

ANALYTICAL REPORT

Eurofins TestAmerica, Cedar Falls
3019 Venture Way
Cedar Falls, IA 50613
Tel: (319)277-2401

Laboratory Job ID: 310-193884-1
Client Project/Site: Special Waste

For:

Dee Zee Inc
2400 46th Ave
Des Moines, Iowa 50313

Attn: Harlan Buxbaum



Authorized for release by:
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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Dee Zee Inc
Project/Site: Special Waste

Job ID: 310-193884-1

Job ID: 310-193884-1

Laboratory: Eurofins TestAmerica, Cedar Falls

Narrative

**Job Narrative
310-193884-1**

Comments

No additional comments.

Receipt

The samples were received on 10/23/2020 5:30 PM; the samples arrived in good condition, and where required, properly preserved and on ice.

Metals

Methods 200.7 Rev 4.4, 6010C: The following sample was diluted due to the presence OF AN INTERFERENT. F1022 A (310-193884-2). Elevated reporting limits (RLs) are provided.

Method 7470A: The laboratory control sample (LCS) for preparation batch 310-297256, 310-297328 and 310-297328 and analytical batch 310-297546 recovered outside control limits for the following analytes: Mercury. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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

Organic Prep

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



Sample Summary

Client: Dee Zee Inc
Project/Site: Special Waste

Job ID: 310-193884-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
310-193884-1	S1022 A	Solid	10/22/20 13:00	10/23/20 17:30	
310-193884-2	F1022 A	Solid	10/22/20 15:30	10/23/20 17:30	

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Detection Summary

Client: Dee Zee Inc
Project/Site: Special Waste

Job ID: 310-193884-1

Client Sample ID: S1022 A

Lab Sample ID: 310-193884-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.549		0.500		mg/L	1		6010C	TCLP

Client Sample ID: F1022 A

Lab Sample ID: 310-193884-2

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Cedar Falls

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Client Sample Results

Client: Dee Zee Inc
 Project/Site: Special Waste

Job ID: 310-193884-1

Client Sample ID: S1022 A

Lab Sample ID: 310-193884-1

Date Collected: 10/22/20 13:00

Matrix: Solid

Date Received: 10/23/20 17:30

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.100		0.100		mg/L		10/28/20 08:38	10/29/20 13:45	1
Barium	0.549		0.500		mg/L		10/28/20 08:38	10/29/20 13:45	1
Cadmium	<0.0200		0.0200		mg/L		10/28/20 08:38	10/29/20 13:45	1
Chromium	<0.0200		0.0200		mg/L		10/28/20 08:38	10/29/20 13:45	1
Lead	<0.100		0.100		mg/L		10/28/20 08:38	10/29/20 13:45	1
Selenium	<0.100		0.100		mg/L		10/28/20 08:38	10/29/20 13:45	1
Silver	<0.0200		0.0200		mg/L		10/28/20 08:38	10/29/20 13:45	1

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00200	*	0.00200		mg/L		10/28/20 10:25	10/29/20 10:40	1



Client Sample Results

Client: Dee Zee Inc
 Project/Site: Special Waste

Job ID: 310-193884-1

Client Sample ID: F1022 A

Lab Sample ID: 310-193884-2

Date Collected: 10/22/20 15:30

Matrix: Solid

Date Received: 10/23/20 17:30

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.200		0.200		mg/L		10/28/20 08:38	10/29/20 14:04	2
Barium	<0.500		0.500		mg/L		10/28/20 08:38	10/29/20 13:47	1
Cadmium	<0.0200		0.0200		mg/L		10/28/20 08:38	10/29/20 13:47	1
Chromium	<0.0200		0.0200		mg/L		10/28/20 08:38	10/29/20 13:47	1
Lead	<0.100		0.100		mg/L		10/28/20 08:38	10/29/20 13:47	1
Selenium	<0.100		0.100		mg/L		10/28/20 08:38	10/29/20 13:47	1
Silver	<0.0200		0.0200		mg/L		10/28/20 08:38	10/29/20 13:47	1

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00200	*	0.00200		mg/L		10/28/20 10:25	10/29/20 10:42	1



Definitions/Glossary

Client: Dee Zee Inc
Project/Site: Special Waste

Job ID: 310-193884-1

Qualifiers

Metals

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

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

QC Sample Results

Client: Dee Zee Inc
Project/Site: Special Waste

Job ID: 310-193884-1

Method: 6010C - Metals (ICP)

Lab Sample ID: LB 310-297256/1-B
Matrix: Solid
Analysis Batch: 297635

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 297283

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	<0.100		0.100		mg/L		10/28/20 08:37	10/29/20 13:30	1
Barium	<0.500		0.500		mg/L		10/28/20 08:37	10/29/20 13:30	1
Cadmium	<0.0200		0.0200		mg/L		10/28/20 08:37	10/29/20 13:30	1
Chromium	<0.0200		0.0200		mg/L		10/28/20 08:37	10/29/20 13:30	1
Lead	<0.100		0.100		mg/L		10/28/20 08:37	10/29/20 13:30	1
Selenium	<0.100		0.100		mg/L		10/28/20 08:37	10/29/20 13:30	1
Silver	<0.0200		0.0200		mg/L		10/28/20 08:37	10/29/20 13:30	1

Lab Sample ID: LCS 310-297256/2-B
Matrix: Solid
Analysis Batch: 297635

Client Sample ID: Lab Control Sample
Prep Type: TCLP
Prep Batch: 297283

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	2.00	1.945		mg/L		97	80 - 120
Cadmium	2.00	1.883		mg/L		94	80 - 120
Chromium	2.00	1.880		mg/L		94	80 - 120
Lead	4.00	3.708		mg/L		93	80 - 120
Selenium	8.00	8.249		mg/L		103	80 - 120
Silver	2.00	2.157		mg/L		108	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: LB 310-297256/1-C
Matrix: Solid
Analysis Batch: 297546

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 297328

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.00200		0.00200		mg/L		10/28/20 10:25	10/29/20 10:21	1

Lab Sample ID: LCS 310-297256/2-C
Matrix: Solid
Analysis Batch: 297546

Client Sample ID: Lab Control Sample
Prep Type: TCLP
Prep Batch: 297328

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits

QC Association Summary

Client: Dee Zee Inc
 Project/Site: Special Waste

Job ID: 310-193884-1

Metals

Leach Batch: 297256

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-193884-1	S1022 A	TCLP	Solid	1311	
310-193884-2	F1022 A	TCLP	Solid	1311	
LB 310-297256/1-B	Method Blank	TCLP	Solid	1311	
LB 310-297256/1-C	Method Blank	TCLP	Solid	1311	
LCS 310-297256/2-B	Lab Control Sample	TCLP	Solid	1311	
LCS 310-297256/2-C	Lab Control Sample	TCLP	Solid	1311	

Prep Batch: 297283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-193884-1	S1022 A	TCLP	Solid	3010A	297256
310-193884-2	F1022 A	TCLP	Solid	3010A	297256
LB 310-297256/1-B	Method Blank	TCLP	Solid	3010A	297256
LCS 310-297256/2-B	Lab Control Sample	TCLP	Solid	3010A	297256

Prep Batch: 297328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-193884-1	S1022 A	TCLP	Solid	7470A	297256
310-193884-2	F1022 A	TCLP	Solid	7470A	297256
LB 310-297256/1-C	Method Blank	TCLP	Solid	7470A	297256
LCS 310-297256/2-C	Lab Control Sample	TCLP	Solid	7470A	297256

Analysis Batch: 297546

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-193884-1	S1022 A	TCLP	Solid	7470A	297328
310-193884-2	F1022 A	TCLP	Solid	7470A	297328
LB 310-297256/1-C	Method Blank	TCLP	Solid	7470A	297328
LCS 310-297256/2-C	Lab Control Sample	TCLP	Solid	7470A	297328

Analysis Batch: 297635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-193884-1	S1022 A	TCLP	Solid	6010C	297283
310-193884-2	F1022 A	TCLP	Solid	6010C	297283
310-193884-2	F1022 A	TCLP	Solid	6010C	297283
LB 310-297256/1-B	Method Blank	TCLP	Solid	6010C	297283
LCS 310-297256/2-B	Lab Control Sample	TCLP	Solid	6010C	297283

Lab Chronicle

Client: Dee Zee Inc
Project/Site: Special Waste

Job ID: 310-193884-1

Client Sample ID: S1022 A

Lab Sample ID: 310-193884-1

Date Collected: 10/22/20 13:00

Matrix: Solid

Date Received: 10/23/20 17:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			297256	10/27/20 14:00	ERT	TAL CF
TCLP	Prep	3010A			297283	10/28/20 08:38	CJT	TAL CF
TCLP	Analysis	6010C		1	297635	10/29/20 13:45	CTB	TAL CF
TCLP	Leach	1311			297256	10/27/20 14:00	ERT	TAL CF
TCLP	Prep	7470A			297328	10/28/20 10:25	ACJ	TAL CF
TCLP	Analysis	7470A		1	297546	10/29/20 10:40	ACJ	TAL CF

Client Sample ID: F1022 A

Lab Sample ID: 310-193884-2

Date Collected: 10/22/20 15:30

Matrix: Solid

Date Received: 10/23/20 17:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			297256	10/27/20 14:00	ERT	TAL CF
TCLP	Prep	3010A			297283	10/28/20 08:38	CJT	TAL CF
TCLP	Analysis	6010C		1	297635	10/29/20 13:47	CTB	TAL CF
TCLP	Leach	1311			297256	10/27/20 14:00	ERT	TAL CF
TCLP	Prep	3010A			297283	10/28/20 08:38	CJT	TAL CF
TCLP	Analysis	6010C		2	297635	10/29/20 14:04	CTB	TAL CF
TCLP	Leach	1311			297256	10/27/20 14:00	ERT	TAL CF
TCLP	Prep	7470A			297328	10/28/20 10:25	ACJ	TAL CF
TCLP	Analysis	7470A		1	297546	10/29/20 10:42	ACJ	TAL CF

Laboratory References:

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

Accreditation/Certification Summary

Client: Dee Zee Inc
Project/Site: Special Waste

Job ID: 310-193884-1

Laboratory: Eurofins TestAmerica, Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-21

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Method Summary

Client: Dee Zee Inc
Project/Site: Special Waste

Job ID: 310-193884-1

Method	Method Description	Protocol	Laboratory
6010C	Metals (ICP)	SW846	TAL CF
7470A	Mercury (CVAA)	SW846	TAL CF
1311	TCLP Extraction	SW846	TAL CF
3010A	Preparation, Total Metals	SW846	TAL CF
7470A	Preparation, Mercury	SW846	TAL CF

Protocol References:

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

Laboratory References:

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





Cooler/Sample Receipt and Temperature Log Form

Client Information		
Client: <u>Dee Lee</u>		
City/State: <u>Deer</u> <small>CITY</small>	STATE: <u>IA</u>	Project: <u>Special Waste</u>
Receipt Information		
Date/Time Received: <u>10.23.20</u> <small>DATE</small>	<u>1730</u> <small>TIME</small>	Received By: <u>BLM</u>
Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____		
Condition of Cooler/Containers		
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?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler custody seals intact? <input checked="" 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? ↓
Temperature Record		
Coolant: <input type="checkbox"/> Wet ice <input checked="" type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE		
Thermometer ID: <u>N</u>	Correction Factor (°C): <u>+0.0</u>	
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature		
Uncorrected Temp (°C): <u>10.1</u>	Corrected Temp (°C): <u>10.1</u>	
• Sample Container Temperature		
Container(s) used:	<u>CONTAINER 1</u> <u>302 soil</u>	<u>CONTAINER 2</u> <u>250ml amber NT</u>
Uncorrected Temp (°C):	<u>11.8</u>	<u>11.6</u>
Corrected Temp (°C):	<u>11.8</u>	<u>11.6</u>
Exceptions Noted		
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		
Additional Comments		
<u>P1022A says 15:30 on COC + BUD on containers.</u>		

Login Sample Receipt Checklist

Client: Dee Zee Inc

Job Number: 310-193884-1

Login Number: 193884

List Source: Eurofins TestAmerica, Cedar Falls

List Number: 1

Creator: Marzen, Brita K

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?	True	
There are no discrepancies between the containers received and the COC.	False	Time on sample 2 containers do not match the COC. Logged in per COC.
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	