	12/17/25 17:07	5
Lead	17.7		1.97	0.614	mg/Kg	✱	12/16/25 08:15	12/17/25 17:07	5
Manganese	623		1.97	0.945	mg/Kg	✱	12/16/25 08:15	12/17/25 17:07	5
Molybdenum	5.57		0.788	0.323	mg/Kg	✱	12/16/25 08:15	12/17/25 17:07	5
Nickel	32.5		1.18	0.473	mg/Kg	✱	12/16/25 08:15	12/17/25 17:07	5
Selenium	14.3		1.18	0.591	mg/Kg	✱	12/16/25 08:15	12/17/25 17:07	5
Silver	0.208	J	0.394	0.150	mg/Kg	✱	12/16/25 08:15	12/17/25 17:07	5
Thallium	0.213	J	0.394	0.150	mg/Kg	✱	12/16/25 08:15	12/18/25 14:12	5
Vanadium	149		1.18	0.417	mg/Kg	✱	12/16/25 08:15	12/17/25 17:07	5
Zinc	38.5		3.94	2.60	mg/Kg	✱	12/16/25 08:15	12/17/25 17:07	5
Lithium	26.9		13.8	5.46	mg/Kg	✱	12/16/25 08:15	12/18/25 14:15	35
Boron	827		276	237	mg/Kg	✱	12/16/25 08:15	12/18/25 14:15	35

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0630		0.0172	0.00707	mg/Kg	✱	12/19/25 13:08	12/22/25 13:04	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (SW846 9214)	16.3		0.984	0.482	mg/Kg	✱		12/12/25 14:38	1

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Lab Chronicle

Client: MidAmerican Energy Company
Project/Site: MAE - Salix - Beneficial Use

Job ID: 310-322256-1

Client Sample ID: Neal 3 Fly Ash (North)

Lab Sample ID: 310-322256-1

Date Collected: 12/09/25 13:00

Matrix: Solid

Date Received: 12/11/25 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
TCLP	Leach	1311			476492	U8FK	EET CF	12/15/25 15:00 - 12/16/25 07:00 ¹
TCLP	Prep	3010A			476551	RLT9	EET CF	12/16/25 09:00
TCLP	Analysis	6010D		1	476739	ZRI4	EET CF	12/17/25 14:12
SPLP West	Leach	1312			476491	U8FK	EET CF	12/15/25 15:00 - 12/16/25 07:00 ¹
SPLP West	Prep	3010A			476562	RLT9	EET CF	12/16/25 09:00
SPLP West	Analysis	6020B		4	476762	NFT2	EET CF	12/17/25 15:55
SPLP West	Leach	1312			476491	U8FK	EET CF	12/15/25 15:00 - 12/16/25 07:00 ¹
SPLP West	Prep	3010A			476562	RLT9	EET CF	12/16/25 09:00
SPLP West	Analysis	6020B		4	476903	NFT2	EET CF	12/18/25 13:44
SPLP West	Leach	1312			476491	U8FK	EET CF	12/15/25 15:00 - 12/16/25 07:00 ¹
SPLP West	Prep	7470A			476558	RLT9	EET CF	12/16/25 10:55
SPLP West	Analysis	7470A		1	476711	RLT9	EET CF	12/17/25 10:31
TCLP	Leach	1311			476492	U8FK	EET CF	12/15/25 15:00 - 12/16/25 07:00 ¹
TCLP	Prep	7470A			476564	RLT9	EET CF	12/16/25 10:55
TCLP	Analysis	7470A		1	476711	RLT9	EET CF	12/17/25 10:54
SPLP	Leach	1312			476490	U8FK	EET CF	12/15/25 15:00 - 12/16/25 07:00 ¹
SPLP	Analysis	9214		1	477216	HE7K	EET CF	12/23/25 10:30
Total/NA	Analysis	Moisture		1	476203	W9YR	EET CF	12/11/25 13:05

Client Sample ID: Neal 3 Fly Ash (North)

Lab Sample ID: 310-322256-1

Date Collected: 12/09/25 13:00

Matrix: Solid

Date Received: 12/11/25 08:30

Percent Solids: 99.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			476399	RLT9	EET CF	12/16/25 08:15
Total/NA	Analysis	6020B		5	476762	NFT2	EET CF	12/17/25 17:04
Total/NA	Prep	3050B			476399	RLT9	EET CF	12/16/25 08:15
Total/NA	Analysis	6020B		5	476903	NFT2	EET CF	12/18/25 14:01
Total/NA	Prep	3050B			476399	RLT9	EET CF	12/16/25 08:15
Total/NA	Analysis	6020B		20	476903	NFT2	EET CF	12/18/25 14:03
Total/NA	Prep	7471B			476868	RLT9	EET CF	12/19/25 13:08
Total/NA	Analysis	7471B		1	477119	NLZB	EET CF	12/22/25 12:53
Soluble	Leach	DI Leach			476283	WZC8	EET CF	12/12/25 09:32
Soluble	Analysis	9214		1	476365	WZC8	EET CF	12/12/25 14:23

Client Sample ID: Neal 4 Fly Ash (South)

Lab Sample ID: 310-322256-2

Date Collected: 12/09/25 13:00

Matrix: Solid

Date Received: 12/11/25 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
TCLP	Leach	1311			476492	U8FK	EET CF	12/15/25 15:00 - 12/16/25 07:00 ¹
TCLP	Prep	3010A			476551	RLT9	EET CF	12/16/25 09:00
TCLP	Analysis	6010D		1	476739	ZRI4	EET CF	12/17/25 14:13
SPLP West	Leach	1312			476491	U8FK	EET CF	12/15/25 15:00 - 12/16/25 07:00 ¹
SPLP West	Prep	3010A			476562	RLT9	EET CF	12/16/25 09:00
SPLP West	Analysis	6020B		4	476762	NFT2	EET CF	12/17/25 16:02

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Lab Chronicle

Client: MidAmerican Energy Company
Project/Site: MAE - Salix - Beneficial Use

Job ID: 310-322256-1

Client Sample ID: Neal 4 Fly Ash (South)

Lab Sample ID: 310-322256-2

Date Collected: 12/09/25 13:00

Matrix: Solid

Date Received: 12/11/25 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
SPLP West	Leach	1312			476491	U8FK	EET CF	12/15/25 15:00 - 12/16/25 07:00 ¹
SPLP West	Prep	3010A			476562	RLT9	EET CF	12/16/25 09:00
SPLP West	Analysis	6020B		4	476903	NFT2	EET CF	12/18/25 13:49
SPLP West	Leach	1312			476491	U8FK	EET CF	12/15/25 15:00 - 12/16/25 07:00 ¹
SPLP West	Prep	7470A			476558	RLT9	EET CF	12/16/25 10:55
SPLP West	Analysis	7470A		1	476711	RLT9	EET CF	12/17/25 10:35
TCLP	Leach	1311			476492	U8FK	EET CF	12/15/25 15:00 - 12/16/25 07:00 ¹
TCLP	Prep	7470A			476564	RLT9	EET CF	12/16/25 10:55
TCLP	Analysis	7470A		1	476711	RLT9	EET CF	12/17/25 10:56
SPLP	Leach	1312			476490	U8FK	EET CF	12/15/25 15:00 - 12/16/25 07:00 ¹
SPLP	Analysis	9214		1	477216	HE7K	EET CF	12/23/25 10:46
Total/NA	Analysis	Moisture		1	476203	W9YR	EET CF	12/11/25 13:05

Client Sample ID: Neal 4 Fly Ash (South)

Lab Sample ID: 310-322256-2

Date Collected: 12/09/25 13:00

Matrix: Solid

Date Received: 12/11/25 08:30

Percent Solids: 100.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			476399	RLT9	EET CF	12/16/25 08:15
Total/NA	Analysis	6020B		5	476762	NFT2	EET CF	12/17/25 17:07
Total/NA	Prep	3050B			476399	RLT9	EET CF	12/16/25 08:15
Total/NA	Analysis	6020B		50	476996	NFT2	EET CF	12/19/25 15:07
Total/NA	Prep	3050B			476399	RLT9	EET CF	12/16/25 08:15
Total/NA	Analysis	6020B		5	476903	NFT2	EET CF	12/18/25 14:12
Total/NA	Prep	3050B			476399	RLT9	EET CF	12/16/25 08:15
Total/NA	Analysis	6020B		35	476903	NFT2	EET CF	12/18/25 14:15
Total/NA	Prep	7471B			476868	RLT9	EET CF	12/19/25 13:08
Total/NA	Analysis	7471B		1	477119	NLZB	EET CF	12/22/25 13:04
Soluble	Leach	DI Leach			476283	WZC8	EET CF	12/12/25 09:32
Soluble	Analysis	9214		1	476365	WZC8	EET CF	12/12/25 14:38

¹ This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

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

Eurofins Cedar Falls

Definitions/Glossary

Client: MidAmerican Energy Company
Project/Site: MAE - Salix - Beneficial Use

Job ID: 310-322256-1

Qualifiers

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

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

Accreditation/Certification Summary

Client: MidAmerican Energy Company
Project/Site: MAE - Salix - Beneficial Use

Job ID: 310-322256-1

Laboratory: Eurofins Cedar Falls

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	01-25-26
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
6020B	3050B	Solid	Lithium
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: MidAmerican Energy Company
Project/Site: MAE - Salix - Beneficial Use

Job ID: 310-322256-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CF
6020B	Metals (ICP/MS)	SW846	EET CF
7470A	Mercury (CVAA)	SW846	EET CF
7471B	Mercury (CVAA)	SW846	EET CF
9214	Potentiometric Determination of Fluoride-Aqueous Smpls w/Ion-Selective Electrode	SW846	EET CF
Moisture	Percent Moisture	EPA	EET CF
1311	TCLP Extraction	SW846	EET CF
1312	SPLP Extraction	SW846	EET CF
3010A	Preparation, Total Metals	SW846	EET CF
3050B	Preparation, Metals	SW846	EET CF
7470A	Preparation, Mercury	SW846	EET CF
7471B	Preparation, Mercury	SW846	EET CF
DI Leach	Deionized Water Leaching Procedure	ASTM	EET CF

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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



Environment Testing
America



310-322256 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client <u>MidAmerican</u>			
City/State.	CITY <u>Salix</u>	STATE <u>IA</u>	Project:
Receipt Information			
Date/Time Received.	DATE <u>12/11/25</u>	TIME <u>0830</u>	Received By <u>ES</u>
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. <u>AA</u>		Correction Factor (°C): <u>0</u>	
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C):		Corrected Temp (°C):	
• Sample Container Temperature			
Container(s) used:	CONTAINER 1 <u>Other Client</u>		CONTAINER 2
Uncorrected Temp (°C):	<u>13.5</u>		
Corrected Temp (°C)	<u>13.5</u>		
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			

[illegible]

Login Sample Receipt Checklist

Client: MidAmerican Energy Company

Job Number: 310-322256-1

Login Number: 322256

List Source: Eurofins Cedar Falls

List Number: 1

Creator: Schaufenbuel, Erin

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ 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.	False	received in a box
Cooler Temperature is acceptable.	False	Cooler temperature outside required temperature criteria.
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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

PREPARER				
Preparer Name	Site Name	Address	City State Zip	Comment Spring
Kenna Anderson	Neal Energy Center North	1151 260th Street	Sergeant Bluff	Iowa 51054

PREPARER INPUT		Exposure Point Concentration for Soil(mg/kg)	Site-Specific Background Soil Level* (mg/kg)
Chemical	CASRN		
Antimony	007440-36-0		0.675
Arsenic, Inorganic	007440-38-2		14.7
Barium	007440-39-3		1440
Beryllium (soil/water)	007440-41-7		3.73
Boron And Borates Only	007440-42-8		687
Cadmium (soil)	007440-43-9		0.975
Chromium, total	007440-47-3		57.8
Cobalt	007440-48-4		18.2
Copper	007440-50-8		148
Fluoride	007681-49-4		7.66
Lead and Compounds	007439-92-1		22.1
Lithium	007439-93-2		25.9
Manganese	007439-96-5		527
Mercury	007439-97-6		0.152
Molybdenum	007439-98-7		7.28
Nickel	007440-02-0		42.5
Selenium	007782-49-2		15.3
Silver	007440-22-4		0.359
Thallium	007440-28-0		1.49
Vanadium	007440-62-2		209
Zinc	007440-66-6		46.9

CANCER OUTPUT			
Chemical	CASRN	Site Worker Soil	
Arsenic, Inorganic	007440-38-2		0.08
Lead and Compounds	007439-92-1	NQ	
TOTALS:	Å		0.08

Cumulative Cancer Risk Site Worker: 0.08
All cancer risk values are $\times 10^{-4}$

SITE WORKER - NON CANCER OUTPUT BY TARGET ORGAN

[illegible]

[illegible]

Preparer Name	Site Name	Address	City State Zip	Comment Fall
Kenna Anderson	Neal Energy Center North	1151 260th Street	Sergeant Bluff	Iowa 51054

Chemical	CASRN	Exposure Point Conc	Site-Specific Background Soil Level* (mg/kg)
Antimony	007440-36-0		0.68
Arsenic, Inorganic	007440-38-2		15.3
Barium	007440-39-3		878
Beryllium (soil/water)	007440-41-7		2.56
Boron And Borates Only	007440-42-8		563
Cadmium (soil)	007440-43-9		0.799
Chromium, total	007440-47-3		57.3
Cobalt	007440-48-4		16.5
Copper	007440-50-8		132
Fluoride	007681-49-4		1.86
Lead and Compounds	007439-92-1		20.7
Lithium	007439-93-2		17.8
Manganese	007439-96-5		747
Mercury	007439-97-6		0.184
Molybdenum	007439-98-7		6.61
Nickel	007440-02-0		36.2
Selenium	007782-49-2		17.7
Silver	007440-22-4		0.255
Thallium	007440-28-0		0.365
Vanadium	007440-62-2		172
Zinc	007440-66-6		48.5

Chemical	CASRN	Site Worker Soil
Arsenic, Inorganic	007440-38-2	0.09
Lead and Compounds	007439-92-1	NQ
TOTALS:	Å	0.09

SITE WORKER - NON CANCER OUTPUT BY TARGET ORGAN

[illegible]

[illegible]

PREPARER	Site Name	Address	City State Zip	Comment Spring
Preparer Name Kenna Anderson	Neal Energy Center South	2761 Port Neal Circle	Salix	Iowa 51052

PREPARER INPUT

Chemical	CASRN	Exposure Point Concentration for Soil(mg/kg)	Site-Specific Background Soil Level* (mg/kg)
Antimony	007440-36-0		0.619
Arsenic, Inorganic	007440-38-2		13.8
Barium	007440-39-3		4590
Beryllium (soil/water)	007440-41-7		3.37
Boron And Borates Only	007440-42-8		611
Cadmium (soil)	007440-43-9		0.948
Chromium, total	007440-47-3		52.9
Cobalt	007440-48-4		16.9
Copper	007440-50-8		132
Fluoride	007681-49-4		16.5
Lead and Compounds	007439-92-1		21
Lithium	007439-93-2		29.3
Manganese	007439-96-5		407
Mercury	007439-97-6		0.0975
Molybdenum	007439-98-7		7.56
Nickel	007440-02-0		40.6
Selenium	007782-49-2		13.4
Silver	007440-22-4		0.288
Thallium	007440-28-0		1.79
Vanadium	007440-62-2		171
Zinc	007440-66-6		52.8

CANCER OUTPUT

Chemical	CASRN	Site Worker Soil	
Arsenic, Inorganic	007440-38-2		0.08
Lead and Compounds	007439-92-1	NQ	
TOTALS:	Å		0.08

Cumulative Cancer Risk Site Worker: 0.08
All cancer risk values are $\times 10^{-4}$

SITE WORKER - NON CANCER OUTPUT BY TARGET ORGAN

[illegible]

[illegible]

PREPARER				
Preparer Name	Site Name	Address	City State Zip	Comment Fall
Kenna Anderson	Neal Energy Center South	2761 Port Neal Circle	Salix	Iowa 51052

PREPARER INPUT	CASRN	Exposure Point Concentration for Soil(mg/kg)	Site-Specific Background Soil Level* (mg/kg)
Antimony	007440-36-0		0.569
Arsenic, Inorganic	007440-38-2		12.8
Barium	007440-39-3		1260
Beryllium (soil/water)	007440-41-7		2.36
Boron And Borates Only	007440-42-8		827
Cadmium (soil)	007440-43-9		0.67
Chromium, total	007440-47-3		45.5
Cobalt	007440-48-4		15
Copper	007440-50-8		113
Fluoride	007681-49-4		16.3
Lead and Compounds	007439-92-1		17.7
Lithium	007439-93-2		26.9
Manganese	007439-96-5		623
Mercury	007439-97-6		0.063
Molybdenum	007439-98-7		5.57
Nickel	007440-02-0		32.5
Selenium	007782-49-2		14.3
Silver	007440-22-4		0.208
Thallium	007440-28-0		0.213
Vanadium	007440-62-2		149
Zinc	007440-66-6		38.5

CANCER OUTPUT			
Chemical	CASRN	Site Worker Soil	
Arsenic, Inorganic	007440-38-2		0.07
Lead and Compounds	007439-92-1	NQ	
TOTALS:	Å		0.07

Cumulative Cancer Risk Site Worker: 0.07
All cancer risk values are $\times 10^{-4}$

SITE WORKER - NON CANCER OUTPUT BY TARGET ORGAN

Chemical Name	CASRN	Media	Heart	Liver	Blood	Kidney	Skin	Endoc	Eye	Immu	Nerve	GenUr	Respi	Other	Devel	Gastro
Antimony	007440-36-0	Å Soil				0									0	
Arsenic, Inorganic	007440-38-2	Å Soil		0.58				0.58								
Barium	007440-39-3	Å Soil		0.02			0.02									
Beryllium (soil/water)	007440-41-7	Å Soil														0
Boron And Borates Only	007440-42-8	Å Soil										0.01				0.01
Cadmium (soil)	007440-43-9	Å Soil					0					0			0	
Chromium, total	007440-47-3	Å Soil													0.05	
Cobalt	007440-48-4	Å Soil				0.13										
Copper	007440-50-8	Å Soil			0.01		0.01									0.01
Fluoride	007681-49-4	Å Soil													0	
Lead and Compounds	007439-92-1	Å Soil														0.018
Lithium	007439-93-2	Å Soil		0.018			0.018									
Manganese	007439-96-5	Å Soil													0	
Mercury	007439-97-6	Å										0.01				

Molybdenum	007439-98-7	Soil	0													
		Å														
Nickel	007440-02-0	Soil	0													
		Å														
Selenium	007782-49-2	Soil	0													
		Å														
Silver	007440-22-4	Soil	0.01	0.01												
		Å	0.01													
Thallium	007440-28-0	Soil	0													
		Å														
Vanadium	007440-62-2	Soil	0.06	0.06	0.06	0.06	0.06									
		Å														
Zinc	007440-66-6	Soil	0.08													
		Å														
		Soil	0													
		Sum:	0.628	0.07	0.27	0.108	0.65	0	0	0	0.01	0.01	0	0.06	0.028	0.07