United States Environmental Protection Agency
Region 7
300 Minnesota Avenue
Kansas City, KS 66101

Date: APR 21 2017

Subject: Transmittal of Sample Analysis Results for ASR #: 7449

Project ID: RWRECYCLE

Project Description: Recycletronics - RCRA sampling

From: Margaret E.W. St. Germain, Chief M. St Germain
Laboratory Technology & Analysis Branch, Environmental Sciences & Technology Division

To: Rebecca Wenner
WEMM/AWMD

Enclosed are the analytical data for the above-referenced Analytical Services Request (ASR) and Project. The Regional Laboratory has reviewed and verified the results in accordance with procedures described in our Quality Manual (QM). In addition to all of the analytical results, this transmittal contains pertinent information that may have influenced the reported results and documents any deviations from the established requirements of the QM.

Please contact us within 14 days of receipt of this package if you determine there is a need for any changes. Please complete the Online ASR Sample/Data Disposition and Customer Survey for this ASR as soon as possible. The process of disposing of the samples for this ASR will be initiated 30 days from the date of this transmittal unless an alternate release date is specified on the Online ASR Sample/Data Disposition and Customer Survey.

If you have any questions or concerns relating to this data package, contact our customer service line at 913-551-5295.

Enclosures

cc: Analytical Data File.

RCRA
561287

Project Manager: Rebecca Wenner **Org:** WEMM/AWMD **Phone:** 913-551-7644

Project ID: RWRECYCLE **QAPP Number:** ADDENDUM IN REVIEW.

Project Desc: Recycletronics - RCRA sampling

Location: Sioux City **State:** Iowa **Program:** RCRA Enforcement

Purpose: Enforcement **GPRA PRC:** 302DA1

Pb concentrations in soil and glass.

PM has noted that this is a RCRA administrative ASR and not a CI ASR.
Per RWenner on 4/6/17 that this ASR is not part of a litigation hold at this time.

Explanation of Codes, Units and Qualifiers used on this report

Sample QC Codes: QC Codes identify the type of sample for quality control purpose.

__ = Field Sample
FB = Field Blank
FD = Field Duplicate

Units: Specific units in which results are reported.

mg/L = Milligrams per Liter
% = Percent
mg/kg = Milligrams per Kilogram
ug/L = Micrograms per Liter

Data Qualifiers: Specific codes used in conjunction with data values to provide additional information on the quality of reported results, or used to explain the absence of a specific value.

(Blank)= Values have been reviewed and found acceptable for use.
U = The analyte was not detected at or above the reporting limit.
O = Parameter not analyzed.
K = The identification of the analyte is acceptable; the reported value may be biased high. The actual value is expected to be less than the reported value.

ASR Number: 7449 **Sample Information Summary** **04/21/2017**

Project ID: RWRECYCLE **Project Desc:** Recycletronics - RCRA sampling

Sample No	QC Code	Matrix	Location Description	External Sample No	Start Date	Start Time	End Date	End Time	Receipt Date
1	- __	Solid	1220 Steuben funnel glass sample		04/04/2017	11:10	04/04/2017	11:12	04/06/2017
2	- __	Solid	1220 Steuben panel glass sample		04/04/2017	11:19	04/04/2017	11:21	04/06/2017
3	- __	Solid	Background soil sample		04/04/2017	12:45	04/04/2017	12:46	04/06/2017
4	- __	Solid	2301 G Street soil sample (79" NW corner of pile)		04/04/2017	13:43	04/04/2017	13:46	04/06/2017
5	- __	Solid	2301 G Street soil sample (12' NE center of pile)		04/04/2017	13:57	04/04/2017	14:00	04/06/2017
6	- __	Solid	2301 G Street soil sample (16' E from sample 5)		04/04/2017	14:11	04/04/2017	14:17	04/06/2017
6	- FD	Solid	2301 G Street soil sample (16' E from sample 5)		04/04/2017	14:11	04/04/2017	14:17	04/06/2017
7	- __	Solid	2301 G Street glass sample		04/04/2017	14:46	04/04/2017	14:49	04/06/2017
103	- __	Solid	Foundry site glass sample		04/04/2017	15:40	04/04/2017	15:48	04/06/2017
104	- __	Solid	Akron, IA glass sample		04/04/2017	17:39	04/04/2017	17:40	04/06/2017
105	- FB	Solid	Blank glass sample		04/04/2017	18:40	04/04/2017	18:41	04/06/2017
106	- __	Solid	Feed Mill site glass sample		04/05/2017	11:30	04/05/2017	11:34	04/06/2017
107	- __	Solid	Scandinavian bldg. glass sample		04/05/2017	13:42	04/05/2017	13:50	04/06/2017
201	- __	Water	2301 G Street water sample		04/04/2017	14:50	04/05/2017	15:05	04/06/2017

Analysis	Comments About Results For This Analysis

1 Mercury in Soil or Sediment

Lab: Region 7 EPA Laboratory - Kansas City, Ks.

Method: EPA Region 7 RLAB Method 3121.23D

Basis: Dry

Samples: 1-__ 2-__ 3-__ 4-__ 5-__ 6-__ 6-FD
7-__ 103-__ 104-__ 105-FB 106-__ 107-__

Comments:

1 Percent Solid

Lab: Region 7 EPA Laboratory - Kansas City, Ks.

Method: EPA Region 7 RLAB Method 3142.9H

Basis: N/A

Samples: 1-__ 2-__ 3-__ 4-__ 5-__ 6-__ 6-FD
7-__ 103-__ 104-__ 105-FB 106-__ 107-__

Comments:
(N/A)

1 TCLP Mercury in Soil

Lab: Region 7 EPA Laboratory - Kansas City, Ks.

Method: EPA Region 7 RLAB Method 3121.23D applied to TCLP extracts

Basis: N/A

Samples: 1-__ 2-__ 3-__ 4-__ 5-__ 6-__ 6-FD
7-__ 103-__ 104-__ 105-FB 106-__ 107-__

Comments:

1 TCLP Metals in Soil

Lab: Region 7 EPA Laboratory - Kansas City, Ks.

Method: EPA Region 7 RLAB Method 3122.3F TCLP

Basis: N/A

Samples: 1-__ 2-__ 3-__ 4-__ 5-__ 6-__ 6-FD
7-__ 103-__ 104-__ 105-FB 106-__ 107-__

Comments:

1 Total Metals Analysis of TCLP Metals in Soil by ICP-AES

Lab: Region 7 EPA Laboratory - Kansas City, Ks.

Analysis **Comments About Results For This Analysis**

Method: EPA Region 7 RLAB Method 3122.3F

Basis: Dry

Samples: 1-__ 2-__ 3-__ 4-__ 5-__ 6-__ 6-FD
7-__ 103-__ 104-__ 105-FB 106-__ 107-__

Comments:

1 Mercury in Water

Lab: Region 7 EPA Laboratory - Kansas City, Ks.

Method: EPA Region 7 RLAB Method 3121.23D

Samples: 201-__

Comments:
(N/A)

1 TCLP Mercury in Water

Lab: Region 7 EPA Laboratory - Kansas City, Ks.

Method: EPA Region 7 RLAB Method 3121.23D applied to TCLP extracts

Samples: 201-__

Comments:
The results for this TCLP analysis of sample 201 was K-coded at the RCRA TCLP action level of the analytes. The analyses of the total analytes in these samples determined that the RCRA action level could not have been exceeded for any of the TCLP analytes.

1 TCLP Metals in Water

Lab: Region 7 EPA Laboratory - Kansas City, Ks.

Method: EPA Region 7 RLAB Method 3122.3F TCLP

Samples: 201-__

Comments:
The results for this TCLP analysis of sample 201 were O-coded, as there were not enough solids collected on the filter (<0.5% solids). Therefore, the liquid is considered the extract and the solid does not need to be tumbled (i.e. TCLP is not needed). The total results from the liquid sample (Met T TCLP W.3F) are the TCLP results.

1 Total Metals Analysis of TCLP Metals in Water by ICP-AES

Lab: Region 7 EPA Laboratory - Kansas City, Ks.

Method: EPA Region 7 RLAB Method 3122.3F

Samples: 201-__

Comments:

ASR Number: 7449 **RLAB Approved Sample Analysis Results** **04/21/2017**

Project ID: RWRECYCLE **Project Desc:** Recycletronics - RCRA sampling

Analysis/ Analyte	Units	1-__	2-__	3-__	4-__
1 Mercury in Soil or Sediment					
Mercury	mg/kg	0.00164	0.000400 U	0.0477	0.0101
1 Percent Solid					
Solids, percent	%	99.9	100	72.9	83.8
1 TCLP Mercury in Soil					
Mercury	mg/L	0.000250 U	0.000250 U	0.000250 U	0.000679
1 TCLP Metals in Soil					
Arsenic	mg/L	0.050 U	0.050 U	0.050 U	0.050 U
Barium	mg/L	0.297	1.86	0.919	1.12
Cadmium	mg/L	0.005 U	0.005 U	0.005 U	0.005 U
Chromium	mg/L	0.015 U	0.015 U	0.015 U	0.015 U
Lead	mg/L	6.84	0.050 U	0.050 U	0.050 U
Selenium	mg/L	0.050 U	0.050 U	0.050 U	0.050 U
Silver	mg/L	0.025 U	0.025 U	0.025 U	0.025 U
1 Total Metals Analysis of TCLP Metals in Soil by ICP-AES					
Arsenic	mg/kg	5.0 U	5.0 U	9.5	5.9 U
Barium	mg/kg	24.6	147	177	146
Cadmium	mg/kg	1.0 U	1.0 U	2.4	1.8
Chromium	mg/kg	2.0 U	2.0 U	17.9	16.5
Lead	mg/kg	1020	5.0 U	32.5	52.6
Selenium	mg/kg	10.0 U	9.9 U	13.6 U	11.8 U
Silver	mg/kg	2.0 U	2.0 U	2.7 U	2.4 U

ASR Number: 7449 **RLAB Approved Sample Analysis Results** **04/21/2017**

Project ID: RWRECYCLE **Project Desc:** Recycletronics - RCRA sampling

Analysis/ Analyte	Units	5-__	6-__	6-FD	7-__
1 Mercury in Soil or Sediment					
Mercury	mg/kg	0.0245	0.0154	0.0151	0.000400 U
1 Percent Solid					
Solids, percent	%	79.0	63.3	65.5	100
1 TCLP Mercury in Soil					
Mercury	mg/L	0.00163	0.000250 U	0.000250 U	0.000939
1 TCLP Metals in Soil					
Arsenic	mg/L	0.050 U	0.050 U	0.050 U	0.050 U
Barium	mg/L	2.15	2.14	2.19	1.92
Cadmium	mg/L	0.007	0.007	0.007	0.005 U
Chromium	mg/L	0.015 U	0.015 U	0.015 U	0.015 U
Lead	mg/L	0.385	2.73	2.48	78.4
Selenium	mg/L	0.050 U	0.050 U	0.050 U	0.050 U
Silver	mg/L	0.025 U	0.025 U	0.025 U	0.025 U
1 Total Metals Analysis of TCLP Metals in Soil by ICP-AES					
Arsenic	mg/kg	6.3 U	7.9 U	8.7	5.0 U
Barium	mg/kg	217	284	255	511
Cadmium	mg/kg	2.5	3.1	3.0	1.0 U
Chromium	mg/kg	20.3	62.2	55.6	2.0 U
Lead	mg/kg	407	1020	833	20700
Selenium	mg/kg	12.6 U	15.8 U	15.2 U	9.9 U
Silver	mg/kg	2.5 U	3.2 U	3.0 U	2.0 U

ASR Number: 7449 **RLAB Approved Sample Analysis Results** **04/21/2017**

Project ID: RWRECYCLE **Project Desc:** Recycletronics - RCRA sampling

Analysis/ Analyte	Units	103-__	104-__	105-FB	106-__
1 Mercury in Soil or Sediment					
Mercury	mg/kg	0.00898	0.000400 U	0.000401 U	0.00164
1 Percent Solid					
Solids, percent	%	98.1	100	100	100
1 TCLP Mercury in Soil					
Mercury	mg/L	0.000312	0.000250 U	0.000250 U	0.000258
1 TCLP Metals in Soil					
Arsenic	mg/L	0.050 U	0.050 U	0.050 U	0.050 U
Barium	mg/L	1.60	0.739	0.063	0.331
Cadmium	mg/L	0.005 U	0.005 U	0.005 U	0.005 U
Chromium	mg/L	0.015 U	0.015 U	0.015 U	0.015 U
Lead	mg/L	3.86	11.0	0.050 U	8.54
Selenium	mg/L	0.050 U	0.050 U	0.050 U	0.050 U
Silver	mg/L	0.025 U	0.025 U	0.025 U	0.025 U
1 Total Metals Analysis of TCLP Metals in Soil by ICP-AES					
Arsenic	mg/kg	5.1 U	5.0 U	5.0 U	5.0 U
Barium	mg/kg	185	74.7	2.0 U	21.6
Cadmium	mg/kg	1.0 U	1.0 U	1.0 U	1.0 U
Chromium	mg/kg	2.8	2.0 U	2.0 U	2.0 U
Lead	mg/kg	401	1960	5.0 U	1440
Selenium	mg/kg	10.1 U	9.9 U	9.9 U	10.0 U
Silver	mg/kg	2.0 U	2.0 U	2.0 U	2.0 U

ASR Number: 7449 **RLAB Approved Sample Analysis Results** **04/21/2017**

Project ID: RWRECYCLE **Project Desc:** Recycletronics - RCRA sampling

Analysis/ Analyte	Units	107-__	201-__
1 Mercury in Soil or Sediment			
Mercury	mg/kg	0.000550	
1 Percent Solid			
Solids, percent	%	100	
1 TCLP Mercury in Soil			
Mercury	mg/L	0.000250 U	
1 TCLP Metals in Soil			
Arsenic	mg/L	0.050 U	
Barium	mg/L	0.244	
Cadmium	mg/L	0.005 U	
Chromium	mg/L	0.015 U	
Lead	mg/L	7.71	
Selenium	mg/L	0.050 U	
Silver	mg/L	0.025 U	
1 Total Metals Analysis of TCLP Metals in Soil by ICP-AES			
Arsenic	mg/kg	5.0 U	
Barium	mg/kg	9.6	
Cadmium	mg/kg	1.0 U	
Chromium	mg/kg	2.0 U	
Lead	mg/kg	1090	
Selenium	mg/kg	10.0 U	
Silver	mg/kg	2.0 U	
1 Mercury in Water			
Mercury	ug/L		0.313
1 TCLP Mercury in Water			
Mercury	mg/L		0.200 K
1 TCLP Metals in Water			
Arsenic	mg/L		N/A O
Barium	mg/L		N/A O
Cadmium	mg/L		N/A O
Chromium	mg/L		N/A O
Lead	mg/L		N/A O
Selenium	mg/L		N/A O
Silver	mg/L		N/A O
1 Total Metals Analysis of TCLP Metals in Water by ICP-AES			
Arsenic	ug/L		30
Barium	ug/L		1620
Cadmium	ug/L		19
Chromium	ug/L		72
Lead	ug/L		12600
Selenium	ug/L		50 U
Silver	ug/L		25 U

CHAIN OF CUSTODY RECORD
ENVIRONMENTAL PROTECTION AGENCY REGION VII

ACTIVITY LEADER(Print)	NAME OF SURVEY OR ACTIVITY	DATE OF COLLECTION (DAY / MONTH / YEAR)	SHEET
R. Wenner	#7449	4-5 / 04 / 17	1 of 1

CONTENTS OF SHIPMENT

SAMPLE NUMBER	TYPE OF CONTAINERS: CUBITAINER	1L Plastic BOTTLE	1L W-M BOTTLE	Bag BOTTLE	VOA SET (2 VIALS EA)	SAMPLED MEDIA: water	soil	sediment	dust	other glass	RECEIVING LABORATORY REMARKS/OTHER INFORMATION (condition of samples upon receipt, other sample numbers, etc.)
	NUMBERS OF CONTAINERS PER SAMPLE NUMBER										
7449-1				1						✓	
2				1						✓	
3			1				✓				
4			1				✓				
5			1				✓				
6			1				✓				All sample tags completed w/ pen that bled, could not see date/time of sample collection @ SR. Discussed w/ PM + sampler @ SR. ☆ 4/6/17
6FD			1				✓				
7				1						✓	
103				1						✓	
104				1						✓	
105FB				1						✓	
106				1						✓	
107				1						✓	
201		1				✓					
		✓ Rec'd 500ml for all analyses 4/6/17									Tags, COC + field sheets corrected @ SR to show FD + FB samples. ☆ 4/6/17
											Cl. Temp. Rec'd bet. 0-4° 4/6/17

DESCRIPTION OF SHIPMENT

14 PIECE(S) CONSISTING OF _____ BOX(ES)

1 ICE CHEST(S): OTHER _____

MODE OF SHIPMENT

____ COMMERCIAL CARRIER _____

____ COURIER

✓ SAMPLER CONVEYED _____ (SHIPPING DOCUMENT NUMBER)

PERSONNEL CUSTODY RECORD

RELINQUISHED BY (SAMPLER)	DATE	TIME	RECEIVED BY	REASON FOR CHANGE OF CUSTODY
Rebecca Wenner ☐ SEALED UNSEALED ☐	4/6/2017	1051	Nicole Robley ☐ SEALED UNSEALED ☐	Analy
RELINQUISHED BY ☐ SEALED UNSEALED ☐	DATE	TIME	RECEIVED BY ☐ SEALED UNSEALED ☐	REASON FOR CHANGE OF CUSTODY
RELINQUISHED BY ☐ SEALED UNSEALED ☐	DATE	TIME	RECEIVED BY ☐ SEALED UNSEALED ☐	REASON FOR CHANGE OF CUSTODY

7-EPA-9262(Revised 5/85)

*U.S. GPO: 2002-756-917/40053

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7449 **Sample Number:** 1 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7449-1-Steuben

Project ID: RWRECYCLE **Project Manager:** Rebecca Wenner
Project Desc: Recycletronics - RCRA sampling
City: Sioux City **State:** Iowa
Program: RCRA Enforcement

Location Desc: Soil sample

Storet ID: _____ **External Sample Number:** _____

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 04/04/17 11:10
Longitude: ___ ___ ___ **End:** 04/04/17 11:12

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 8 oz glass	4 Deg C	28	Days	1 Mercury in Soil or Sediment
1 - 8 oz glass	4 Deg C	180	Days	1 Total Metals Analysis of TCLP Metals in Soil by ICP-AES
1 - 8 oz glass	4 Deg C	180	Days	1 TCLP Metals in Soil
1 - 8 oz glass	None	28	Days	1 TCLP Mercury in Soil
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Funnel glass - red + black
1220 Steuben
Southwest side of the ramp (outside)
Sample taken from 1 open box (Gayloard)

7449-1ST Lead (sample) Sample # 7449-1-Steuben
XRF = 199.7K + 231.5K lead

Sample Collected By: RW/EPA

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7449 **Sample Number:** 2 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7449-2-Steuben

Project ID: RWRECYCLE **Project Manager:** Rebecca Wenner
Project Desc: Recycletronics - RCRA sampling
City: Sioux City **State:** Iowa
Program: RCRA Enforcement

Location Desc: Soil sample

Storet ID: _____ **External Sample Number:** _____

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 04/04/17 11:19
Longitude: ___ ___ ___ **End:** 04/04/17 11:21

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 8 oz glass	4 Deg C	28	Days	1 Mercury in Soil or Sediment
1 - 8 oz glass	4 Deg C	180	Days	1 Total Metals Analysis of TCLP Metals in Soil by ICP-AES
1 - 8 oz glass	4 Deg C	180	Days	1 TCLP Metals in Soil
1 - 8 oz glass	None	28	Days	1 TCLP Mercury in Soil
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Panel glass
1220 Steuben
Southwest side of the ramp (outside)
Sample taken from 1 open box (Gaylord)
7449 ST Panel glass Sample# 7449-2-Steuben
XRF: 359ppm + 333ppm Lead

Sample Collected By: RW/EPA

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7449 **Sample Number:** 3 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7449-3-background

Project ID: RWRECYCLE **Project Manager:** Rebecca Wenner
Project Desc: Recycletronics - RCRA sampling
City: Sioux City **State:** Iowa
Program: RCRA Enforcement

Location Desc: Soil sample

Storet ID: _____ **External Sample Number:** _____

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 04/04/17 12:45
Longitude: ___ ___ ___ **End:** 04/04/17 12:46

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 8 oz glass	4 Deg C	28	Days	1 Mercury in Soil or Sediment
1 - 8 oz glass	4 Deg C	180	Days	1 Total Metals Analysis of TCLP Metals in Soil by ICP-AES
1 - 8 oz glass	4 Deg C	180	Days	1 TCLP Metals in Soil
1 - 8 oz glass	None	28	Days	1 TCLP Mercury in Soil
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A) Background (7449-3-background)
Raymond Park 24th + G Street
Sioux City, NE
Low moisture dark brown soil
XRF = 21 ppm

Sample Collected By: RW/EPA

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7449 **Sample Number:** 4 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7449-4-G Street

Project ID: RWRECYCLE **Project Manager:** Rebecca Wenner
Project Desc: Recycletronics - RCRA sampling
City: Sioux City **State:** Iowa
Program: RCRA Enforcement

Location Desc: Soil sample

Storet ID: _____ **External Sample Number:** _____

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 04/04/17 13:43
Longitude: ___ ___ ___ **End:** 04/04/17 13:46

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 8 oz glass	4 Deg C	28	Days	1 Mercury in Soil or Sediment
1 - 8 oz glass	4 Deg C	180	Days	1 Total Metals Analysis of TCLP Metals in Soil by ICP-AES
1 - 8 oz glass	4 Deg C	180	Days	1 TCLP Metals in Soil
1 - 8 oz glass	None	28	Days	1 TCLP Mercury in Soil
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

2301 G Street
79 inches from the NW corner of the pile
Loose/moist light brown Soil

7449-4-G street (Sample)
XRF - 531 ppM Lead

Sample Collected By: RW/EPA

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7449 **Sample Number:** 5 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7449-5-G Street

Project ID: RWRECYCLE **Project Manager:** Rebecca Wenner
Project Desc: Recycletronics - RCRA sampling
City: Sioux City **State:** Iowa
Program: RCRA Enforcement

Location Desc: Soil sample

Storet ID: _____ **External Sample Number:** _____

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 04/04/17 13:57
Longitude: ___ ___ ___ **End:** 04/04/17 14:00

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 8 oz glass	4 Deg C	28	Days	1 Mercury in Soil or Sediment
1 - 8 oz glass	4 Deg C	180	Days	1 Total Metals Analysis of TCLP Metals in Soil by ICP-AES
1 - 8 oz glass	4 Deg C	180	Days	1 TCLP Metals in Soil
1 - 8 oz glass	None	28	Days	1 TCLP Mercury in Soil
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

2301 G Street
12 Feet Northeast corner of the pile
7449-5-G street (Sample)
MM 04/04/17
XRF- ~~316~~ 3263 ppm Lead

Dark brown/sandy + loose soil

Sample Collected By: RW/EPA

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7449 **Sample Number:** 6 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7449-6-G Street

Project ID: RWRECYCLE **Project Manager:** Rebecca Wenner
Project Desc: Recycletronics - RCRA sampling
City: Sioux City **State:** Iowa
Program: RCRA Enforcement

Location Desc: Soil sample

Storet ID: _____ **External Sample Number:** _____

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	04/04/17	14:11
Longitude: ___ ___ ___	**End:**	04/04/17	14:17

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 8 oz glass	4 Deg C	28	Days	1 Mercury in Soil or Sediment
1 - 8 oz glass	4 Deg C	180	Days	1 Total Metals Analysis of TCLP Metals in Soil by ICP-AES
1 - 8 oz glass	4 Deg C	180	Days	1 TCLP Metals in Soil
1 - 8 oz glass	None	28	Days	1 TCLP Mercury in Soil
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

2301 G Street
16 Feet east from Sample 7449-5-G street
More Sediment / less sandy
dark brown Soil

XRF - 3758 ppm Lead
Sample 7449-6-G Street

Sample Collected By: RW/EPA

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7449 **Sample Number:** ~~101~~ 6 **QC Code:** FD **Matrix:** Solid **Tag ID:** 7449-~~101~~ 6-FD

Project ID: RWRECYCLE **Project Manager:** Rebecca Wenner
Project Desc: Recycletronics - RCRA sampling
City: Sioux City **State:** Iowa
Program: RCRA Enforcement

Location Desc: Glass sample

Storet ID: _____ **External Sample Number:** _____

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	04/04/17	14:11
Longitude: ___ ___ ___	**End:**	04/04/17	14:17

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 8 oz glass	4 Deg C	28	Days	1 Mercury in Soil or Sediment
1 - 8 oz glass	4 Deg C	180	Days	1 Total Metals Analysis of TCLP Metals in Soil by ICP-AES
1 - 8 oz glass	4 Deg C	180	Days	1 TCLP Metals in Soil
1 - 8 oz glass	None	28	Days	1 TCLP Mercury in Soil
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

2301 G Street
16 Feet east from Sample 7449-5-G street
more sediment //less sandy
dark brown soil
XRF - 3758 ppm Lead
Sample 7449-6-FD

Sample Collected By: RW/EPA

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7449 **Sample Number:** ~~102~~ 7 RW **QC Code:** __ **Matrix:** Solid **Tag ID:** 7449-~~102~~ 7-~~G Street~~

Project ID: RWRECYCLE **Project Manager:** Rebecca Wenner
Project Desc: Recycletronics - RCRA sampling
City: Sioux City **State:** Iowa
Program: RCRA Enforcement

Location Desc: Glass sample

Storet ID: _____ **External Sample Number:** _____

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	04/04/17	14:46
Longitude: ___ ___ ___	**End:**	04/04/17	14:49

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 8 oz glass	4 Deg C	28	Days	1 Mercury in Soil or Sediment
1 - 8 oz glass	4 Deg C	180	Days	1 Total Metals Analysis of TCLP Metals in Soil by ICP-AES
1 - 8 oz glass	4 Deg C	180	Days	1 TCLP Metals in Soil
1 - 8 oz glass	None	28	Days	1 TCLP Mercury in Soil
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A) 2301 G-Street
Glass samples from pile
Dark and red glass
Sample# 7449-7-G street
XRF= 158.7K + 227.1K Lead

Sample Collected By: RW/EPA

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7449 **Sample Number:** 103 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7449-103-~~Foundry~~

Project ID: RWRECYCLE **Project Manager:** Rebecca Wenner
Project Desc: Recycletronics - RCRA sampling
City: Sioux City **State:** Iowa
Program: RCRA Enforcement

Location Desc: Glass sample

Storet ID: _____ **External Sample Number:** _____

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 04/04/17 15:40
Longitude: ___ ___ ___ **End:** 04/04/17 15:48

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 8 oz glass	4 Deg C	28	Days	1 Mercury in Soil or Sediment
1 - 8 oz glass	4 Deg C	180	Days	1 Total Metals Analysis of TCLP Metals in Soil by ICP-AES
1 - 8 oz glass	4 Deg C	180	Days	1 TCLP Metals in Soil
1 - 8 oz glass	None	28	Days	1 TCLP Mercury in Soil
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A) Foundry Site (1300 Foundry Road)
Glass pieces from pile
Muddy/clear tred glass
XRF - 17.5K Lead
~~26~~ 27.6K
Mn 04/04/17 80ppm
233.0K
1822ppm
263.0K

Sample Collected By: RW/EPA

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7449 **Sample Number:** 104 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7449-104-~~Akron~~

Project ID: RWRECYCLE **Project Manager:** Rebecca Wenner
Project Desc: Recycletronics - RCRA sampling
City: Sioux City **State:** Iowa
Program: RCRA Enforcement

Location Desc: Glass sample

Storet ID: _____ **External Sample Number:** _____

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 04/04/17 17:39
Longitude: ___ ___ ___ **End:** 04/04/17 17:40

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 8 oz glass	4 Deg C	28	Days	1 Mercury in Soil or Sediment
1 - 8 oz glass	4 Deg C	180	Days	1 Total Metals Analysis of TCLP Metals in Soil by ICP-AES
1 - 8 oz glass	4 Deg C	180	Days	1 TCLP Metals in Soil
1 - 8 oz glass	None	28	Days	1 TCLP Mercury in Soil
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A) Akron, Iowa
Glass Sample
Black glass
Sample # 7449-104-Akron
XRF= 273.2K

Sample Collected By: RW/EPA

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7449 **Sample Number:** 105 **QC Code:** FB **Matrix:** Solid **Tag ID:** 7449-105 ~~Blank~~ FB

Project ID: RWRECYCLE **Project Manager:** Rebecca Wenner
Project Desc: Recycletronics - RCRA sampling
City: Sioux City **State:** Iowa
Program: RCRA Enforcement

Location Desc: Glass sample

Storet ID: _____ **External Sample Number:** _____

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 04/04/17 18:40
Longitude: ___ ___ ___ **End:** 04/04/17 18:41

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 8 oz glass	4 Deg C	28	Days	1 Mercury in Soil or Sediment
1 - 8 oz glass	4 Deg C	180	Days	1 Total Metals Analysis of TCLP Metals in Soil by ICP-AES
1 - 8 oz glass	4 Deg C	180	Days	1 TCLP Metals in Soil
1 - 8 oz glass	None	28	Days	1 TCLP Mercury in Soil
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Blank

Sample Collected By: RW/EPA

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7449 **Sample Number:** 106 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7449-106-FM

Project ID: RWRECYCLE **Project Manager:** Rebecca Wenner
Project Desc: Recycletronics - RCRA sampling
City: Sioux City **State:** Iowa
Program: RCRA Enforcement

Location Desc: Glass sample

Storet ID: _____ **External Sample Number:** _____

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 04/05/17 11:30
Longitude: ___ ___ ___ **End:** 04/05/17 11:34

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 8 oz glass	4 Deg C	28	Days	1 Mercury in Soil or Sediment
1 - 8 oz glass	4 Deg C	180	Days	1 Total Metals Analysis of TCLP Metals in Soil by ICP-AES
1 - 8 oz glass	4 Deg C	180	Days	1 TCLP Metals in Soil
1 - 8 oz glass	None	28	Days	1 TCLP Mercury in Soil
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Feed Mill site
black + red coated glass
XRF = 280.9K + 267.6K (Lead)
Sample 7449-106-FM

Sample Collected By: RW/EPA

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7449 **Sample Number:** 107 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7449-107-SB

Project ID: RWRECYCLE **Project Manager:** Rebecca Wenner
Project Desc: Recycletronics - RCRA sampling
City: Sioux City **State:** Iowa
Program: RCRA Enforcement

Location Desc: Glass sample

Storet ID: _____ **External Sample Number:** _____

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 04/05/17 13:42
Longitude: ___ ___ ___ **End:** 04/05/17 13:50

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 8 oz glass	4 Deg C	28	Days	1 Mercury in Soil or Sediment
1 - 8 oz glass	4 Deg C	180	Days	1 Total Metals Analysis of TCLP Metals in Soil by ICP-AES
1 - 8 oz glass	4 Deg C	180	Days	1 TCLP Metals in Soil
1 - 8 oz glass	None	28	Days	1 TCLP Mercury in Soil
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)
Scandinavian Bldg.
red glass
XRF = 194.1K + 218.7K (lead)

Sample Collected By: RW/EPA

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7449 **Sample Number:** 201 **QC Code:** __ **Matrix:** Water **Tag ID:** 7449-201-G Street

Project ID: RWRECYCLE **Project Manager:** Rebecca Wenner
Project Desc: Recycletronics - RCRA sampling
City: Sioux City **State:** Iowa
Program: RCRA Enforcement

Location Desc: Water sample

Storet ID: _____ **External Sample Number:** _____

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	04/04/17	14:50
Longitude: ___ ___ ___	**End:**	04/04/17	15:05

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	5 mL of HNO3/L to pH<2	28	Days	1 Mercury in Water
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Total Metals Analysis of TCLP Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	None	28	Days	1 TCLP Mercury in Water
1 - 8 oz glass	4 Deg C	180	Days	1 TCLP Metals in Water

Sample Comments:

(N/A)

2301 G Street
Water Sample
6 inches east of the pile
dark brown with sediment
MH 04/06/17
7449 Sample - 7449-201-G Street

Sample Collected By: RW/EPA