



ANALYTICAL REPORT

PREPARED FOR

Attn: Jay Tommasin
Transco Railway Products
PO BOX 112
Oelwein, Iowa 50662

Generated 2/20/2025 3:05:29 PM

JOB DESCRIPTION

Beneficial Use-Coal Slag and Steel Shot

JOB NUMBER

310-299989-1

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



Generated
2/20/2025 3:05:29 PM

Authorized for release by
Samuel Miller, Project Management Assistant I
Samuel.Miller@et.eurofinsus.com
(319)277-2401

Case Narrative

Client: Transco Railway Products
Project: Beneficial Use-Coal Slag and Steel Shot

Job ID: 310-299989-1

Job ID: 310-299989-1

Eurofins Cedar Falls

Job Narrative 310-299989-1

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

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

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

Receipt

The samples were received on 2/6/2025 2:55 PM. 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 2.4°C.

Metals

Method 6010D - TCLP: The continuing calibration verification (CCV) associated with batch 310-446966 recovered above the upper control limit for Silver. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 6010D - TCLP: The following sample(s) was diluted due to the presence of an interferent. >: Steel Shot (310-299989-2). 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.

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: Transco Railway Products
Project/Site: Beneficial Use-Coal Slag and Steel Shot

Job ID: 310-299989-1

<u>Lab Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Collected</u>	<u>Received</u>
310-299989-1	Coal Slag	Solid	02/06/25 07:00	02/06/25 14:55
310-299989-2	Steel Shot	Solid	02/06/25 07:30	02/06/25 14:55

- 1
- 2
- 3
- 4
- 5
- 6
- 7

Client Sample Results

Client: Transco Railway Products
 Project/Site: Beneficial Use-Coal Slag and Steel Shot

Job ID: 310-299989-1

Client Sample ID: Coal Slag

Lab Sample ID: 310-299989-1

Date Collected: 02/06/25 07:00

Matrix: Solid

Date Received: 02/06/25 14:55

Method: 6010D - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Arsenic	<0.0300		0.100	0.0300	mg/L		02/14/25 14:24	1	ZRI4
Barium	0.865		0.200	0.0400	mg/L		02/14/25 14:24	1	ZRI4
Cadmium	<0.00390		0.0200	0.00390	mg/L		02/14/25 14:24	1	ZRI4
Chromium	0.0150	J	0.0200	0.00600	mg/L		02/14/25 14:24	1	ZRI4
Lead	<0.0370		0.100	0.0370	mg/L		02/14/25 14:24	1	ZRI4
Selenium	<0.0290		0.100	0.0290	mg/L		02/14/25 14:24	1	ZRI4
Silver	<0.0160	^+	0.0500	0.0160	mg/L		02/14/25 14:24	1	ZRI4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Antimony	<0.0324		0.0400	0.0324	mg/L		02/14/25 15:12	4	ZRI4
Arsenic	<0.0204		0.0400	0.0204	mg/L		02/14/25 15:12	4	ZRI4
Barium	<0.0640		0.200	0.0640	mg/L		02/14/25 15:12	4	ZRI4
Beryllium	<0.00680		0.0200	0.00680	mg/L		02/14/25 15:12	4	ZRI4
Cadmium	<0.00280		0.0100	0.00280	mg/L		02/14/25 15:12	4	ZRI4
Chromium	<0.0440		0.100	0.0440	mg/L		02/14/25 15:12	4	ZRI4
Copper	<0.0360		0.100	0.0360	mg/L		02/14/25 15:12	4	ZRI4
Lead	<0.00760		0.0200	0.00760	mg/L		02/14/25 15:12	4	ZRI4
Selenium	<0.0332		0.100	0.0332	mg/L		02/14/25 15:12	4	ZRI4
Thallium	<0.0116		0.0200	0.0116	mg/L		02/14/25 15:12	4	ZRI4

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Mercury	<0.00110		0.00200	0.00110	mg/L		02/14/25 15:09	1	F5MW

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Analyzed	Dil Fac	Analyst
Percent Moisture (Moisture)	0.0		0.1	0.1	%		02/06/25 20:08	1	T5AC
Percent Solids (Moisture)	100.0		0.1	0.1	%		02/06/25 20:08	1	T5AC

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	RL	Unit	D	Analyzed	Dil Fac	Analyst
pH (9045D)	9.1	HF	1.0	1.0	SU		02/10/25 10:24	1	HETK

General Chemistry - SPLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Fluoride (4500 F C-2011)	<0.200		0.200	0.200	mg/L		02/17/25 10:09	1	HE7K

Client Sample ID: Coal Slag

Lab Sample ID: 310-299989-1

Date Collected: 02/06/25 07:00

Matrix: Solid

Date Received: 02/06/25 14:55

Percent Solids: 100.0

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Antimony	<7.08		15.7	7.08	mg/Kg	⊛	02/11/25 16:07	100	ZRI4
Arsenic	<6.61		15.7	6.61	mg/Kg	⊛	02/11/25 16:07	100	ZRI4
Barium	5770		15.7	7.87	mg/Kg	⊛	02/11/25 16:07	100	ZRI4
Beryllium	<3.15		7.87	3.15	mg/Kg	⊛	02/11/25 16:07	100	ZRI4
Boron	<393		787	393	mg/Kg	⊛	02/11/25 16:07	100	ZRI4
Cadmium	<0.149		0.393	0.149	mg/Kg	⊛	02/10/25 16:56	5	NFT2
Chromium	47.6		23.6	10.2	mg/Kg	⊛	02/11/25 16:07	100	ZRI4

Eurofins Cedar Falls

Client Sample Results

Client: Transco Railway Products
 Project/Site: Beneficial Use-Coal Slag and Steel Shot

Job ID: 310-299989-1

Client Sample ID: Coal Slag

Lab Sample ID: 310-299989-1

Date Collected: 02/06/25 07:00

Matrix: Solid

Date Received: 02/06/25 14:55

Percent Solids: 100.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Cobalt	11.1		0.393	0.181	mg/Kg	☼	02/10/25 16:56	5	NFT2
Copper	26.5		23.6	9.60	mg/Kg	☼	02/11/25 16:07	100	ZRI4
Lead	1.16	J	1.97	0.614	mg/Kg	☼	02/10/25 16:56	5	NFT2
Lithium	19.8		1.97	0.566	mg/Kg	☼	02/10/25 16:56	5	NFT2
Manganese	404		39.3	18.9	mg/Kg	☼	02/11/25 16:07	100	ZRI4
Molybdenum	<8.50		15.7	8.50	mg/Kg	☼	02/11/25 16:07	100	ZRI4
Nickel	25.1		23.6	10.7	mg/Kg	☼	02/11/25 16:07	100	ZRI4
Selenium	<11.8		23.6	11.8	mg/Kg	☼	02/11/25 16:07	100	ZRI4
Silver	<3.46		7.87	3.46	mg/Kg	☼	02/11/25 16:07	100	ZRI4
Thallium	<0.197		0.393	0.197	mg/Kg	☼	02/10/25 16:56	5	NFT2
Vanadium	66.8		1.18	0.362	mg/Kg	☼	02/10/25 16:56	5	NFT2
Zinc	<37.8		78.7	37.8	mg/Kg	☼	02/11/25 16:07	100	ZRI4

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Mercury	<0.00796		0.0194	0.00796	mg/Kg	☼	02/13/25 14:04	1	F5MW

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Fluoride (4500 F C-2011)	<0.538		0.996	0.538	mg/Kg	☼	02/08/25 11:10	1	WZC8

Client Sample ID: Steel Shot

Lab Sample ID: 310-299989-2

Date Collected: 02/06/25 07:30

Matrix: Solid

Date Received: 02/06/25 14:55

Method: 6010D - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Arsenic	<0.150		0.500	0.150	mg/L		02/20/25 11:44	5	ZRI4
Barium	5.52		1.00	0.200	mg/L		02/20/25 11:44	5	ZRI4
Cadmium	<0.0195		0.100	0.0195	mg/L		02/20/25 11:44	5	ZRI4
Chromium	<0.0300		0.100	0.0300	mg/L		02/20/25 11:44	5	ZRI4
Lead	<0.185		0.500	0.185	mg/L		02/20/25 11:44	5	ZRI4
Selenium	<0.145		0.500	0.145	mg/L		02/20/25 11:44	5	ZRI4
Silver	<0.0800		0.250	0.0800	mg/L		02/20/25 11:44	5	ZRI4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Antimony	<0.0324		0.0400	0.0324	mg/L		02/14/25 15:35	4	ZRI4
Arsenic	<0.0204		0.0400	0.0204	mg/L		02/14/25 15:35	4	ZRI4
Barium	0.622		0.200	0.0640	mg/L		02/14/25 15:35	4	ZRI4
Beryllium	<0.00680		0.0200	0.00680	mg/L		02/14/25 15:35	4	ZRI4
Cadmium	<0.00280		0.0100	0.00280	mg/L		02/14/25 15:35	4	ZRI4
Chromium	<0.0440		0.100	0.0440	mg/L		02/14/25 15:35	4	ZRI4
Copper	<0.0360		0.100	0.0360	mg/L		02/14/25 15:35	4	ZRI4
Lead	<0.00760		0.0200	0.00760	mg/L		02/14/25 15:35	4	ZRI4
Selenium	<0.0332		0.100	0.0332	mg/L		02/14/25 15:35	4	ZRI4
Thallium	<0.0116		0.0200	0.0116	mg/L		02/14/25 15:35	4	ZRI4

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Mercury	<0.00110		0.00200	0.00110	mg/L		02/14/25 14:50	1	F5MW

Eurofins Cedar Falls

Client Sample Results

Client: Transco Railway Products
 Project/Site: Beneficial Use-Coal Slag and Steel Shot

Job ID: 310-299989-1

Client Sample ID: Steel Shot

Lab Sample ID: 310-299989-2

Date Collected: 02/06/25 07:30

Matrix: Solid

Date Received: 02/06/25 14:55

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Analyzed	Dil Fac	Analyst
Chromium, trivalent (7196A)	1260		1.00	1.00	mg/Kg		02/17/25 10:15	1	HE7K
Percent Moisture (Moisture)	0.8		0.1	0.1	%		02/06/25 20:08	1	T5AC
Percent Solids (Moisture)	99.2		0.1	0.1	%		02/06/25 20:08	1	T5AC

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	RL	Unit	D	Analyzed	Dil Fac	Analyst
pH (9045D)	8.2	HF	1.0	1.0	SU		02/10/25 10:25	1	HE7K

General Chemistry - SPLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Fluoride (4500 F C-2011)	0.806		0.200	0.200	mg/L		02/17/25 10:21	1	HE7K

Client Sample ID: Steel Shot

Lab Sample ID: 310-299989-2

Date Collected: 02/06/25 07:30

Matrix: Solid

Date Received: 02/06/25 14:55

Percent Solids: 99.2

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Antimony	6.88	B	0.999	0.449	mg/Kg	✱	02/10/25 16:58	5	NFT2
Arsenic	19.6	B	0.999	0.419	mg/Kg	✱	02/10/25 16:58	5	NFT2
Barium	3410		9.99	4.99	mg/Kg	✱	02/11/25 16:10	50	ZRI4
Beryllium	<2.00		4.99	2.00	mg/Kg	✱	02/11/25 16:10	50	ZRI4
Boron	<250		499	250	mg/Kg	✱	02/11/25 16:10	50	ZRI4
Cadmium	1.31	B	0.499	0.190	mg/Kg	✱	02/10/25 16:58	5	NFT2
Chromium	1260		15.0	6.49	mg/Kg	✱	02/11/25 16:10	50	ZRI4
Cobalt	37.8		4.99	2.30	mg/Kg	✱	02/11/25 16:10	50	ZRI4
Copper	1110		15.0	6.09	mg/Kg	✱	02/11/25 16:10	50	ZRI4
Lead	21.1		2.50	0.779	mg/Kg	✱	02/10/25 16:58	5	NFT2
Lithium	3.62		2.50	0.719	mg/Kg	✱	02/10/25 16:58	5	NFT2
Manganese	4840		25.0	12.0	mg/Kg	✱	02/11/25 16:10	50	ZRI4
Molybdenum	234		9.99	5.39	mg/Kg	✱	02/11/25 16:10	50	ZRI4
Nickel	400		1.50	0.679	mg/Kg	✱	02/10/25 16:58	5	NFT2
Selenium	<0.749		1.50	0.749	mg/Kg	✱	02/10/25 16:58	5	NFT2
Silver	0.502	B	0.499	0.220	mg/Kg	✱	02/10/25 16:58	5	NFT2
Thallium	<0.250		0.499	0.250	mg/Kg	✱	02/10/25 16:58	5	NFT2
Vanadium	89.0		1.50	0.459	mg/Kg	✱	02/10/25 16:58	5	NFT2
Zinc	1620		49.9	24.0	mg/Kg	✱	02/11/25 16:10	50	ZRI4

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Mercury	<0.00785		0.0191	0.00785	mg/Kg	✱	02/13/25 14:15	1	F5MW

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Chromium, hexavalent (7196A)	1.13		0.834	0.278	mg/Kg	✱	02/18/25 10:08	2	W2JF

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Fluoride (4500 F C-2011)	2.58		0.984	0.531	mg/Kg	✱	02/08/25 11:27	1	WZC8

Eurofins Cedar Falls

Accreditation/Certification and Definitions Summary

Client: Transco Railway Products
 Project/Site: Beneficial Use-Coal Slag and Steel Shot

Job ID: 310-299989-1

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	12-01-25

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
4500 F C-2011		Solid	Fluoride
6020B	3050B	Solid	Lithium
7196A		Solid	Chromium, trivalent
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-26
A2LA	Dept. of Energy	0001.01	11-30-26
A2LA	ISO/IEC 17025	0001.01	11-30-26
Alabama	State	43200	01-31-26
Alaska	State	PA00009	06-30-25
Alaska (UST)	State	17-027	02-28-25
Arizona	State	AZ0780	03-12-25
Arkansas DEQ	State	88-00660	08-09-25
California	State	2792	01-31-26
Colorado	State	PA00009	06-30-25
Connecticut	State	PH-0746	06-30-25
Delaware (DW)	State	N/A	01-31-26
Florida	NELAP	E87997	06-30-25
Georgia (DW)	State	C048	01-31-26
Illinois	NELAP	200027	01-31-26
Iowa	State	361	03-01-26
Kansas	NELAP	E-10151	10-31-25
Kentucky (DW)	State	KY90088	12-31-25
Kentucky (UST)	State	0001.01	11-30-26
Kentucky (WW)	State	KY90088	12-31-25
Louisiana (All)	NELAP	02055	06-30-25
Maine	State	2019012	03-12-25
Maryland	State	100	06-30-25
Massachusetts	State	M-PA009	06-30-25
Michigan	State	9930	01-31-25 *
Minnesota	NELAP	042-999-487	12-31-25
Mississippi	State	023	01-31-26
Missouri	State	450	01-31-28
Montana (DW)	State	0098	01-01-26
Nebraska	State	NE-OS-32-17	01-31-26
New Hampshire	NELAP	2730	01-10-26
New Jersey	NELAP	PA011	06-30-25
New York	NELAP	10670	04-01-25
North Carolina (DW)	State	42705	07-31-25
North Carolina (WW/SW)	State	521	12-31-25
North Dakota	State	R-205	01-31-24 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification and Definitions Summary

Client: Transco Railway Products
 Project/Site: Beneficial Use-Coal Slag and Steel Shot

Job ID: 310-299989-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oklahoma	NELAP	9804	08-31-25
Oregon	NELAP	PA200001	09-11-25
Pennsylvania	NELAP	36-00037	01-31-26
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-29
Rhode Island	State	LAO00338	12-30-25
South Carolina	State	89002	01-31-25 *
Tennessee	State	02838	01-31-26
Texas	NELAP	T104704194-23-46	08-31-25
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-25
Virginia	NELAP	460182	06-14-25
Washington	State	C457	04-11-25
West Virginia (DW)	State	9906 C	01-31-26
West Virginia DEP	State	055	07-31-25
Wyoming	State	8TMS-L	01-31-26
Wyoming (UST)	A2LA	0001.01	11-30-26

Qualifiers

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
B	Compound was found in the blank and sample.
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
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.

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
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
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)

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification and Definitions Summary

Client: Transco Railway Products
Project/Site: Beneficial Use-Coal Slag and Steel Shot

Job ID: 310-299989-1

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
MRL	Method Reporting 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
SDL	Sample Detection Limit
SDL	Sample Detection Limit
SDL	Sample Detection Limit
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cedar Falls

Method Summary

Client: Transco Railway Products
 Project/Site: Beneficial Use-Coal Slag and Steel Shot

Job ID: 310-299989-1

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
4500 F C-2011	Fluoride (Ion-selective Electrode)	SM	EET CF
7196A	Chromium, Trivalent (Colorimetric)	SW846	EET CF
7196A	Chromium, Hexavalent	SW846	ELLE
9045D	pH	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
3060A	Alkaline Digestion (Chromium, Hexavalent)	SW846	ELLE
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
- SM = "Standard Methods For The Examination Of Water And Wastewater"
- SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

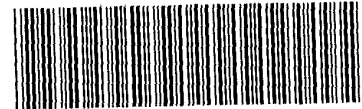
Laboratory References:

- EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401
- ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300





Environment Testing
America



310-299989 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <u>Transco</u>			
City/State: <u>Odessa TX</u>	<u>TX</u>	Project:	
Receipt Information			
Date/Time Received: <u>2/6/25</u> <u>1455</u>	Received By: <u>XB</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 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>2</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): <u>2.4</u>	Corrected Temp (°C): <u>2.4</u>		
• Sample Container Temperature			
Container(s) used:	<u>CONTAINER 1</u>	<u>CONTAINER 2</u>	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
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			

Document CED-P-SAM-FRM45521
Revision 26
Date 27 Jan 2022

Eurofins Cedar Falls

General temperature criteria is 0 to 6°C
Bacteria temperature criteria is 0 to 10°C

1
2
3
4
5
6
7

Eurofins Cedar Falls

3019 Venture Way
 Cedar Falls IA 50613
 Phone: 319-277-2401 Fax: 319-277-2425

Chain of Custody Record

Page 1 of 1

Client Information		Lab PM Miller, Samuel	Carrier Tracking No(s)	COC No: 310-103162-27015 1
Client Contact: Ms Mary Wheaton		E-Mail Samuel.Miller@eurofins.com	State of Origin	Page: Page 1 of 1
Company Transco Railway Products		PWSID:	Job #:	
Address: PO BOX 112		Due Date Requested	Analysis Requested	
City: Oelwein		TAT Requested (days)	Preservation Codes: N None	
State, Zip: IA, 50662		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No	Other	
Phone: 164478		PO #: 164478	Total Number of Containers	
Email: mwheaton@transcorailway.com		W/O #:	Special Instructions/Note:	
Project Name: Beneficial Use- Coal Slag and Steel Shot		Project #: 31002554	Perform MS/MSD (Yes or No) 4500_F_C, 6020A, 7471B, 9045D, Moisture 4500_F_C, 6010C, 6020A, 7470A	
Site: Beneficial Use- Coal Slag and Steel Shot		SSOW#:	Field Filtered Sample (Yes or No) N N	
Sample Identification	Sample Date	Sample Time	Sample Type (C-Comp, G-grab)	Matrix (Water, Solid, Sewage, etc.)
Coal Slag	2-6-25	7:00		Solid
Steel Shot	2-6-25	7:30		Solid
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested I II III IV Other (specify)				
Empty Kit Relinquished by				
Relinquished by Garry H. Wadsworth		Date/Time 2-6-25 9:00am	Company Transco	
Relinquished by		Date/Time	Company	
Relinquished by		Date/Time	Company	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months
 Special Instructions/QC Requirements

Method of Shipment
 Date/Time
 Received by
 Date/Time
 Received by
 Date/Time
 Received by
 Date/Time
 Cooler Temperature(s) °C and Other Remarks:
 20 25 1456



Eurofins Cedar Falls

3019 Venture Way
 Cedar Falls, IA 50613
 Phone: 319-277-2401 Fax: 319-277-2425

Chain of Custody Record



Client Information (Sub Contract Lab)		Sampler: N/A		Lab PM: Miller, Samuel		Carrier Tracking No(s): N/A		COC No: 310-80556 1			
Client Contact: Shipping/Receiving		Phone: N/A		E-Mail: Samuel.Miller@et.eurofinsus.com		State of Origin: Iowa		Page: Page 1 of 1			
Company: Eurofins Lancaster Laboratories Environm				Accreditations Required (See note): State - Iowa; State Program - Iowa				Job #: 310-299989-1			
Address: 2425 New Holland Pike, City: Lancaster State, Zip PA, 17601 Phone: 717-656-2300(Tel) Email: N/A Project Name: Beneficial Use-Coal Slag and Steel Shot Site: N/A		Due Date Requested: 2/19/2025 TAT Requested (days): N/A PO #: N/A WO #: N/A Project #: 31002554 SSOW#: N/A		Analysis Requested						Preservation Codes: - Other: N/A	
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oh, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	7196A/3060A (MOD) Local Method	Total Number of containers	Special Instructions/Note:	
Steel Shot (310-299989-2)		2/6/25	07:30 Central	G	Solid		X		1		
<p>Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & 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/tests/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>											
Possible Hazard Identification					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)						
Unconfirmed					<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months						
Deliverable Requested: I, II, III, IV, Other (specify)			Primary Deliverable Rank: 1		Special Instructions/QC Requirements:						
Empty Kit Relinquished by:			Date:		Time:		Method of Shipment:				
Relinquished by:		Date/Time:	Company:	Received by:		Date/Time:	Company:				
Relinquished by:		Date/Time:	Company:	Received by:		Date/Time:	Company:				
Relinquished by:		Date/Time:	Company:	Received by:		Date/Time:	Company:				
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:		Cooler Temperature(s) and Other Remarks: R: 1.4 C: 1.4							

177

1
2
3
4
5
6
7