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February 22, 2024

Ms. Becky Jolly  
Iowa Department of Natural Resources  
Land Quality Bureau  
502 E. 9<sup>th</sup> Street  
Des Moines, Iowa 50319

Dear Ms. Jolly:

Re: Fluff Quarterly Sampling Results  
Alter Metal Recycling – Mason City, Iowa  
1st Quarter 2024

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CJF Associates, LLC (CJF) is pleased to submit this report on behalf of Alter Trading Corporation, Mason City, Iowa (Alter). This report presents the quarterly fluff sampling results as identified above.

### **Summary**

- PCB concentration this quarter: 17 mg/kg;
- Ten-Sample Rolling PCB Average: 19.2 mg/kg;
- PCB TCLP result this quarter is non-detect; and
- All TCLP metal results are below regulatory criteria.

Based on the analytical results; the fluff may be landfilled in Iowa per IAC 567, Chapter 118.

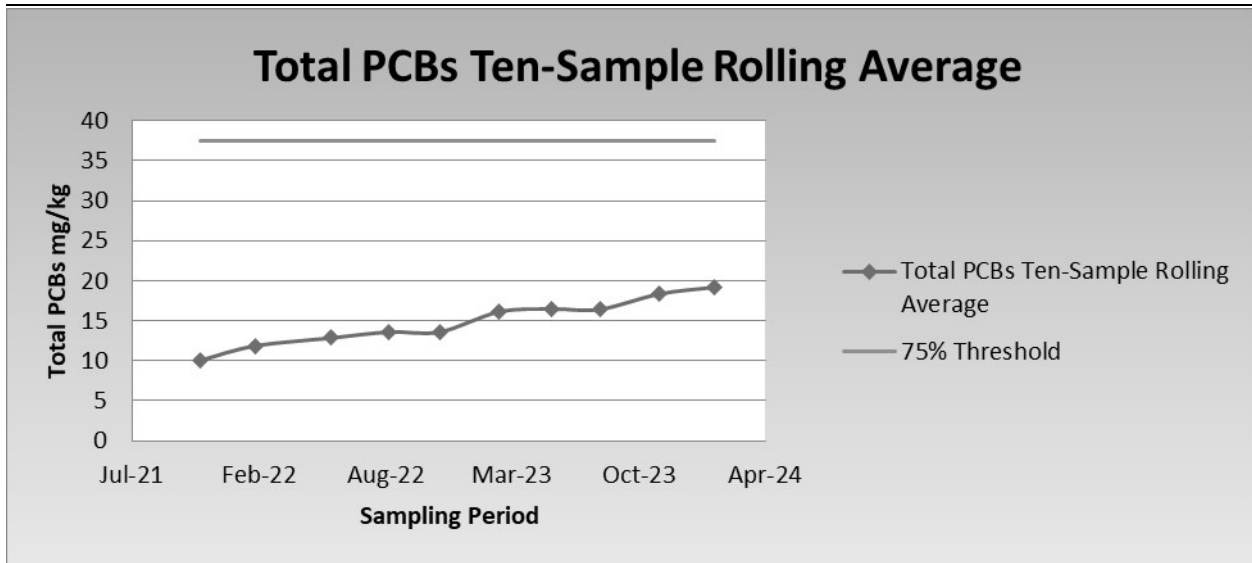
### **Details**

In order to characterize the fluff, samples were collected and analyzed from the bulk seven-day composite sample. The composite sample was collected from January 3, 2024 through January 17, 2024 in accordance with IAC 567, Chapter 118. Samples were analyzed for total Polychlorinated Biphenyls (PCBs), Toxic Characteristic Leaching Procedure (TCLP) PCBs, TCLP Resource Conservation and Recovery Act (RCRA) metals, and Ignitability.

Total PCBs results for the sampling period totaled 17 mg/kg. Barium and cadmium were the only RCRA metals identified above the laboratory reporting limits. Lead was not identified above the reporting limit concentration of 0.4 mg/L which does not exceed the regulatory TCLP concentration of 5.0 mg/L. The present ten-sample rolling average for PCBs is 19.2 mg/kg. Rolling averages of the ten-sampling period results for total PCBs are presented below:



February 22, 2024



First quarter analytical results are summarized as follows:

Sample ID	Analyte										Ignitability <sup>2</sup>
	Total PCBs <sup>1</sup>	TCLP PCBs	TCLP Arsenic	TCLP Barium	TCLP Cad	TCLP Chrom	TCLP Lead	TCLP Sel	TCLP Silver	TCLP Mercury	
MCSF-012924-001	17	ND	ND	1.0	0.2	ND	ND	ND	ND	ND	>201

**Notes**

All TCLP results are reported in mg/L

ND = Not Detected Above Laboratory Detection Limits

(1) Results reported in mg/kg

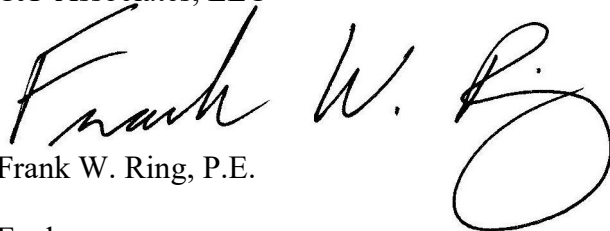
NA = Not Analyzed

(2) Results reported in Degrees F

Laboratory analytical results and chain of custody forms are presented in Attachment A.

If you have any questions, please contact Frank W. Ring at (313) 999-4071.

Sincerely,  
CJF Associates, LLC



Frank W. Ring, P.E.

Encl.

CC: Ryan Carpenter, Alter  
Bill Rowland, Landfill of Iowa North

**ATTACHMENT A**

LABORATORY ANALYTICAL RESULTS



# ANALYTICAL REPORT

## PREPARED FOR

Attn: Charles Ring  
CJF Associates, LLC  
PO BOX 80815  
St. Claire Shores, Michigan 48080

Generated 2/20/2024 8:00:15 AM

## JOB DESCRIPTION

Mason City, 1218-01

## JOB NUMBER

240-198708-1

# Eurofins Cleveland

## 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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Authorized for release by  
Denise Heckler, Project Manager II  
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# Definitions/Glossary

Client: CJF Associates, LLC  
Project/Site: Mason City, 1218-01

Job ID: 240-198708-1

## Qualifiers

### GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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

# Case Narrative

Client: CJF Associates, LLC  
Project: Mason City, 1218-01

Job ID: 240-198708-1

**Job ID: 240-198708-1**

**Eurofins Cleveland**

## Job Narrative 240-198708-1

### Receipt

The samples were received on 1/30/2024 9:45 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.7°C

### PCBs

Method 8082A: Surrogate recovery for the following sample was outside control limits: MCSF-012924-001 (240-198708-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8082A: The following sample was diluted due to the nature of the sample matrix: MCSF-012924-001 (240-198708-1). Elevated reporting limits (RLs) are provided.

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

### 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.

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# Method Summary

Client: CJF Associates, LLC  
Project/Site: Mason City, 1218-01

Job ID: 240-198708-1

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CF
PCB	Total PCB Calculation	TAL SOP	EET CF
6010D	Metals (ICP)	SW846	EET CF
7470A	Mercury (CVAA)	SW846	EET CF
D92	Flashpoint	ASTM	EET CF
Moisture	Percent Moisture	EPA	EET CF
1311	TCLP Extraction	SW846	EET CF
3010A	Preparation, Total Metals	SW846	EET CF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET CF
3550B	Ultrasonic Extraction	SW846	EET CF
7470A	Preparation, Mercury	SW846	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.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

#### Laboratory References:

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

# Sample Summary

Client: CJF Associates, LLC  
Project/Site: Mason City, 1218-01

Job ID: 240-198708-1

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<u>Lab Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Collected</u>	<u>Received</u>
240-198708-1	MCSF-012924-001	Solid	01/29/24 15:00	01/30/24 09:45

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

# Detection Summary

Client: CJF Associates, LLC  
Project/Site: Mason City, 1218-01

Job ID: 240-198708-1

**Client Sample ID: MCSF-012924-001**

**Lab Sample ID: 240-198708-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1242	17		2.3	0.24	mg/Kg	20	✳	8082A	Total/NA
Total PCBs	17		2.3	0.24	mg/Kg	1		PCB	Total/NA
Barium	1.0		0.80	0.16	mg/L	4		6010D	TCLP
Cadmium	0.20		0.080	0.016	mg/L	4		6010D	TCLP
Flashpoint	>201		65.0	65.0	Degrees F	1		D92	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland



# Client Sample Results

Client: CJF Associates, LLC  
 Project/Site: Mason City, 1218-01

Job ID: 240-198708-1

**Client Sample ID: MCSF-012924-001**

**Lab Sample ID: 240-198708-1**

Date Collected: 01/29/24 15:00

Matrix: Solid

Date Received: 01/30/24 09:45

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		4.0	1.3	ug/L		02/09/24 06:08	02/09/24 13:54	1
PCB-1221	ND		4.0	1.3	ug/L		02/09/24 06:08	02/09/24 13:54	1
PCB-1232	ND		4.0	1.3	ug/L		02/09/24 06:08	02/09/24 13:54	1
PCB-1242	ND		4.0	1.3	ug/L		02/09/24 06:08	02/09/24 13:54	1
PCB-1248	ND		4.0	1.1	ug/L		02/09/24 06:08	02/09/24 13:54	1
PCB-1254	ND		4.0	1.1	ug/L		02/09/24 06:08	02/09/24 13:54	1
PCB-1260	ND		4.0	1.1	ug/L		02/09/24 06:08	02/09/24 13:54	1
PCB-1268	ND		4.0	1.1	ug/L		02/09/24 06:08	02/09/24 13:54	1
Polychlorinated biphenyls, Total	ND		4.0	1.3	ug/L		02/09/24 06:08	02/09/24 13:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	128	S1+	11 - 122				02/09/24 06:08	02/09/24 13:54	1
Tetrachloro-m-xylene	66		23 - 123				02/09/24 06:08	02/09/24 13:54	1

**Method: TAL SOP PCB - Total PCB Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total PCBs</b>	<b>17</b>		2.3	0.24	mg/Kg			02/12/24 17:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.40	0.12	mg/L		02/09/24 09:30	02/12/24 12:18	4
<b>Barium</b>	<b>1.0</b>		0.80	0.16	mg/L		02/09/24 09:30	02/12/24 12:18	4
<b>Cadmium</b>	<b>0.20</b>		0.080	0.016	mg/L		02/09/24 09:30	02/12/24 12:18	4
Chromium	ND		0.080	0.024	mg/L		02/09/24 09:30	02/12/24 12:18	4
Lead	ND		0.40	0.10	mg/L		02/09/24 09:30	02/12/24 12:18	4
Selenium	ND		0.40	0.12	mg/L		02/09/24 09:30	02/12/24 12:18	4
Silver	ND		0.20	0.056	mg/L		02/09/24 09:30	02/12/24 12:18	4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0020	0.0015	mg/L		02/12/24 11:41	02/13/24 12:30	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Flashpoint (ASTM D92)</b>	<b>&gt;201</b>		65.0	65.0	Degrees F			02/03/24 11:13	1
<b>Percent Moisture (EPA Moisture)</b>	<b>3.8</b>		0.1	0.1	%			01/31/24 21:57	1
<b>Percent Solids (EPA Moisture)</b>	<b>96.2</b>		0.1	0.1	%			01/31/24 21:57	1

# Client Sample Results

Client: CJF Associates, LLC  
 Project/Site: Mason City, 1218-01

Job ID: 240-198708-1

**Client Sample ID: MCSF-012924-001**

**Lab Sample ID: 240-198708-1**

**Date Collected: 01/29/24 15:00**

**Matrix: Solid**

**Date Received: 01/30/24 09:45**

**Percent Solids: 96.2**

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.11	0.0029	mg/Kg	☼	02/08/24 10:50	02/09/24 16:28	1
PCB-1221	ND		0.11	0.030	mg/Kg	☼	02/08/24 10:50	02/09/24 16:28	1
PCB-1232	ND		0.11	0.011	mg/Kg	☼	02/08/24 10:50	02/09/24 16:28	1
<b>PCB-1242</b>	<b>17</b>		2.3	0.24	mg/Kg	☼	02/08/24 10:50	02/12/24 17:06	20
PCB-1248	ND		0.11	0.0077	mg/Kg	☼	02/08/24 10:50	02/09/24 16:28	1
PCB-1254	ND		0.11	0.0072	mg/Kg	☼	02/08/24 10:50	02/09/24 16:28	1
PCB-1260	ND		0.11	0.0038	mg/Kg	☼	02/08/24 10:50	02/09/24 16:28	1
PCB-1268	ND		0.11	0.0016	mg/Kg	☼	02/08/24 10:50	02/09/24 16:28	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>DCB Decachlorobiphenyl (Surr)</i>	84		10 - 149				02/08/24 10:50	02/09/24 16:28	1
<i>Tetrachloro-m-xylene</i>	25		10 - 147				02/08/24 10:50	02/09/24 16:28	1

# Surrogate Summary

Client: CJF Associates, LLC  
Project/Site: Mason City, 1218-01

Job ID: 240-198708-1

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCB1 (10-149)	TCX1 (10-147)
240-198708-1	MCSF-012924-001	84	25
LCS 310-413140/2-A	Lab Control Sample	78	82
MB 310-413140/1-A	Method Blank	82	78

#### Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)

TCX = Tetrachloro-m-xylene

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCB1 (11-122)	TCX1 (23-123)
LCS 310-413218/2-A	Lab Control Sample	64	80
LCSD 310-413218/3-A	Lab Control Sample Dup	65	60

#### Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)

TCX = Tetrachloro-m-xylene

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: TCLP

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCB1 (11-122)	TCX1 (23-123)
240-198708-1	MCSF-012924-001	128 S1+	66
LB 310-413163/1-B	Method Blank	66	75

#### Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)

TCX = Tetrachloro-m-xylene

# QC Sample Results

Client: CJF Associates, LLC  
Project/Site: Mason City, 1218-01

Job ID: 240-198708-1

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

**Lab Sample ID: MB 310-413140/1-A**  
**Matrix: Solid**  
**Analysis Batch: 413274**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 413140**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.025	0.00064	mg/Kg		02/08/24 10:50	02/09/24 14:01	1
PCB-1221	ND		0.025	0.0066	mg/Kg		02/08/24 10:50	02/09/24 14:01	1
PCB-1232	ND		0.025	0.0025	mg/Kg		02/08/24 10:50	02/09/24 14:01	1
PCB-1242	ND		0.025	0.0027	mg/Kg		02/08/24 10:50	02/09/24 14:01	1
PCB-1248	ND		0.025	0.0017	mg/Kg		02/08/24 10:50	02/09/24 14:01	1
PCB-1254	ND		0.025	0.0016	mg/Kg		02/08/24 10:50	02/09/24 14:01	1
PCB-1260	ND		0.025	0.00084	mg/Kg		02/08/24 10:50	02/09/24 14:01	1
PCB-1268	ND		0.025	0.00035	mg/Kg		02/08/24 10:50	02/09/24 14:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	82		10 - 149	02/08/24 10:50	02/09/24 14:01	1
Tetrachloro-m-xylene	78		10 - 147	02/08/24 10:50	02/09/24 14:01	1

**Lab Sample ID: LCS 310-413140/2-A**  
**Matrix: Solid**  
**Analysis Batch: 413274**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 413140**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	0.198	0.174		mg/Kg		88	33 - 129
PCB-1260	0.198	0.190		mg/Kg		96	39 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	78		10 - 149
Tetrachloro-m-xylene	82		10 - 147

**Lab Sample ID: LCS 310-413218/2-A**  
**Matrix: Solid**  
**Analysis Batch: 413244**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 413218**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	12.5	10.2		ug/L		82	30 - 133
PCB-1260	12.5	10.7		ug/L		86	31 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	64		11 - 122
Tetrachloro-m-xylene	80		23 - 123

**Lab Sample ID: LCSD 310-413218/3-A**  
**Matrix: Solid**  
**Analysis Batch: 413244**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 413218**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016	12.5	8.81		ug/L		70	30 - 133	15	35
PCB-1260	12.5	10.1		ug/L		81	31 - 133	6	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	65		11 - 122

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# QC Sample Results

Client: CJF Associates, LLC  
 Project/Site: Mason City, 1218-01

Job ID: 240-198708-1

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

**Lab Sample ID: LCSD 310-413218/3-A**  
**Matrix: Solid**  
**Analysis Batch: 413244**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 413218**

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	60		23 - 123

**Lab Sample ID: LB 310-413163/1-B**  
**Matrix: Solid**  
**Analysis Batch: 413244**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 413218**

Analyte	LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	ND		4.0	1.3	ug/L		02/09/24 06:08	02/09/24 13:05	1
PCB-1221	ND		4.0	1.3	ug/L		02/09/24 06:08	02/09/24 13:05	1
PCB-1232	ND		4.0	1.3	ug/L		02/09/24 06:08	02/09/24 13:05	1
PCB-1242	ND		4.0	1.3	ug/L		02/09/24 06:08	02/09/24 13:05	1
PCB-1248	ND		4.0	1.1	ug/L		02/09/24 06:08	02/09/24 13:05	1
PCB-1254	ND		4.0	1.1	ug/L		02/09/24 06:08	02/09/24 13:05	1
PCB-1260	ND		4.0	1.1	ug/L		02/09/24 06:08	02/09/24 13:05	1
PCB-1268	ND		4.0	1.1	ug/L		02/09/24 06:08	02/09/24 13:05	1
Polychlorinated biphenyls, Total	ND		4.0	1.3	ug/L		02/09/24 06:08	02/09/24 13:05	1

Surrogate	LB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
DCB Decachlorobiphenyl (Surr)	66		11 - 122	02/09/24 06:08	02/09/24 13:05	1
Tetrachloro-m-xylene	75		23 - 123	02/09/24 06:08	02/09/24 13:05	1

## Method: 6010D - Metals (ICP)

**Lab Sample ID: LB 310-413161/1-B**  
**Matrix: Solid**  
**Analysis Batch: 413398**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 413248**

Analyte	LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	ND		0.10	0.030	mg/L		02/09/24 09:30	02/12/24 11:34	1
Barium	ND		0.20	0.040	mg/L		02/09/24 09:30	02/12/24 11:34	1
Cadmium	ND		0.020	0.0039	mg/L		02/09/24 09:30	02/12/24 11:34	1
Chromium	ND		0.020	0.0060	mg/L		02/09/24 09:30	02/12/24 11:34	1
Lead	ND		0.10	0.026	mg/L		02/09/24 09:30	02/12/24 11:34	1
Selenium	ND		0.10	0.029	mg/L		02/09/24 09:30	02/12/24 11:34	1
Silver	ND		0.050	0.014	mg/L		02/09/24 09:30	02/12/24 11:34	1

**Lab Sample ID: LCS 310-413161/2-B**  
**Matrix: Solid**  
**Analysis Batch: 413398**

**Client Sample ID: Lab Control Sample**  
**Prep Type: TCLP**  
**Prep Batch: 413248**

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Arsenic	4.00	3.98		mg/L		99	80 - 120
Barium	2.00	2.11		mg/L		105	80 - 120
Cadmium	2.00	1.84		mg/L		92	80 - 120
Chromium	2.00	1.92		mg/L		96	80 - 120
Lead	4.00	3.68		mg/L		92	80 - 120
Selenium	8.00	7.90		mg/L		99	80 - 120
Silver	2.00	2.05		mg/L		102	80 - 120

Eurofins Cleveland



# QC Sample Results

Client: CJF Associates, LLC  
 Project/Site: Mason City, 1218-01

Job ID: 240-198708-1

## Method: 7470A - Mercury (CVAA)

Lab Sample ID: LB 310-413161/1-C  
 Matrix: Solid  
 Analysis Batch: 413507

Client Sample ID: Method Blank  
 Prep Type: TCLP  
 Prep Batch: 413394

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0020	0.0015	mg/L		02/12/24 11:41	02/13/24 12:26	1

Lab Sample ID: LCS 310-413161/2-C  
 Matrix: Solid  
 Analysis Batch: 413507

Client Sample ID: Lab Control Sample  
 Prep Type: TCLP  
 Prep Batch: 413394

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.0167	0.0172		mg/L		103	80 - 120

Lab Sample ID: 240-198708-1 MS  
 Matrix: Solid  
 Analysis Batch: 413507

Client Sample ID: MCSF-012924-001  
 Prep Type: TCLP  
 Prep Batch: 413394

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.0167	0.0172		mg/L		103	80 - 120

## Method: D92 - Flashpoint

Lab Sample ID: 240-198708-1 DU  
 Matrix: Solid  
 Analysis Batch: 412744

Client Sample ID: MCSF-012924-001  
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Flashpoint	>201		>201.0		Degrees F		NC	16

## Method: Moisture - Percent Moisture

Lab Sample ID: 240-198708-1 DU  
 Matrix: Solid  
 Analysis Batch: 412500

Client Sample ID: MCSF-012924-001  
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	3.8		4.9		%		24	39
Percent Solids	96.2		95.1		%		1	10

# QC Association Summary

Client: CJF Associates, LLC  
Project/Site: Mason City, 1218-01

Job ID: 240-198708-1

## GC Semi VOA

### Prep Batch: 413140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-198708-1	MCSF-012924-001	Total/NA	Solid	3550B	
MB 310-413140/1-A	Method Blank	Total/NA	Solid	3550B	
LCS 310-413140/2-A	Lab Control Sample	Total/NA	Solid	3550B	

### Leach Batch: 413163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-198708-1	MCSF-012924-001	TCLP	Solid	1311	
LB 310-413163/1-B	Method Blank	TCLP	Solid	1311	

### Prep Batch: 413218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-198708-1	MCSF-012924-001	TCLP	Solid	3510C	413163
LB 310-413163/1-B	Method Blank	TCLP	Solid	3510C	413163
LCS 310-413218/2-A	Lab Control Sample	Total/NA	Solid	3510C	
LCSD 310-413218/3-A	Lab Control Sample Dup	Total/NA	Solid	3510C	

### Analysis Batch: 413244

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-198708-1	MCSF-012924-001	TCLP	Solid	8082A	413218
LB 310-413163/1-B	Method Blank	TCLP	Solid	8082A	413218
LCS 310-413218/2-A	Lab Control Sample	Total/NA	Solid	8082A	413218
LCSD 310-413218/3-A	Lab Control Sample Dup	Total/NA	Solid	8082A	413218

### Analysis Batch: 413274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-198708-1	MCSF-012924-001	Total/NA	Solid	8082A	413140
MB 310-413140/1-A	Method Blank	Total/NA	Solid	8082A	413140
LCS 310-413140/2-A	Lab Control Sample	Total/NA	Solid	8082A	413140

### Analysis Batch: 413370

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-198708-1	MCSF-012924-001	Total/NA	Solid	8082A	413140

### Analysis Batch: 413963

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-198708-1	MCSF-012924-001	Total/NA	Solid	PCB	

## Metals

### Leach Batch: 413161

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-198708-1	MCSF-012924-001	TCLP	Solid	1311	
LB 310-413161/1-B	Method Blank	TCLP	Solid	1311	
LB 310-413161/1-C	Method Blank	TCLP	Solid	1311	
LCS 310-413161/2-B	Lab Control Sample	TCLP	Solid	1311	
LCS 310-413161/2-C	Lab Control Sample	TCLP	Solid	1311	
240-198708-1 MS	MCSF-012924-001	TCLP	Solid	1311	

### Prep Batch: 413248

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-198708-1	MCSF-012924-001	TCLP	Solid	3010A	413161

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# QC Association Summary

Client: CJF Associates, LLC  
Project/Site: Mason City, 1218-01

Job ID: 240-198708-1

## Metals (Continued)

### Prep Batch: 413248 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 310-413161/1-B	Method Blank	TCLP	Solid	3010A	413161
LCS 310-413161/2-B	Lab Control Sample	TCLP	Solid	3010A	413161

### Prep Batch: 413394

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-198708-1	MCSF-012924-001	TCLP	Solid	7470A	413161
LB 310-413161/1-C	Method Blank	TCLP	Solid	7470A	413161
LCS 310-413161/2-C	Lab Control Sample	TCLP	Solid	7470A	413161
240-198708-1 MS	MCSF-012924-001	TCLP	Solid	7470A	413161

### Analysis Batch: 413398

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-198708-1	MCSF-012924-001	TCLP	Solid	6010D	413248
LB 310-413161/1-B	Method Blank	TCLP	Solid	6010D	413248
LCS 310-413161/2-B	Lab Control Sample	TCLP	Solid	6010D	413248

### Analysis Batch: 413507

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-198708-1	MCSF-012924-001	TCLP	Solid	7470A	413394
LB 310-413161/1-C	Method Blank	TCLP	Solid	7470A	413394
LCS 310-413161/2-C	Lab Control Sample	TCLP	Solid	7470A	413394
240-198708-1 MS	MCSF-012924-001	TCLP	Solid	7470A	413394

## General Chemistry

### Analysis Batch: 412500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-198708-1	MCSF-012924-001	Total/NA	Solid	Moisture	
240-198708-1 DU	MCSF-012924-001	Total/NA	Solid	Moisture	

### Analysis Batch: 412744

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-198708-1	MCSF-012924-001	Total/NA	Solid	D92	
240-198708-1 DU	MCSF-012924-001	Total/NA	Solid	D92	

# Lab Chronicle

Client: CJF Associates, LLC  
 Project/Site: Mason City, 1218-01

Job ID: 240-198708-1

**Client Sample ID: MCSF-012924-001**

**Lab Sample ID: 240-198708-1**

**Date Collected: 01/29/24 15:00**

**Matrix: Solid**

**Date Received: 01/30/24 09:45**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
TCLP	Leach	1311			413163	HSP8	EET CF	02/08/24 15:30 - 02/09/24 07:00 <sup>1</sup>
TCLP	Prep	3510C			413218	Y6AF	EET CF	02/09/24 06:08
TCLP	Analysis	8082A		1	413244	BW2O	EET CF	02/09/24 13:54
Total/NA	Analysis	PCB		1	413963	D2YP	EET CF	02/12/24 17:06
TCLP	Leach	1311			413161	HSP8	EET CF	02/08/24 15:30 - 02/09/24 07:00 <sup>1</sup>
TCLP	Prep	3010A			413248	QTZ5	EET CF	02/09/24 09:30
TCLP	Analysis	6010D		4	413398	ZRI4	EET CF	02/12/24 12:18
TCLP	Leach	1311			413161	HSP8	EET CF	02/08/24 15:30 - 02/09/24 07:00 <sup>1</sup>
TCLP	Prep	7470A			413394	NFT2	EET CF	02/12/24 11:41
TCLP	Analysis	7470A		1	413507	NFT2	EET CF	02/13/24 12:30
Total/NA	Analysis	D92		1	412744	WZC8	EET CF	02/03/24 11:13
Total/NA	Analysis	Moisture		1	412500	ZJX4	EET CF	01/31/24 21:57

**Client Sample ID: MCSF-012924-001**

**Lab Sample ID: 240-198708-1**

**Date Collected: 01/29/24 15:00**

**Matrix: Solid**

**Date Received: 01/30/24 09:45**

**Percent Solids: 96.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550B			413140	D0DG	EET CF	02/08/24 10:50
Total/NA	Analysis	8082A		1	413274	BW2O	EET CF	02/09/24 16:28
Total/NA	Prep	3550B			413140	D0DG	EET CF	02/08/24 10:50
Total/NA	Analysis	8082A		20	413370	BW2O	EET CF	02/12/24 17:06

<sup>1</sup> 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 - Cleveland Sample Receipt Form/Narrative**

Login # : \_\_\_\_\_

**Barberton Facility**

Client CJF Associates LLC Site Name \_\_\_\_\_

Cooler unpacked by: \_\_\_\_\_

Cooler Received on 1-30-24 Opened on 1-30-24

FedEx: 1<sup>st</sup> Grd  Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other \_\_\_\_\_

Receipt After-hours: Drop-off Date/Time \_\_\_\_\_ Storage Location \_\_\_\_\_

Eurofins Cooler # EC Foam Box Client Cooler Box Other \_\_\_\_\_

Packing material used: Bubble Wrap Foam Plastic Bag None Other \_\_\_\_\_

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt:  See Multiple Cooler Form

IR GUN # 21 (CF +0.4 °C) Observed Cooler Temp. 2.3 °C Corrected Cooler Temp. 2.7 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No

-Were the seals on the outside of the cooler(s) signed & dated? Yes No NA

-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No NA

-Were tamper/custody seals intact and uncompromised? Yes No NA

3. Shippers' packing slip attached to the cooler(s)?  Yes No

4. Did custody papers accompany the sample(s)?  Yes No

5. Were the custody papers relinquished & signed in the appropriate place?  Yes No

6. Was/were the person(s) who collected the samples clearly identified on the COC?  Yes No

7. Did all bottles arrive in good condition (Unbroken)?  Yes No

8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?  Yes No

9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?

10. Were correct bottle(s) used for the test(s) indicated?  Yes No

11. Sufficient quantity received to perform indicated analyses?  Yes No

12. Are these work share samples and all listed on the COC? Yes  No

If yes, Questions 13-17 have been checked at the originating laboratory.

13. Were all preserved sample(s) at the correct pH upon receipt? Yes No  NA pH Strip Lot# HC316719

14. Were VOAs on the COC? Yes  No

15. Were air bubbles >6 mm in any VOA vials?  Yes  No NA Larger than this.

16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # \_\_\_\_\_ Yes  No

17. Was a LL Hg or Me Hg trip blank present? \_\_\_\_\_ Yes  No

Contacted PM \_\_\_\_\_ Date \_\_\_\_\_ by \_\_\_\_\_ via Verbal Voice Mail Other \_\_\_\_\_

Concerning \_\_\_\_\_

**18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES**  additional next page

Samples processed by: \_\_\_\_\_

**19. SAMPLE CONDITION**

Sample(s) \_\_\_\_\_ were received after the recommended holding time had expired.

Sample(s) \_\_\_\_\_ were received in a broken container.

Sample(s) \_\_\_\_\_ were received with bubble >6 mm in diameter. (Notify PM)

**20. SAMPLE PRESERVATION**

Sample(s) \_\_\_\_\_ were further preserved in the laboratory.

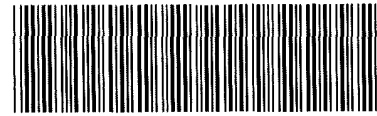
Time preserved: \_\_\_\_\_ Preservative(s) added/Lot number(s): \_\_\_\_\_

VOA Sample Preservation - Date/Time VOAs Frozen: \_\_\_\_\_





Environment Testing  
America



240-198708 Chain of Custody

**Cooler/Sample Receipt and Temperature**

<b>Client Information</b>			
Client: <u>eurofins Cleveland</u>			
City/State:	CITY	STATE	Project:
<b>Receipt Information</b>			
Date/Time Received:	DATE <u>1-31-24</u>	TIME <u>0920</u>	Received By: <u>MY</u>
Delivery Type: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
<b>Condition of Cooler/Containers</b>			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID: _____	
Multiple Coolers?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler # _____ of _____	
Cooler Custody Seals Present?	<del><input checked="" type="checkbox"/> Yes</del> <input checked="" type="checkbox"/> No <u>MY</u>	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓	
<b>Temperature Record</b>			
Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE			
Thermometer ID:	<u>X</u>	Correction Factor (°C):	<u>0</u>
• <b>Temp Blank Temperature</b> – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C):		Corrected Temp (°C):	
• <b>Sample Container Temperature</b>			
Container(s) used:	CONTAINER 1 <u>402 soil jar</u>	CONTAINER 2 <u>→</u>	
Uncorrected Temp (°C):	<u>2.3</u>	<u>0.8</u>	
Corrected Temp (°C):	<u>2.3</u>	<u>0.8</u>	
<b>Exceptions Noted</b>			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> 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?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE If yes, contact PM before proceeding. If no, proceed with login			
<b>Additional Comments</b>			





<b>Client Information (Sub Contract Lab)</b>		Lab Piv: Heckler, Denise D	Carrier Tracking No(s):	COC No: 240-179933 1														
Client Contact: Shipping/Receiving		E-Mail: Denise.Heckler@et.eurofinsus.com	State of Origin: Iowa	Page: Page 1 of 1														
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): State - Iowa																
Address: 3019 Venture Way.		Due Date Requested: 2/12/2024																
City: Cedar Falls		TAT Requested (days):																
State, Zip: IA, 50613		PO #:																
Phone: 319-277-2401(Tel) 319-277-2425(Fax)		WO #:																
Email:		Project #: 24013819																
Project Name: Alter Metals, Iowa, 1053.1216,1217,1218		SSOW#:																
Site:		Matrix (W=water, S=solid, O=soil, G=grab, ET=Etasus, A=Air)																
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Preservation Code	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	D92 Flashpoint	8082A/1311_T TCLP PCB	Total PCB/ Total PCBs	6010D/1311T_M TCLP Metals	Moisture/ Percent Moisture	Analysis Requested			Special Instructions/Note:			
MCSF-012924-001 (240-198708-1)	1/29/24	03:00 Central	Solid		X	X	X	X	X	X								
MCSF-012924-001 DUP (240-198708-2)	1/29/24	03:05 Central	Solid		X	X	X	X	X	X								
<p>Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte &amp; accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.</p>																		
<b>Possible Hazard Identification</b>																		
<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements:																		
<input type="checkbox"/> Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)																		
Primary Deliverable Rank: 2 Empty Kit Relinquished by: _____ Date: _____ Relinquished by: <i>Rochelle Hancock</i> Date: 1-30-24 12:05 Relinquished by: _____ Date: _____ Relinquished by: _____ Date: _____ Custody Seals Intact: _____ Custody Seal No. _____ Cooler Temperature(s) °C and Other Remarks:																		
Received by: _____ Date/Time: 1-31-24 9:20 Received by: _____ Date/Time: _____ Received by: _____ Date/Time: _____ Company: _____ Company: _____ Company: _____																		
Method of Shipment: _____ Special Instructions/QC Requirements: _____																		





# Login Sample Receipt Checklist

Client: CJF Associates, LLC

Job Number: 240-198708-1

**Login Number: 198708**

**List Number: 2**

**Creator: Costello, Mackenzie K**

**List Source: Eurofins Cedar Falls**

**List Creation: 01/31/24 11:29 AM**

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

