IOWA DEPARTMENT OF NATURAL RESOURCES

REQUEST FOR SPECIAL WASTE AUTHORIZATION

Check one of the following: ☐ **New Application** ☒ **Renewal, Existing SWA #:** **08-SWA-24-11**

The intent of a special waste authorization is to provide safe and proper management for disposal of wastes which present a threat to human health or the environment or a waste with inherent properties which make the disposal of the waste in a sanitary landfill difficult to manage. It is each landfill's responsibility to inform the waste generator if a waste should be handled as a special waste and to ensure that special wastes delivered to the landfill conform to the Special Waste Acceptance Criteria (SWAC) on file with the Department. It is the Department's responsibility to review each application for a special waste authorization to verify that the proposed waste can be landfilled under the current regulations in Iowa.

READ THE FOLLOWING INSTRUCTIONS BEFORE COMPLETING THIS APPLICATION

Waste Generator:

1. Complete Sections 1-3 of this application applicable to the waste characterization and disposal information.
2. Attach Toxicity Characteristic Leaching Procedure (TCLP) test results, material safety data sheet(s) (MSDS), or evidence of "processor knowledge" when appropriate that demonstrates the waste is not considered a characteristic hazardous waste exhibiting the properties of flammability, corrosivity, reactivity or toxicity or a listed hazardous waste as defined in 40 CFR Part 261, Subpart D.
3. Provide signature in Section 3 to verify that the information provided is true, accurate and complete.
4. Mail or deliver (2) copies of the completed application with attachments to the requested disposal destination (*must be a landfill that is authorized to accept waste from the service area of where the waste was generated*). Please contact Sue Johnson at (515) 725-8317 for a list of landfills authorized to accept waste from the service area in which your facility is located.

Receiving Landfill:

Prior review of this application by the receiving landfill allows the department to more quickly process and evaluate the application.

1. Complete Section 5 of this application applicable to the landfill.
2. Indicate by signing the application that the landfill is willing to accept the waste if a Special Waste Authorization is issued by the department and if instructions for disposal of the waste, as contained in the landfill's SWAC, are followed by the generator.
3. Attach SWAC procedures for disposal of the waste.
4. Keep 1 copy for your records and submit the remaining one copy of the completed application with attachments (TCLP, MSDS, SWAC, etc.) to the department at the following address:

   Iowa Department of Natural Resources
   Land Quality Bureau- Attn: Susan Johnson
   502 East 9th Street
   Des Moines, IA 50319-0034

Applications will be considered incomplete if not signed by both the waste generator and receiving landfill. The receiving landfill must attach a copy of the SWAC for the particular waste for which the application has been submitted.

Written notification of approval or rejection will be mailed or faxed to the generator and landfill. If approved, a copy of the authorization must accompany the waste hauler to the landfill.

For questions concerning this application contact Sue Johnson at (515) 725-8317 or susan.johnson@dnr.iowa.gov

SECTION 1: WASTE GENERATOR INFORMATION

Name of Primary Contact* Lee Mason Title Project Engineer

**SWA approvals will be sent to this person at the address provided below.*

Company Name Iowa State University

Mailing Address 226 Power Plant Building, 616 Beach Road

City Ames State IA Zip Code 50011

Telephone # 515-357-9302 Fax # 515-294-0597

Address or location of the point of generation of the waste, if different from the company address:

Address

City State Zip Code

SECTION 2: WASTE CHARACTERIZATION

Waste determined to be hazardous may not be landfilled in Iowa. Attach TCLP analysis that demonstrates the waste is not considered hazardous. For raw or virgin materials being disposed of, a MSDS that indicates the waste is not hazardous may be submitted in lieu of a TCLP analysis.

The generator may also apply knowledge of the hazardous characteristic(s) of the waste in light of the materials or the processes used ("knowledge of process"). In order to use knowledge to characterize the waste, the knowledge that is applied must be valid and verifiable and the generator must be able to demonstrate the basis for their claim by providing supporting information to justify that conclusion.

Name and description of waste:
Circulating Fluidized Bed Ash (CFB). It is coal ash from the two boilers at Iowa State University.

Has any pretreatment been utilized? If so, please describe the pretreatment process:
No

List the alternatives to disposal that were analyzed and reason not utilized (*attach extra sheets if necessary*):
It used to be sent to Basic Materials in Waterloo. A trailer with top load capatibility is required but it is not typical.

Physical state at room temperature?	Percent (%) Solid:	pH:	Flashpoint:
☒ Solid ☐ Semi-Solid ☐ Liquid	100	12.2-12.4	N/A

Does this waste pass the paint filter liquids test? Free liquids are prohibited from landfill disposal. Free liquids are defined as the liquid produced when a 100-millimeter or 100-gram representative sample is placed on a standard mesh number 60 (fine mesh size) conical paint filter for five minutes.	☒ Yes ☐ No
Is this waste a listed hazardous waste as identified in 40 CFR 261, Subpart D? Refer to the following web link to find listed hazardous wastes: http://www.gpoaccess.gov/cfr/index.html	☐ Yes ☒ No

SECTION 2: WASTE CHARACTERIZATION (Continued)

Does this waste exhibit the property of *ignitability* as defined in 40 CFR 261, Subpart C?	☐ Yes ☒ No
Does this waste exhibit the property of *corrosivity* as defined in 40 CFR 261, Subpart C?	☐ Yes ☒ No
Does this waste exhibit the property of *reactivity* as defined in 40 CFR 261, Subpart C?	☐ Yes ☒ No
Does this waste exhibit the property of *toxicity* as defined in 40 CFR 261, Subpart C?	☐ Yes ☒ No

SECTION 3: WASTE DISPOSAL INFORMATION

Indicate the proposed disposal location and if this is a request for an on going disposal of a special waste or a one-time disposal. If on going, indicate the approximate amount in pounds to be disposed of quarterly.

Landfill Name* Boone County Landfill

**List only a landfill that is authorized to accept waste from the service area of where the waste was generated. Sue Johnson at (515) 725-8317 or susan.johnson@dnr.iowa.gov for a list of landfills authorized to accept waste from your facility.*

☒ **On going (or intermittent) with an average disposal rate per quarter of** 40,000 **pounds**

Indicate the amount on hand to be disposed of immediately: 40,000 **pounds**

☐ **One time only, with an estimated quantity of** _____ **pounds**

SECTION 4: WASTE GENERATOR CERTIFICATION

"I certify under penalty of law (§455B.417.1(c), Code of Iowa) that I have examined and am familiar with the information submitted in this document concerning hazardous waste, and all attachments, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete."

Applicant Signature: _____ **Date:** 10/27/25

Printed Name: Lee Mason **Title:** Project Engineer

SECTION 5: LANDFILL INFORMATION

The following section is to be completed by the receiving landfill. By signing below, the landfill verifies that the application has been examined and if approved by the department, is willing to accept the waste described within, provided that instructions for disposal of the waste, as contained in the landfill's Special Waste Acceptance Criteria, are followed by the generator.

Prior review of this application by the receiving landfill will allow the department to more quickly process and evaluate the application. Please address the following:

Indicate the properties that lead you to believe this is a special waste:

This waste is not included in the definition of MSW or C&D waste

Indicate any special handling procedures that the waste generator must follow prior to delivery at the landfill:

This waste can be accepted only on non-windy, non-rainy days with prior approval. Please contact the office at 515-433-0591 prior to hauling

Name of Responsible Official*: John Roosa

**SWA approvals will be sent to this person at the address given below.*

Solid Waste Agency Name Boone County Landfill

Mailing Address 1268 224th Lane

City Boone **State** Iowa **Zip Code** 50036

Telephone # 515-433-0591 **Fax #** jroosa@boonecounty.iowa.gov

Responsible Official Signature: John Roosa **Date:** 11/24/2025

ANALYTICAL REPORT

October 27, 2025

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

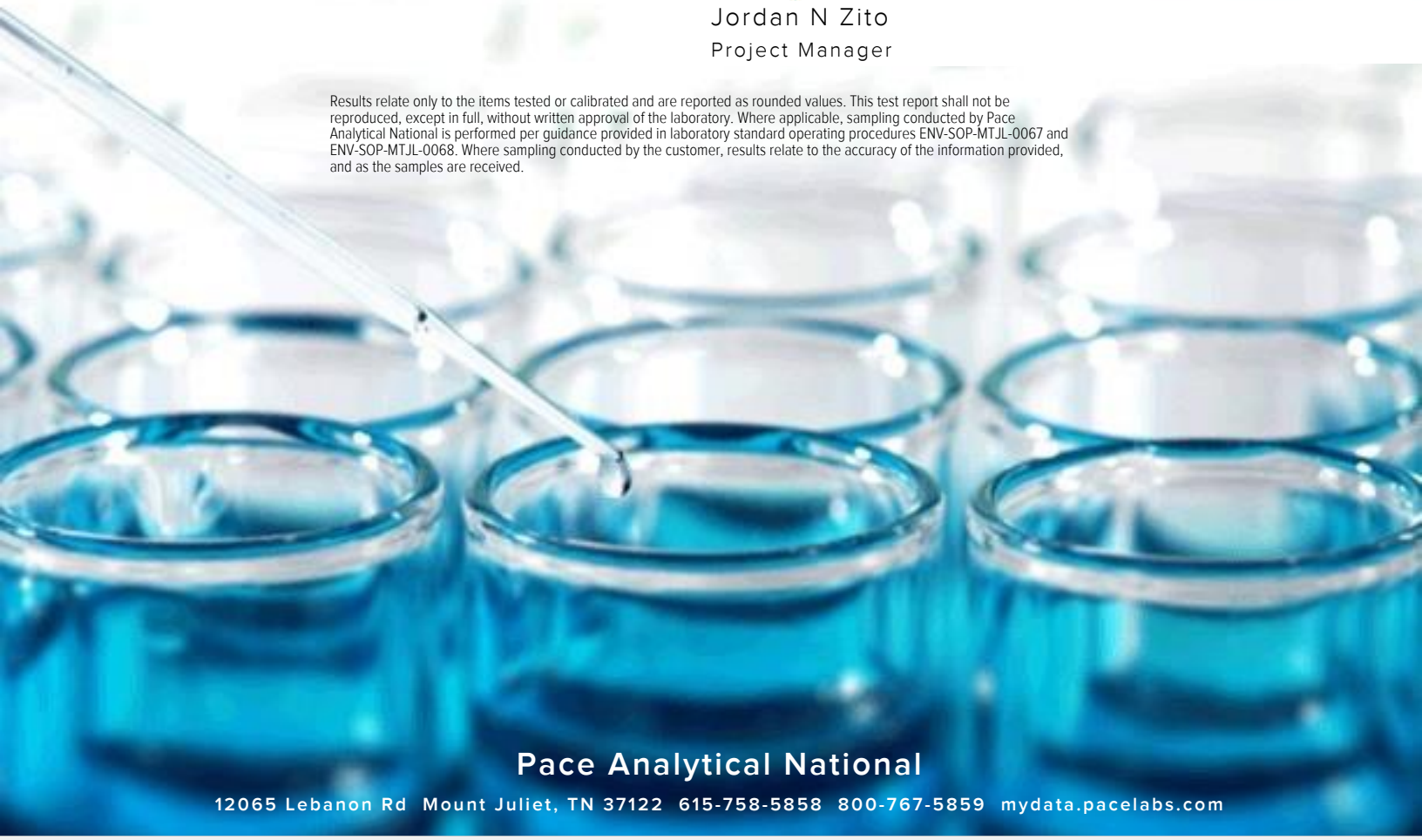
Iowa State University

Sample Delivery Group:	L1909467
Samples Received:	10/18/2025
Project Number:	
Description:	

Report To: Lee Mason
222 Power Plant Building
Ames, IA 50011

Entire Report Reviewed By:

Jordan N Zito
Project Manager



Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

TABLE OF CONTENTS

SAMPLE SUMMARY

ASH 1,2,3 L1909467-01

Collected by	Collected date/time	Received date/time
	10/17/25 11:47	10/18/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2624372	1	10/21/25 10:13	10/21/25 10:19	MT	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2624628	1	10/21/25 14:32	10/22/25 11:23	BJM	Mt. Juliet, TN

ASH 1,2,3 L1909467-02

Collected by	Collected date/time	Received date/time
	10/17/25 11:47	10/18/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG2623491	1	10/22/25 10:51	10/22/25 10:51	CCY	Mt. Juliet, TN
Mercury by Method 7470A	WG2626363	1	10/23/25 13:58	10/24/25 17:58	MDE	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2626561	1	10/24/25 10:48	10/24/25 16:37	BAG	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jordan N Zito
Project Manager

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	81.0		1	10/21/2025 10:19	WG2624372

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	11.5	T8	1	10/22/2025 11:23	WG2624628

Sample Narrative:

L1909467-01 WG2624628: 11.52 at 18.8C

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		10/22/2025 10:51:33 AM	WG2623491
Initial pH	11.58		10/22/2025 10:51:33 AM	WG2623491
Final pH	7.81		10/22/2025 10:51:33 AM	WG2623491

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	RDL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Mercury	ND		0.0100	0.20	1	10/24/2025 17:58	WG2626363

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	RDL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Arsenic	ND		0.100	5	1	10/24/2025 16:37	WG2626561
Barium	0.164		0.100	100	1	10/24/2025 16:37	WG2626561
Cadmium	ND		0.100	1	1	10/24/2025 16:37	WG2626561
Chromium	ND		0.100	5	1	10/24/2025 16:37	WG2626561
Lead	ND		0.100	5	1	10/24/2025 16:37	WG2626561
Selenium	ND		0.100	1	1	10/24/2025 16:37	WG2626561
Silver	ND		0.100	5	1	10/24/2025 16:37	WG2626561

Method Blank (MB)

(MB) R4290119-1 10/21/25 10:19

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1909584-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1909584-01 10/21/25 10:19 • (DUP) R4290119-3 10/21/25 10:19

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	85.0	86.0	1	1.22		10

Laboratory Control Sample (LCS)

(LCS) R4290119-2 10/21/25 10:19

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	90.0-110	

L1908670-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1908670-03 10/22/25 11:23 • (DUP) R4290441-2 10/22/25 11:23

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	5.29	5.29	1	0.000		1

Sample Narrative:

OS: 5.29 at 19.6C

DUP: 5.29 at 19.3C

L1909467-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1909467-01 10/22/25 11:23 • (DUP) R4290441-3 10/22/25 11:23

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	11.5	11.5	1	0.000		1

Sample Narrative:

OS: 11.52 at 18.8C

DUP: 11.52 at 18.6C

Laboratory Control Sample (LCS)

(LCS) R4290441-1 10/22/25 11:23

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	su	su	%	%	
pH	10.0	9.99	99.9	99.0-101	

Sample Narrative:

LCS: 9.99 at 18.9C

QUALITY CONTROL SUMMARY

L1909467-02

Method Blank (MB)

(MB) R4291760-1 10/24/25 17:22

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Mercury	U		0.00333	0.0100

Laboratory Control Sample (LCS)

(LCS) R4291760-2 10/24/25 17:24

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury	0.0300	0.0289	96.4	80.0-120	

L1909132-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1909132-02 10/24/25 17:27 • (MS) R4291760-4 10/24/25 17:33 • (MSD) R4291760-5 10/24/25 17:35

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.0300	ND	0.0298	0.0297	99.2	99.1	1	75.0-125			0.0385	20

L1909485-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1909485-03 10/24/25 17:38 • (MS) R4291760-6 10/24/25 17:49 • (MSD) R4291760-7 10/24/25 17:52

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.0300	ND	0.0290	0.0294	96.8	97.9	1	75.0-125			1.05	20

QUALITY CONTROL SUMMARY

L1909467-02

Method Blank (MB)

(MB) R4291799-1 10/24/25 16:07

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic	U		0.0333	0.100
Barium	U		0.0333	0.100
Cadmium	U		0.0333	0.100
Chromium	U		0.0333	0.100
Lead	U		0.0333	0.100
Selenium	U		0.0333	0.100
Silver	U		0.0333	0.100

Laboratory Control Sample (LCS)

(LCS) R4291799-2 10/24/25 16:09

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	10.0	9.55	95.5	80.0-120	
Barium	10.0	9.83	98.3	80.0-120	
Cadmium	10.0	9.59	95.9	80.0-120	
Chromium	10.0	9.90	99.0	80.0-120	
Lead	10.0	9.60	96.0	80.0-120	
Selenium	10.0	9.57	95.7	80.0-120	
Silver	2.00	1.87	93.4	80.0-120	

L1909485-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1909485-04 10/24/25 16:11 • (MS) R4291799-4 10/24/25 16:16 • (MSD) R4291799-5 10/24/25 16:18

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	10.0	ND	9.53	9.37	95.3	93.7	1	75.0-125			1.66	20
Barium	10.0	ND	9.84	9.68	98.4	96.8	1	75.0-125			1.67	20
Cadmium	10.0	ND	9.63	9.47	96.3	94.7	1	75.0-125			1.63	20
Chromium	10.0	0.151	10.1	10.1	99.5	99.1	1	75.0-125			0.346	20
Lead	10.0	ND	9.58	9.41	95.8	94.1	1	75.0-125			1.73	20
Selenium	10.0	ND	9.40	9.30	94.0	93.0	1	75.0-125			1.06	20
Silver	2.00	ND	1.85	1.83	92.7	91.7	1	75.0-125			1.05	20

L1909947-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1909947-02 10/24/25 16:20 • (MS) R4291799-6 10/24/25 16:23 • (MSD) R4291799-7 10/24/25 16:25

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	10.0	ND	9.37	9.32	93.7	93.2	1	75.0-125			0.568	20
Barium	10.0	0.313	9.98	9.93	96.7	96.2	1	75.0-125			0.501	20
Cadmium	10.0	ND	9.43	9.41	94.3	94.1	1	75.0-125			0.198	20
Chromium	10.0	ND	9.91	9.76	99.1	97.6	1	75.0-125			1.49	20
Lead	10.0	ND	9.48	9.39	94.3	93.4	1	75.0-125			0.894	20
Selenium	10.0	ND	9.31	9.26	93.1	92.6	1	75.0-125			0.557	20
Silver	2.00	ND	1.86	1.83	93.0	91.5	1	75.0-125			1.60	20

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
U (Radiochemistry)	Result + Error < MDA.
J (Radiochemistry)	Result < MDA; Result + Error > MDA.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
T8	Sample(s) received past/too close to holding time expiration.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Company Name/Address:
Iowa State University

222 Power Plant Building
Ames, IA 50011

Billing Information:
Iowa State University
222 Power Plant Building
616 Beach Road
Ames, IA 50011

Pres Chk

Report to:
Lee Mason 515-357-9302

Email To: **lamason@iastate.edu**

Project Description:

City/State Collected:

Please Circle: PT MT CT ET

Regulatory Program(DOD,RCRA,DW,etc):

Client Project #

Lab Project #
IOWASUAIA-ASH

Collected by (print):
Lee Mason

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately
Packed on Ice N____ Y____

Rush? (Lab MUST Be Notified)
____ Same Day ____ Five Day
____ Next Day ____ 5 Day (Rad Only)
____ Two Day ____ 10 Day (Rad Only)
____ Three Day ____ STD TAT

Quote #

Date Results Needed

No. of Cntrs

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	PH 4ozClr-NoPres	TCLP Metals 1L-Clr-NoPres	TS 4ozClr-NoPres	Remarks	Sample # (lab only)
Ash 1		SS		10/17/25	11:45am	X				-01
Ash 2				10/17/25	11:46am		X			-02
Ash 3				10/17/25	11:47am			X		-01

Chain of Custody Page ___ of ___

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1909467

F160

Acctnum: IOWASUAIA
Template:**T282086**
Prelogin: **P1182673**
PM: **942 - Jordan N Zito**
PB 10/07/25

Shipped Via: **FedEX Ground**

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 7919 7508 0888

Sample Receipt Checklist
COC Seal Present/Intact: __NP ✓Y __N
COC Signed/Accurate: ✓Y __N
Bottles arrive intact: ✓Y __N
Correct bottles used: ✓Y __N
Sufficient volume sent: ✓Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: ✓Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes (No) HCL / MeoH TBR
	10/17/25	11:48am		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: ED A918.0 10:18.0 3
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 10/18/25 Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK