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

Date: MAR - 2 2018

Subject: Transmittal of Sample Analysis Results for ASR #: 7710

Project ID: EH07RZG

Project Description: Newton County Mine Tailings - Granby subdistrict

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

To: Elizabeth Hagenmaier
SUPR/LMSE

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.

07RZ 40548863 53
0402 Superfund 03/02/18

Project Manager: Elizabeth Hagenmaier **Org:** SUPR/LMSE **Phone:** 913-551-7939

Project ID: EH07RZG **QAPP Number:** 2017051

Project Desc: Newton County Mine Tailings - Granby subdistrict

Location: Granby **State:** Missouri **Program:** Superfund

Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02 **GPRA PRC:** 000DD2

Purpose: Site Characterization

Remedial design sampling.

PM (EH) noted on the submitted ASR that it is not a part of a litigation hold activity 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
FD = Field Duplicate

Units: Specific units in which results are reported.

mg/kg = Milligrams per Kilogram

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.

ASR Number: 7710 **Sample Information Summary** **03/02/2018**

Project ID: EH07RZG **Project Desc:** Newton County Mine Tailings - Granby subdistrict

Sample No	QC Code	Matrix	Location Description	External Sample No	Start Date	Start Time	End Date	End Time	Receipt Date
1	- __	Solid	[redacted] - S#1		01/30/2018	14:02	01/30/2018	14:05	02/01/2018
2	- __	Solid	[redacted] - S#2		01/30/2018	14:14	01/30/2018	14:18	02/01/2018
3	- __	Solid	[redacted] - S#3		01/30/2018	14:34	01/30/2018	14:40	02/01/2018
3	- FD	Solid	[redacted] - S#3		01/30/2018	14:34	01/30/2018	14:40	02/01/2018
5	- __	Solid	S. Cemetery [redacted] - S#1		01/30/2018	16:05	01/30/2018	16:10	02/01/2018
6	- __	Solid	S. Cemetery- [redacted] - S#2		01/31/2018	09:30	01/31/2018	09:36	02/01/2018
6	- FD	Solid	S. Cemetery- [redacted] - S#2		01/31/2018	09:30	01/31/2018	09:36	02/01/2018
8	- __	Solid	S. Cemetery- [redacted] - S#3		01/31/2018	09:32	01/31/2018	09:34	02/01/2018
9	- __	Solid	S. Cemetery- [redacted] - S#4		01/31/2018	09:49	01/31/2018	09:51	02/01/2018
10	- __	Solid	S. Cemetery- [redacted] - S#5		01/31/2018	10:04	01/31/2018	10:11	02/01/2018
11	- __	Solid	S. Cemetery- [redacted] - S#6		01/31/2018	10:18	01/31/2018	10:23	02/01/2018
12	- __	Solid	S. Cemetery- [redacted] - S#7		01/31/2018	10:37	01/31/2018	10:40	02/01/2018
13	- __	Solid	[redacted] - S#1	ST-1a/ST-1b	01/31/2018	12:15	01/31/2018	12:20	02/01/2018
14	- __	Solid	[redacted] - S#2	ST-2a/ST-2b	01/31/2018	12:28	01/31/2018	12:33	02/01/2018
15	- __	Solid	[redacted] - S#3		01/31/2018	11:53	01/31/2018	11:55	02/01/2018
16	- __	Solid	[redacted] - S#4		01/31/2018	12:00	01/31/2018	12:06	02/01/2018
17	- __	Solid	[redacted] - S#5		01/31/2018	12:36	01/31/2018	12:38	02/01/2018
18	- __	Solid	[redacted] - S#1	MC-1a/MC-1b	01/30/2018	12:39	01/30/2018	12:44	02/01/2018
18	- FD	Solid	[redacted] - S#1	MC-1Da/MC-1Db	01/30/2018	12:39	01/30/2018	12:44	02/01/2018
20	- __	Solid	[redacted] - S#2	MC-2a/MC-2b	01/30/2018	13:05	01/30/2018	13:10	02/01/2018
21	- __	Solid	[redacted] - S#3	MC-3a/MC-3b	01/30/2018	13:18	01/30/2018	13:18	02/01/2018
22	- __	Solid	[redacted] - S#1	FID31-1a/FID31-1b	01/30/2018	13:38	01/30/2018	13:43	02/01/2018
23	- __	Solid	[redacted] - S#2	FID31-2a/FID31-2b	01/30/2018	13:55	01/30/2018	14:00	02/01/2018
24	- __	Solid	[redacted] - S#1	FID30-1a/FID30-1b	01/30/2018	14:30	01/30/2018	14:35	02/01/2018
25	- __	Solid	[redacted] - S#2	FID30-2a/FID30-2b	01/30/2018	14:49	01/30/2018	14:54	02/01/2018
26	- __	Solid	[redacted] - S#1	PR-1a/PR-1b	01/30/2018	15:48	01/30/2018	15:53	02/01/2018
27	- __	Solid	[redacted] - S#2	PR-2a/PR-2b	01/30/2018	15:59	01/30/2018	16:04	02/01/2018
28	- __	Solid	[redacted] - S#3	PR-3a/PR-3b	01/30/2018	16:08	01/30/2018	16:13	02/01/2018
29	- __	Solid	[redacted] - S#4	PR-4a/PR-4b	01/31/2018	09:20	01/31/2018	09:25	02/01/2018
30	- __	Solid	[redacted] - S#5	PR-5a/PR-5b	01/31/2018	09:31	01/31/2018	09:36	02/01/2018
31	- __	Solid	[redacted] - S#1	TA-1a/TA-1b	01/31/2018	10:29	01/31/2018	10:34	02/01/2018
32	- __	Solid	[redacted] - S#2	TA-2a/TA-2b	01/31/2018	10:45	01/31/2018	10:50	02/01/2018

ASR Number: 7710 **RLAB Approved Analysis Comments** **03/02/2018**

Project ID: EH07RZG **Project Desc** Newton County Mine Tailings - Granby subdistrict

Analysis	Comments About Results For This Analysis

1 Metals in Solids by ICP-AES

Lab: Contract Lab Program (Out-Source)

Method: CLP Statement of Work

Basis: Dry

Samples:

1-__	2-__	3-__	3-FD	5-__	6-__	6-FD
8-__	9-__	10-__	11-__	12-__	13-__	14-__
15-__	16-__	17-__	18-__	18-FD	20-__	21-__
22-__	23-__	24-__	25-__	26-__	27-__	28-__
29-__	30-__	31-__	32-__			

Comments:

ASR Number: 7710 **RLAB Approved Sample Analysis Results** **03/02/2018**

Project ID: EH07RZG **Project Desc:** Newton County Mine Tailings - Granby subdistrict

Analysis/ Analyte	Units	1-__	2-__	3-__	3-FD
1 Metals in Solids by ICP-AES					
Cadmium	mg/kg	4.3	3.3	0.62 U	0.65 U
Lead	mg/kg	311	210	94.6	80.9
Zinc	mg/kg	4990	3580	92.3	90.4

ASR Number: 7710 **RLAB Approved Sample Analysis Results** **03/02/2018**

Project ID: EH07RZG **Project Desc:** Newton County Mine Tailings - Granby subdistrict

Analysis/ Analyte	Units	5-__	6-__	6-FD	8-__
1 Metals in Solids by ICP-AES					
Cadmium	mg/kg	1.7	12.7	11.1	14.9
Lead	mg/kg	256	415	360	515
Zinc	mg/kg	1280	5100	4110	12300

ASR Number: 7710 **RLAB Approved Sample Analysis Results** **03/02/2018**

Project ID: EH07RZG **Project Desc:** Newton County Mine Tailings - Granby subdistrict

Analysis/ Analyte	Units	9-__	10-__	11-__	12-__
1 Metals in Solids by ICP-AES					
Cadmium	mg/kg	11.1	2.1	2.3	18.2
Lead	mg/kg	1450	473	879	361
Zinc	mg/kg	22500	2600	1290	12700

ASR Number: 7710 **RLAB Approved Sample Analysis Results** **03/02/2018**

Project ID: EH07RZG **Project Desc:** Newton County Mine Tailings - Granby subdistrict

Analysis/ Analyte	Units	13-__	14-__	15-__	16-__
1 Metals in Solids by ICP-AES					
Cadmium	mg/kg	2.1	0.69 U	0.70	0.65 U
Lead	mg/kg	47.3	30.6	30.8	29.6
Zinc	mg/kg	580	99.3	3100	107

ASR Number: 7710 **RLAB Approved Sample Analysis Results** **03/02/2018**

Project ID: EH07RZG **Project Desc:** Newton County Mine Tailings - Granby subdistrict

Analysis/ Analyte	Units	17-__	18-__	18-FD	20-__
1 Metals in Solids by ICP-AES					
Cadmium	mg/kg	0.72 U	41.4	28.8	52.8
Lead	mg/kg	29.1	993	976	976
Zinc	mg/kg	175	7620	18100	32400

ASR Number: 7710 **RLAB Approved Sample Analysis Results** **03/02/2018**

Project ID: EH07RZG **Project Desc:** Newton County Mine Tailings - Granby subdistrict

Analysis/ Analyte	Units	21-__	22-__	23-__	24-__
1 Metals in Solids by ICP-AES					
Cadmium	mg/kg	73.8	2.6	48.6	26.3
Lead	mg/kg	541	34.4	3510	266
Zinc	mg/kg	64200	358	20200	9930

ASR Number: 7710 **RLAB Approved Sample Analysis Results** **03/02/2018**

Project ID: EH07RZG **Project Desc:** Newton County Mine Tailings - Granby subdistrict

Analysis/ Analyte	Units	25-__	26-__	27-__	28-__
1 Metals in Solids by ICP-AES					
Cadmium	mg/kg	5.6	0.99	0.92	2.9
Lead	mg/kg	538	139	67.3	70.4
Zinc	mg/kg	3740	275	158	597

ASR Number: 7710 **RLAB Approved Sample Analysis Results** **03/02/2018**

Project ID: EH07RZG **Project Desc:** Newton County Mine Tailings - Granby subdistrict

Analysis/ Analyte	Units	29-__	30-__	31-__	32-__
1 Metals in Solids by ICP-AES					
Cadmium	mg/kg	1.1	3.9	7.3	8.4
Lead	mg/kg	9960	599	845	1270
Zinc	mg/kg	1400	1510	7710	18700

CHAIN OF CUSTODY RECORD
ENVIRONMENTAL PROTECTION AGENCY REGION VII

EPA PROJECT MANAGER (Print)	SITE OR SAMPLING EVENT	DATE OF SAMPLE COLLECTION(S)	SHEET
Elizabeth Hagenmaier	ASR #7710	1 (MONTH) 30-31 (DAY) 2018 (YEAR)	1 of 2

CONTENTS OF SHIPMENT

ASR AND SAMPLE NUMBER	TYPE OF CONTAINERS: 1 L PLASTIC BOTTLE	8 oz BOTTLE	BOTTLE	BOTTLE	VOA SET (3 VIALS EA)	SAMPLED MEDIA: WATER	SOLID	HAZ WASTE	AIR	OTHER	RECEIVING LABORATORY REMARKS OTHER INFORMATION (condition of samples upon receipt, other sample numbers, etc.)
	NUMBER(S) OF CONTAINERS PER SAMPLE NUMBER										
#7710-1		2					X				
-2		2					X				
-3		2					X				
-3FD		2					X				Field duplicate
-5		2					X				
-6		2					X				
-6FD		2					X				Field duplicate
-8		1					X				
-9		2					X				
-10							X				
-11							X				
-12							X				
-13							X				
-14							X				
-15							X				
-16							X				
-17							X				
-18							X				
-18FD							X				Field duplicate
-20							X				
-21							X				
-22							X				
-23							X				
-24							X				

* See email dated 2/9/18 in ADF for info. about IVBA jar. 2/9/18

DESCRIPTION OF SHIPMENT

32 CONTAINER(S) CONSISTING OF _____ CRATE(S)

3 ~~ICE CHEST(S)~~ OTHER boxes

MODE OF SHIPMENT

_____ COMMERCIAL CARRIER _____

_____ SAMPLER CONVEYED _____ (SHIPPING AIRBILL NUMBER)

PERSONNEL CUSTODY RECORD

RELINQUISHED BY (PM/SAMPLER)	DATE	TIME	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY
Elizabeth M Hagenmaier SEALED UNSEALED	2/1/18	1443	Nicole Rowley SEALED UNSEALED	2/1/18	1443	Analysis
Nicole Rowley SEALED UNSEALED	2/9/18	1130	[signature] SEALED UNSEALED	2/9/18	1130	IVBA samples Relinquish back to SCPA — 2/8/18
SEALED UNSEALED			SEALED UNSEALED			* See email dated 2/9/18
SEALED UNSEALED			SEALED UNSEALED			in ADF. 2/9/18

7-EPA-9262 (REV 4/17)

WHITE ORIGINAL - EPA LAB • YELLOW - EPA PROJECT MANAGER

CHAIN OF CUSTODY RECORD
ENVIRONMENTAL PROTECTION AGENCY REGION VII

EPA PROJECT MANAGER (Print)	SITE OR SAMPLING EVENT	DATE OF SAMPLE COLLECTION(S)	SHEET
Elizabeth Hagenmaier	ASR # 7710	1 (MONTH) 30-31 (DAY) 2018 (YEAR)	2 of 2

CONTENTS OF SHIPMENT

ASR AND SAMPLE NUMBER	TYPE OF CONTAINERS: 1 L PLASTIC BOTTLE	8 oz. BOTTLE	BOTTLE	BOTTLE	VOA SET (3 VIALS EA)	SAMPLED MEDIA: WATER	SOLID	HAZ WASTE	AIR	OTHER	RECEIVING LABORATORY REMARKS OTHER INFORMATION (condition of samples upon receipt, other sample numbers, etc.)
	NUMBER(S) OF CONTAINERS PER SAMPLE NUMBER										
#7710-25		2					X				
-26							X				
-27							X				
-28							X				
-29							X				
-30							X				
-31							X				
-32							X				
											Samples delivered in boxes + Okpen Pmsion

ASR complete

2/9/18

DESCRIPTION OF SHIPMENT

32 CONTAINER(S) CONSISTING OF _____ CRATE(S)

3 ~~ICE CHEST(S)~~ OTHER boxes

MODE OF SHIPMENT Metals

✓ COMMERCIAL CARRIER 2/1/18

SAMPLER CONVEYED _____ (SHIPPING AIRBILL NUMBER)

PERSONNEL CUSTODY RECORD

RELINQUISHED BY (PM/SAMPLER)	DATE	TIME	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY
[signature] SEALED UNSEALED	2/1/18	1443	Nicole Robley SEALED UNSEALED	2/1/18	1443	Analysis
Nicole Robley SEALED UNSEALED	2/9/18	1130A	[signature] SEALED UNSEALED	2/9/18	1130A	~~IPA~~ IVBA Samples Relinquish back to
SEALED UNSEALED			SEALED UNSEALED			Supp. 2/8/18 2/9/18
SEALED UNSEALED			SEALED UNSEALED			

7-EPA-9262 (REV 4/17)

WHITE ORIGINAL - EPA LAB • YELLOW - EPA PROJECT MANAGER

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

ASR Number: 7710 **Sample Number:** 1 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7710-1-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: [redacted] - S#1

External Sample Number: [redacted] S#1

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

Latitude: 36.906016 **Sample Collection: Start:** 1/30/18 14:02
Longitude: -94.246383 **End:** 1/30/18 14:05

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES
~~1 - 8 oz glass~~	~~4 Deg C~~	~~180 Days~~	~~1 Bioaccessible Lead in Soil by ICP-AES~~

Sample Comments:
(N/A)

* Deleted per email dated 2/8/18 per PM (EH) + LABS Chief (TJH). 2/8/18
All IVBA sample analysis for this ASR# 7710. 2/8/18

Sample Collected By: EH

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

ASR Number: 7710 **Sample Number:** 2 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7710-2-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: [redacted] S#2

External Sample Number: [redacted] S#2

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

Latitude: 36.905926 **Sample Collection: Start:** 1/30/19 14:14
Longitude: -94.245922 **End:** 1/30/18 14:18

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES
~~1 - 8 oz glass~~	~~4 Deg C~~	~~180 Days~~	~~1 Bioaccessible Lead in Soil by ICP-AES~~

Sample Comments:
(N/A)

Deleted. A.
2/8/18

Sample Collected By: EH

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

ASR Number: 7710 **Sample Number:** 3 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7710-3-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: [redacted] St #3

External Sample Number: [redacted] St #3

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

Latitude: 36.905186 **Sample Collection: Start:** 1/30/18 14:34
Longitude: -94.244749 **End:** 1/30/18 14:40

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES
~~1 - 8 oz glass~~	~~4 Deg C~~	180 Days	~~1 Bioaccessible Lead in Soil by ICP-AES~~

Sample Comments:
(N/A)

Deleted ☆
2/8/18

Sample Collected By: EH

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

ASR Number: 7710 **Sample Number:** ~~4~~ 3 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7710-~~4~~ 3-FD

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: [redacted] S#3 FD

External Sample Number: [redacted] S#3 FD

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

		Date	Time(24 hr)
Latitude: 36.905186	**Sample Collection: Start:**	1/30/18	14:34
Longitude: -94.244749	**End:**	1/30/18	14:40

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES
~~1 - 8 oz glass~~	~~4 Deg C~~	~~180 Days~~	~~1 Bioaccessible Lead in Soil by ICP-AES~~

Sample Comments:
(N/A)

Field duplicate of [redacted] S#3

* Deleted on 2/8/18

Sample Collected By: EH

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

ASR Number: 7710 **Sample Number:** 5 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7710-5-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: S. Cemetery - [redacted] S#1

External Sample Number: [redacted] S#1

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

Latitude: 36.905084 **Sample Collection: Start:** 1/30/18 16:05
Longitude: -94.259622 **End:** 1/30/18 16:10

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES
~~1 - 8 oz glass~~	~~4 Deg C~~	~~180 Days~~	~~1 Bioaccessible Lead in Soil by ICP-AES~~

Sample Comments:
(N/A)

* Deleted
2/8/18

Sample Collected By: EH

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

ASR Number: 7710 **Sample Number:** 6 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7710-6-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: S. Cemetery - [redacted] St#2

External Sample Number: [redacted] / S. Cemetery St#2

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

		Date	Time(24 hr)
Latitude: 36.904636	**Sample Collection: Start:**	1/31/18	9:30
Longitude: -94.257634	**End:**	1/31/18	9:36

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES
~~1 - 8 oz glass~~	~~4 Deg C~~	~~180 Days~~	~~1 Bioaccessible Lead in Soil by ICP-AES~~

Sample Comments:

(N/A)

* Deleted in 2/8/18

Sample Collected By: EH

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

ASR Number: 7710 **Sample Number:** ~~7~~ 6 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7710-~~7~~ 6-FD

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: S. Cemetery - [redacted] S#2 FD

External Sample Number: [redacted]/S. Cemetery S#2 FD

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

Latitude: 36.904636 **Sample Collection: Start:** 1/31/18 9:30
Longitude: -94.257634 **End:** 1/31/18 9:36

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES
~~1 - 8 oz glass~~	~~4 Deg C~~	~~180 Days~~	~~1 Bioaccessible Lead in Soil by ICP-AES~~

Sample Comments:
(N/A)

Field duplicate of S. Cemetery - [redacted] S#2

* Deleted. 2/8/18

Sample Collected By: EH

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

ASR Number: 7710 **Sample Number:** 8 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7710-8-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: S. Cemetery - [redacted] S#3

External Sample Number: [redacted] / S. Cemetery S#3

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

		Date	Time(24 hr)
Latitude: 36.904885	**Sample Collection: Start:**	1/31/18	9:32
Longitude: -94.257583	**End:**	1/31/18	9:34

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES
~~1 - 8 oz glass~~	~~4 Deg C~~	~~180 Days~~	~~1 Bioaccessible Lead in Soil by ICP-AES~~

Deleted

Sample Comments:

(N/A) No IVBA sample for S#3

2/1/18

Sample Collected By: EH

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

ASR Number: 7710 **Sample Number:** 9 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7710-9-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: S. Cemetery - [redacted] S# 4

External Sample Number: [redacted] / S. Cemetery S# 4

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

Latitude: 36.904989 **Sample Collection: Start:** 1/31/18 9:49
Longitude: -94.257686 **End:** 1/31/18 9:51

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES
~~1 - 8 oz glass~~	~~4 Deg C~~	~~180 Days~~	~~1 Bioaccessible Lead in Soil by ICP-AES~~

Sample Comments:
(N/A)

Deleted 2/8/18

Sample Collected By: EH

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

ASR Number: 7710 **Sample Number:** 10 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7710-10-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: S. Cemetery - [redacted] S#5

External Sample Number: [redacted] / S. Cemetery S#5

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

		Date	Time(24 hr)
Latitude: 36.905316	**Sample Collection: Start:**	1/31/18	10:04
Longitude: -94.258233	**End:**	1/31/18	10:11

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES
~~1 - 8 oz glass~~	~~4 Deg C~~	~~180 Days~~	~~1 Bioaccessible Lead in Soil by ICP-AES~~

Sample Comments:

(N/A)

* Deleted
2/8/18

Sample Collected By: EH

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

ASR Number: 7710 **Sample Number:** 11 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7710-11-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: S. Cemetery - ~~S#~~ [redacted] S#6

External Sample Number: [redacted] / S. Cemetery S#6

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

Latitude: 36.905362 **Sample Collection: Start:** 1/31/18 10:18
Longitude: -94.258443 **End:** 1/31/18 10:23

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES
~~1 - 8 oz glass~~	~~4 Deg C~~	~~180 Days~~	~~1 Bioaccessible Lead in Soil by ICP-AES~~

Sample Comments:
(N/A)

☆ Deleted 2/8/18

Sample Collected By: EH

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

ASR Number: 7710 **Sample Number:** 12 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7710-12-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: S. Cemetery - [redacted] S#7

External Sample Number: [redacted]/S. Cemetery S#7

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

			Date	Time(24 hr)
Latitude:	36.905425	**Sample Collection: Start:**	1/31/18	10:37
Longitude:	-94.25905	**End:**	1/31/18	10:40

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES
~~1 - 8 oz glass~~	~~4 Deg C~~	~~180 Days~~	~~1 Bioaccessible Lead in Soil by ICP-AES~~

Sample Comments:

(N/A)

Deleted. 2/8/18

Sample Collected By: EH

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

ASR Number: 7710 **Sample Number:** 13 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7710-13-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: [redacted] ST# 1

External Sample Number: ST-1a / ST-1b

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

Latitude: 36.907655 **Sample Collection: Start:** 1/31/18 12:15
Longitude: -94.283827 **End:** 1/31/18 12:20

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES
~~1 - 8 oz glass~~	~~4 Deg C~~	~~180 Days~~	~~1 Bioaccessible Lead in Soil by ICP-AES~~

Sample Comments:
(N/A)

Deleted.
2/8/18

Sample Collected By: EH

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

ASR Number: 7710 **Sample Number:** 14 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7710-14-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: [redacted] S#2

External Sample Number: ST-2a / ST-2b

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

		Date	Time(24 hr)
Latitude: 36.907455	**Sample Collection: Start:**	1/31/18	12:29
Longitude: -94.283334	**End:**	1/31/18	12:33

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES
~~1 - 8 oz glass~~	~~4 Deg C~~	~~180 Days~~	~~1 Bioaccessible Lead in Soil by ICP-AES~~

Sample Comments:

(N/A)

* Deleted. 2/8/18

Sample Collected By: EH

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

ASR Number: 7710 **Sample Number:** 15 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7710-15-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: [redacted] S#3

External Sample Number: [redacted] S#3

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

Latitude: 36.909359 **Sample Collection: Start:** 1/31/18 11:53
Longitude: -94.28406 **End:** 1/31/18 11:55

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES
~~1 - 8 oz glass~~	~~4 Deg C~~	~~180 Days~~	~~1 Bioaccessible Lead in Soil by ICP-AES~~

Sample Comments:
(N/A)

* Deleted 2/8/18

Sample Collected By: EH

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

ASR Number: 7710 **Sample Number:** 16 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7710-16-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: [redacted] S#4

External Sample Number: [redacted] S#4

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

		Date	Time(24 hr)
Latitude: 36.90894	**Sample Collection: Start:**	1/31/18	12:00
Longitude: -94.283548	**End:**	1/31/18	12:06

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES
~~1 - 8 oz glass~~	~~4 Deg C~~	~~180 Days~~	~~1 Bioaccessible Lead in Soil by ICP-AES~~

Sample Comments:

(N/A)

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Sample Collected By: EH

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

ASR Number: 7710 **Sample Number:** 17 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7710-17-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: [redacted] S#5

External Sample Number: [redacted] S#5

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

		Date	Time(24 hr)
Latitude: 36.910012	**Sample Collection: Start:**	1/31/18	12:36
Longitude: -94.284176	**End:**	1/31/18	12:38

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES
~~1 - 8 oz glass~~	~~4 Deg C~~	~~180 Days~~	~~1 Bioaccessible Lead in Soil by ICP-AES~~

Sample Comments:
(N/A)

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2/8/18

Sample Collected By: EH

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

ASR Number: 7710 **Sample Number:** 18 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7710-18-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: [redacted] S#1

External Sample Number: [redacted]-1a/[redacted]-1b

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

Latitude: 36.91243 **Sample Collection: Start:** 1/30/18 12:39
Longitude: -94.251642 **End:** 1/30/18 12:44

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES
~~1 - 8 oz glass~~	~~4 Deg C~~	~~180 Days~~	~~1 Bioaccessible Lead in Soil by ICP-AES~~

Sample Comments:

(N/A)

Deleted 2/8/18

Sample Collected By: EH

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

ASR Number: 7710 **Sample Number:** ~~19~~ 18 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7710-~~19~~ 18-FD

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: [redacted] S#1 FD

External Sample Number: [redacted]-1Da/[redacted]-1Db

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

Latitude: 36.91243 **Sample Collection: Start:** 1/30/18 12:39
Longitude: -94.251642 **End:** 1/30/18 12:44

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES
~~1 - 8 oz glass~~	~~4 Deg C~~	~~180 Days~~	~~1 Bioaccessible Lead in Soil by ICP-AES~~

Sample Comments:
(N/A)

Field duplicate of [redacted] S#1

Deleted 2/8/18

Sample Collected By: EH

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

ASR Number: 7710 **Sample Number:** 20 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7710-20-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: [redacted] S#2

External Sample Number: [redacted]-2a/[redacted]-2b

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

Latitude: 36.912128 **Sample Collection: Start:** 1/30/18 13:05
Longitude: -94.251702 **End:** 1/30/18 13:10

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES
~~1 - 8 oz glass~~	~~4 Deg C~~	~~180 Days~~	~~1 Bioaccessible Lead in Soil by ICP-AES~~

Sample Comments:
(N/A)

☆ Deleted
2/8/18

Sample Collected By: EH

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

ASR Number: 7710 **Sample Number:** 21 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7710-21-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: [redacted] S#3

External Sample Number: [redacted]-3a/[redacted]-3b

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

Latitude: 36.912347 **Sample Collection: Start:** 1/30/18 13:18
Longitude: -94.251009 **End:** 1/30/18 13:18

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES
~~1 - 8 oz glass~~	~~4 Deg C~~	~~180 Days~~	~~1 Bioaccessible Lead in Soil by ICP-AES~~

Sample Comments:
(N/A)

Deleted
2/18/18

Sample Collected By: EH

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

ASR Number: 7710 **Sample Number:** 22 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7710-22-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: [redacted]. S#1

External Sample Number: FID31-1a/FID31-1b

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

		Date	Time(24 hr)
Latitude: 35.913252	**Sample Collection: Start:**	1/30/18	13:38
Longitude: -94.250197	**End:**	1/30/18	13:43

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES
~~1 - 8 oz glass~~	~~4 Deg C~~	~~180 Days~~	~~1 Bioaccessible Lead in Soil by ICP-AES~~

Sample Comments:

(N/A)

Deleted
2/8/18

Sample Collected By: EH

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

ASR Number: 7710 **Sample Number:** 23 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7710-23-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: [redacted] S# 2

External Sample Number: FID 31 2a / FID 31 2b

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

Latitude: 35.914018 **Sample Collection: Start:** 1/30/18 13:55
Longitude: -94.250359 **End:** 1/30/18 14:00

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES
~~1 - 8 oz glass~~	~~4 Deg C~~	~~180 Days~~	~~1 Bioaccessible Lead in Soil by ICP-AES~~

Sample Comments:
(N/A)

Deleted
2/8/18

Sample Collected By: EH

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

ASR Number: 7710 **Sample Number:** 24 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7710-24-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: [redacted] S#1

External Sample Number: FID 30 1a / FID 30 1b

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

		Date	Time(24 hr)
Latitude: 35.912978	**Sample Collection: Start:**	1/30/18	14:30
Longitude: 94.249466	**End:**	1/30/18	14:35

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES
~~1 - 8 oz glass~~	~~4 Deg C~~	~~180 Days~~	~~1 Bioaccessible Lead in Soil by ICP-AES~~

Sample Comments:

(N/A)

Deleted 2/8/18

Sample Collected By: EH

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

ASR Number: 7710 **Sample Number:** 25 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7710-25-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: [redacted] S#2

External Sample Number: FID 3024 / FID 3025

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

			Date	Time(24 hr)
Latitude:	35.91265 ~~470~~	**Sample Collection: Start:**	1/30/18	14:49
Longitude:	-94.247757	**End:**	1/30/18	14:54

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES
~~1 - 8 oz glass~~	~~4 Deg C~~	~~180 Days~~	~~1 Bioaccessible Lead in Soil by ICP-AES~~

Sample Comments:

(N/A)

* Deleted. 2/8/18

Sample Collected By: EH

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

ASR Number: 7710 **Sample Number:** 26 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7710-26-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: [redacted] S#1

External Sample Number: [redacted] 1a / [redacted] 1b

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

		Date	Time(24 hr)
Latitude: 36.907502	**Sample Collection: Start:**	1/30/18	15:48
Longitude: -94.231401	**End:**	1/30/18	15:53

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES
~~1 - 8 oz glass~~	~~4 Deg C~~	~~180 Days~~	~~1 Bioaccessible Lead in Soil by ICP-AES~~

Sample Comments:

(N/A)

Deleted on 2/8/18

Sample Collected By: EH

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

ASR Number: 7710 **Sample Number:** 27 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7710-27-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: [redacted] St#2

External Sample Number: [redacted] 2a / [redacted] 2b

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

Latitude: 36.907610 **Sample Collection: Start:** 1/30/18 15:59
Longitude: -94.230851 **End:** 1/30/18 16:04

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES
~~1 - 8 oz glass~~	4 Deg C	180 Days	~~1 Bioaccessible Lead in Soil by ICP-AES~~

Sample Comments:
(N/A)

Deleted in 2/8/18

Sample Collected By: EH

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

ASR Number: 7710 **Sample Number:** 28 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7710-28-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: [redacted] S# 3

External Sample Number: [redacted] 3a / [redacted] 3b

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

		Date	Time(24 hr)
Latitude: 36.907030	**Sample Collection: Start:**	1/30/18	16:08
Longitude: -94.230854	**End:**	1/30/18	16:13

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES
~~1 - 8 oz glass~~	~~4 Deg C~~	~~180 Days~~	~~1 Bioaccessible Lead in Soil by ICP-AES~~

Sample Comments:

(N/A)

* Deleted. 2/8/18

Sample Collected By: EH

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

ASR Number: 7710 **Sample Number:** 29 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7710-29-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: [redacted] St#4

External Sample Number: [redacted]-4a / [redacted]-4b

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

Latitude: 36.906798 **Sample Collection: Start:** 1/31/18 ~~36~~ 9:20
Longitude: -94.231164 **End:** 1/31/18 9:25

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES
~~1 - 8 oz glass~~	~~4 Deg C~~	~~180 Days~~	~~1 Bioaccessible Lead in Soil by ICP-AES~~

Sample Comments:

(N/A)

Deleted. 2/8/18

Sample Collected By: EH

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

ASR Number: 7710 **Sample Number:** 30 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7710-30-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: [redacted] ~~S#4~~ S#5

External Sample Number: [redacted]-~~4~~5a | [redacted]-~~4~~5b

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

		Date	Time(24 hr)
Latitude: 36.906492	**Sample Collection: Start:**	1/31/18	9:~~30~~ 31
Longitude: -94.230986	**End:**	1/31/18	9:~~25~~ 36

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES
~~1 - 8 oz glass~~	~~4 Deg C~~	~~180 Days~~	~~1 Bioaccessible Lead in Soil by ICP-AES~~

Sample Comments:

(N/A)

Deleted. 2/8/18

Sample Collected By: EH

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

ASR Number: 7710 **Sample Number:** 31 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7710-31-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: [redacted] S#1

External Sample Number: [redacted]-1a / [redacted]-1b

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

		Date	Time(24 hr)
Latitude: 36.908182	**Sample Collection: Start:**	1/31/18	10:29
Longitude: -94.259861	**End:**	1/31/18	10:34

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES
~~1 - 8 oz glass~~	~~4 Deg C~~	~~180 Days~~	~~1 Bioaccessible Lead in Soil by ICP-AES~~

Sample Comments:

(N/A)

* Deleted. 2/8/18

Sample Collected By: EH

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

ASR Number: 7710 **Sample Number:** 32 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7710-32-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: [redacted] S# 2

External Sample Number: [redacted]2a/[redacted]-2b

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

		Date	Time(24 hr)
Latitude: 36.907450	**Sample Collection: Start:**	1/31/18	10:45
Longitude: -94.260104	**End:**	1/31/18	10:50

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES
~~1 - 8 oz glass~~	~~4 Deg C~~	~~180 Days~~	~~1 Bioaccessible Lead in Soil by ICP-AES~~

Sample Comments:

(N/A)

Deleted in 2/8/18

Sample Collected By: EH

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

Date: MAR 29 2017

Subject: Transmittal of Sample Analysis Results for ASR #: 7372

Project ID: EH07RZG

Project Description: Newton County Mine Tailings - Granby subdistrict

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

To: Elizabeth Hagenmaier
SUPR/LMSE

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.

07RZ 40532542 53
Superfund

0002 3/29/17

Project Manager: Elizabeth Hagenmaier **Org:** SUPR/LMSE **Phone:** 913-551-7939

Project ID: EH07RZG **QAPP Number:** 2017051

Project Desc: Newton County Mine Tailings - Granby subdistrict

Location: Granby **State:** Missouri **Program:** Superfund

Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

GPRA PRC: 303DD2

Purpose: Site Characterization

Subdistrict #2 supplemental sampling.

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
FD = Field Duplicate

Units: Specific units in which results are reported.

% = Percent
mg/kg = Milligrams per Kilogram

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.
J = The identification of the analyte is acceptable; the reported value is an estimate.

ASR Number: 7372 **Sample Information Summary** **03/29/2017**

Project ID: EH07RZG **Project Desc:** Newton County Mine Tailings - Granby subdistrict

Sample No	QC Code	Matrix	Location Description	External Sample No	Start Date	Start Time	End Date	End Time	Receipt Date
1	- __	Solid	West of Granby - [redacted] - S. of Tower Rd	PT-1 B	02/13/2017	12:32	02/13/2017	12:32	02/23/2017
2	- __	Solid	West of Granby - [redacted] - S. of Tower Rd	PT-1 S	02/13/2017	12:32	02/13/2017	12:32	02/23/2017
3	- __	Solid	West of Granby - [redacted] - S. of Tower Rd	PT-2 S	02/13/2017	12:35	02/13/2017	12:35	02/23/2017
3	- FD	Solid	West of Granby - [redacted] - S. of Tower Rd	PT-2 FD S	02/13/2017	12:35	02/13/2017	12:35	02/23/2017
4	- __	Solid	West of Granby - [redacted] - S. of Tower Rd	PT-2 B	02/13/2017	12:35	02/13/2017	12:35	02/23/2017
6	- __	Solid	West of Granby - [redacted] - S. of Tower Rd	PT-3 S	02/13/2017	12:44	02/13/2017	12:44	02/23/2017
6	- FD	Solid	West of Granby - [redacted] - S. of Tower Rd	PT-3 FD S	02/13/2017	12:44	02/13/2017	12:44	02/23/2017
8	- __	Solid	West of Granby - [redacted] - S. of Tower Rd	PT-4 S	02/13/2017	12:46	02/13/2017	12:46	02/23/2017
9	- __	Solid	West of Granby - [redacted] - S. of Tower Rd	PT-5 S	02/13/2017	12:50	02/13/2017	12:50	02/23/2017
10	- __	Solid	West of Granby - [redacted] - S. of Tower Rd	PT-6 S	02/13/2017	12:54	02/13/2017	12:54	02/23/2017
11	- __	Solid	West of Granby - [redacted] - S. of Tower Rd	PT-7 S	02/13/2017	13:00	02/13/2017	13:00	02/23/2017
12	- __	Solid	West of Granby - [redacted] - S. of Tower Rd	PT-8 B	02/13/2017	13:03	02/13/2017	13:03	02/23/2017
13	- __	Solid	West of Granby - [redacted] - S. of Tower Rd	PT-8 S	02/13/2017	13:03	02/13/2017	13:03	02/23/2017
14	- __	Solid	West of Granby - [redacted] - S. of Tower Rd	PT-9 B	02/13/2017	13:09	02/13/2017	13:09	02/23/2017
15	- __	Solid	West of Granby - [redacted] - S. of Tower Rd	PT-9 S	02/13/2017	13:09	02/13/2017	13:09	02/23/2017
15	- FD	Solid	West of Granby - [redacted] - S. of Tower Rd	PT-9 S FD	02/13/2017	13:09	02/13/2017	13:09	02/23/2017
16	- __	Solid	SE of Granby - [redacted] - W. of Circle Dr.	R-1 B	02/13/2017	12:45	02/13/2017	12:45	02/23/2017
17	- __	Solid	SE of Granby - [redacted] - W. of Circle Dr.	R-2 B	02/13/2017	12:51	02/13/2017	12:51	02/23/2017
18	- __	Solid	SE of Granby - [redacted] - W. of Circle Dr.	R-3 B	02/13/2017	13:08	02/13/2017	13:08	02/23/2017
19	- __	Solid	SE of Granby - [redacted] - W. of Circle Dr.	R-4 B	02/13/2017	13:46	02/13/2017	13:46	02/23/2017
20	- __	Solid	SE of Granby - [redacted] - W. of Circle Dr.	R-5 B	02/13/2017	13:52	02/13/2017	13:52	02/23/2017
21	- __	Solid	SE of Granby - [redacted] Properties	TC-1 B	02/13/2017	15:00	02/13/2017	15:00	02/23/2017
22	- __	Solid	SE of Granby - [redacted] Properties	TC-2 B	02/13/2017	15:03	02/13/2017	15:03	02/23/2017
23	- __	Solid	SE of Granby - [redacted] Properties	TC-3 B	02/13/2017	15:10	02/13/2017	15:10	02/23/2017
24	- __	Solid	SE of Granby - [redacted] Properties	TC-4 B	02/13/2017	15:11	02/13/2017	15:11	02/23/2017
25	- __	Solid	SE of Granby - [redacted] Properties	TC-5 B	02/13/2017	15:30	02/13/2017	15:30	02/23/2017
26	- __	Solid	SE of Granby - [redacted] Properties	TC-6 B	02/13/2017	15:44	02/13/2017	15:44	02/23/2017

Analysis **Comments About Results For This Analysis**

1 Bioaccessible Lead in Soil by ICP-AES

Lab: Region 7 ESAT Contract Lab (In-House)

Method: EPA Region 7 RLAB Method 3122.3F BioAv

Basis: Dry

Samples:						
1-__	2-__	3-__	3-FD	4-__	6-__	6-FD
8-__	9-__	10-__	11-__	12-__	13-__	14-__
15-__	15-FD	16-__	17-__	18-__	19-__	20-__
21-__	22-__	23-__	24-__	25-__	26-__	

Comments:

1 Metals in Solids by ICP-AES

Lab: Region 7 ESAT Contract Lab (In-House)

Method: EPA Region 7 RLAB Method 3122.3F

Basis: Dry

Samples:						
1-__	2-__	3-__	3-FD	4-__	6-__	6-FD
8-__	9-__	10-__	11-__	12-__	13-__	14-__
15-__	15-FD	16-__	17-__	18-__	19-__	20-__
21-__	22-__	23-__	24-__	25-__	26-__	

Comments:
Cadmium (9.5,7.3) was J-coded in sample 1. Although the analyte in question has been positively identified in the sample, the quantitation is an estimate (J-coded) due to poor precision obtained for this analyte in the laboratory matrix spike and matrix spike duplicate.

Zinc (43,16) was J-coded in sample 1. Although the analyte in question has been positively identified in the sample, the quantitation is an estimate (J-coded) due to poor precision obtained for this analyte in the laboratory matrix spike and matrix spike duplicate.

1 Percent Solid

Lab: Region 7 ESAT Contract Lab (In-House)

Method: EPA Region 7 RLAB Method 3142.9H

Basis: N/A

Samples:						
1-__	2-__	3-__	3-FD	4-__	6-__	6-FD
8-__	9-__	10-__	11-__	12-__	13-__	14-__
15-__	15-FD	16-__	17-__	18-__	19-__	20-__
21-__	22-__	23-__	24-__	25-__	26-__	

Comments:

Analysis	Comments About Results For This Analysis
	(N/A)

ASR Number: 7372 **RLAB Approved Sample Analysis Results** **03/29/2017**

Project ID: EH07RZG **Project Desc:** Newton County Mine Tailings - Granby subdistrict

Analysis/ Analyte	Units	1-__	2-__	3-__	3-FD
1 Bioaccessible Lead in Soil by ICP-AES					
Lead, Bioaccessible	%	79.3	73.1	82.4	72.7
Lead, Total in sieved portion	mg/kg	102	156	397	407
1 Metals in Solids by ICP-AES					
Cadmium	mg/kg	1.3 J	6.0	98.9	107
Lead	mg/kg	32.0	64.7	438	471
Zinc	mg/kg	501 J	1300	5910	6140
1 Percent Solid					
Solids, percent	%	90.3	76.4	86.1	85.9

ASR Number: 7372 **RLAB Approved Sample Analysis Results** **03/29/2017**

Project ID: EH07RZG **Project Desc:** Newton County Mine Tailings - Granby subdistrict

Analysis/ Analyte	Units	4-__	6-__	6-FD	8-__
1 Bioaccessible Lead in Soil by ICP-AES					
Lead, Bioaccessible	%	83.3	76.1	73.0	72.4
Lead, Total in sieved portion	mg/kg	437	184	196	326
1 Metals in Solids by ICP-AES					
Cadmium	mg/kg	112	13.1	13.5	71.3
Lead	mg/kg	467	147	149	299
Zinc	mg/kg	6340	1760	1760	5370
1 Percent Solid					
Solids, percent	%	84.7	76.3	76.0	84.0

ASR Number: 7372 **RLAB Approved Sample Analysis Results** **03/29/2017**

Project ID: EH07RZG **Project Desc:** Newton County Mine Tailings - Granby subdistrict

Analysis/ Analyte	Units	9-__	10-__	11-__	12-__
1 Bioaccessible Lead in Soil by ICP-AES					
Lead, Bioaccessible	%	76.2	57.9	52.1	60.7
Lead, Total in sieved portion	mg/kg	124	52.2	65.8	54.9
1 Metals in Solids by ICP-AES					
Cadmium	mg/kg	7.0	1.4 U	1.4 U	1.2 U
Lead	mg/kg	91.5	46.5	68.3	41.7
Zinc	mg/kg	1000	121	365	311
1 Percent Solid					
Solids, percent	%	81.9	76.6	73.8	83.4

ASR Number: 7372 **RLAB Approved Sample Analysis Results** **03/29/2017**

Project ID: EH07RZG **Project Desc:** Newton County Mine Tailings - Granby subdistrict

Analysis/ Analyte	Units	13-__	14-__	15-__	15-FD
1 Bioaccessible Lead in Soil by ICP-AES					
Lead, Bioaccessible	%	63.0	69.0	66.3	66.9
Lead, Total in sieved portion	mg/kg	58.6	300	279	272
1 Metals in Solids by ICP-AES					
Cadmium	mg/kg	1.3 U	103	130	141
Lead	mg/kg	64.0	164	184	198
Zinc	mg/kg	313	5880	6380	6530
1 Percent Solid					
Solids, percent	%	78.3	88.3	90.0	89.4

ASR Number: 7372 **RLAB Approved Sample Analysis Results** **03/29/2017**

Project ID: EH07RZG **Project Desc:** Newton County Mine Tailings - Granby subdistrict

Analysis/ Analyte	Units	16-__	17-__	18-__	19-__
1 Bioaccessible Lead in Soil by ICP-AES					
Lead, Bioaccessible	%	71.4	98.0	61.9	51.0
Lead, Total in sieved portion	mg/kg	2450	22900	2780	3860
1 Metals in Solids by ICP-AES					
Cadmium	mg/kg	1.7 U	1.2 U	10.0	1.3 U
Lead	mg/kg	3320	59700	2670	5550
Zinc	mg/kg	9770	5700	12900	7560
1 Percent Solid					
Solids, percent	%	57.3	86.2	44.2	73.7

ASR Number: 7372 **RLAB Approved Sample Analysis Results** **03/29/2017**

Project ID: EH07RZG **Project Desc:** Newton County Mine Tailings - Granby subdistrict

Analysis/ Analyte	Units	20-__	21-__	22-__	23-__
1 Bioaccessible Lead in Soil by ICP-AES					
Lead, Bioaccessible	%	74.2	55.1	76.7	66.1
Lead, Total in sieved portion	mg/kg	380	141	7600	168
1 Metals in Solids by ICP-AES					
Cadmium	mg/kg	2.6	1.3 U	3.8	1.5 U
Lead	mg/kg	386	153	7850	177
Zinc	mg/kg	2470	837	11100	779
1 Percent Solid					
Solids, percent	%	72.7	78.2	58.9	67.6

ASR Number: 7372 **RLAB Approved Sample Analysis Results** **03/29/2017**

Project ID: EH07RZG **Project Desc:** Newton County Mine Tailings - Granby subdistrict

Analysis/ Analyte	Units	24-__	25-__	26-__
1 Bioaccessible Lead in Soil by ICP-AES				
Lead, Bioaccessible	%	70.6	55.8	62.8
Lead, Total in sieved portion	mg/kg	2140	81.3	801
1 Metals in Solids by ICP-AES				
Cadmium	mg/kg	1.7	1.4 U	1.3 U
Lead	mg/kg	2590	82.0	916
Zinc	mg/kg	10300	281	4690
1 Percent Solid				
Solids, percent	%	75.8	72.8	77.3

CHAIN OF CUSTODY RECORD
ENVIRONMENTAL PROTECTION AGENCY REGION VII

ACTIVITY LEADER(Print)	NAME OF SURVEY OR ACTIVITY	DATE OF COLLECTION (DAY / MONTH / YEAR)	SHEET
Elizabeth Hagenmaier	NCMT Supp. Sampling	13 / 2 / 2017	1 of 2

CONTENTS OF SHIPMENT

	SAMPLE NUMBER	TYPE OF CONTAINERS: CUBITAINER	8 oz BOTTLE	BOTTLE	BOTTLE	VOA SET (2 VIALS EA)	SAMPLED MEDIA: water	soil	sediment	gas	other	RECEIVING LABORATORY REMARKS/OTHER INFORMATION (condition of samples upon receipt, other sample numbers, etc.)
		NUMBERS OF CONTAINERS PER SAMPLE NUMBER										
B	7372-1		1					X				
D	7372-2		1					X				
B	7372-3		1					X				
D	7372-4		1					X				
B	7372-5 FD		1					X				
B	7372-6		1					X				
B	7372-7-FD		1					X				* Field Duplicate
B	7372-8		1					X				samples were not
	7372-9		1					X				properly labeled as noted/
	7372-10		1					X				instructed (e.g. 3+7FD,
	7372-11		1					X				6+6FD + 15+15FD).
	7372-12		1					X				RSCE corrected @ SR.
B	7372-13		1					X				+ emailed PM re: this
	7372-14		1					X				issue on 2/23/17
B	7372-15		1					X				
B	7372-16		1					X				
	7372-17		1					X				
B	7372-18		1					X				
	7372-19		1					X				
	7372-20		1					X				
	7372-21		1					X				
B	7372-22		1					X				
D	7372-23		1					X				
D	7372-24		1					X				

DESCRIPTION OF SHIPMENT	MODE OF SHIPMENT
27 PIECE(S) CONSISTING OF _____ BOX(ES)	____ COMMERCIAL CARRIER: _____
1 ICE CHEST(S); OTHER _____	____ COURIER
	X SAMPLER CONVEYED
	_____ (SHIPPING DOCUMENT NUMBER)

PERSONNEL CUSTODY RECORD

RELINQUISHED BY (SAMPLER)	DATE	TIME	RECEIVED BY	REASON FOR CHANGE OF CUSTODY
[signature] ☐ SEALED ☐ UNSEALED	2/23/17	0907	RD Wiggans ☐ SEALED ☐ UNSEALED	Rec'd at lab
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

CHAIN OF CUSTODY RECORD
ENVIRONMENTAL PROTECTION AGENCY REGION VII

ACTIVITY LEADER(Print)	NAME OF SURVEY OR ACTIVITY	DATE OF COLLECTION (DAY / MONTH / YEAR)	SHEET
Elizabeth Hagenmaier	NCMT Supp. Sampling	13 / 2 / 2017	2 of 2

CONTENTS OF SHIPMENT

SAMPLE NUMBER	TYPE OF CONTAINERS: CUBITAINER	8 oz BOTTLE	BOTTLE	BOTTLE	VOA SET (2 VIALS EA)	SAMPLED MEDIA: water	soil	sediment	dust	other	RECEIVING LABORATORY REMARKS/OTHER INFORMATION (condition of samples upon receipt, other sample numbers, etc.)
	NUMBERS OF CONTAINERS PER SAMPLE NUMBER										
B. 7372-25		1					X				
B. 7372-26		1					X				
B. 7372-27 (2015) 26		1					X				
	2/23/17										
											PM hand-delivered samples @ Room Tens, No ice + OK per PM 2/23/17

Complete

DESCRIPTION OF SHIPMENT

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

1 ICE CHEST(S); OTHER _____

MODE OF SHIPMENT

___ COMMERCIAL CARRIER _____

___ COURIER

X SAMPLER CONVEYED _____ (SHIPPING DOCUMENT NUMBER)

PERSONNEL CUSTODY RECORD

RELINQUISHED BY (SAMPLER)	DATE	TIME	RECEIVED BY	REASON FOR CHANGE OF CUSTODY
Elizabeth M Hagenmaier ☐ SEALED UNSEALED ☒	2/23/17	0907	R D Wiggans ☐ SEALED UNSEALED ☒	Rec'd at lab
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: 7372 **Sample Number:** 1 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7372-1-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: West of Granby - [redacted] - S. of Tower Rd

External Sample Number: [redacted] - 1 B

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

			Date	Time(24 hr)
Latitude: 36 54 434	**Sample Collection:**	**Start:**	2/13/17	12:32
Longitude: 94 17 878		**End:**	2/13/17	12:32

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES + Bio Pb.
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Bulk sample

Sample Collected By: EPA

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

ASR Number: 7372 **Sample Number:** 2 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7372-2-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: West of Granby - [redacted] - S. of Tower Rd.

External Sample Number: [redacted] - 1 S

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

		Date	Time(24 hr)
Latitude: 36 54 434	**Sample Collection: Start:**	2/13/17	12:32
Longitude: 94 17 878	**End:**	2/13/17	12:32

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES + Ba, Pb
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Sieved sample

Sample Collected By: EPA

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

ASR Number: 7372 **Sample Number:** 3 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7372-3-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: West of Granby - [redacted] - S. of Tower Rd.

External Sample Number: [redacted] - 2 S

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

			Date	Time(24 hr)
Latitude:	36 54 408	**Sample Collection: Start:**	2/13/17	12:35
Longitude:	94 17 862	**End:**	2/13/17	12:35

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES + Bio Pb
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Sieved sample

Sample Collected By: EPA

Sample Collection Field Sheet

US EPA Region 7
Kansas City, KS

3 4 2/23/17 3 4 EMH 2/23/17

ASR Number: 7372 **Sample Number:** 5 **QC Code:** FD **Matrix:** Solid **Tag ID:** 7372-5-FD

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: West of Granby - [redacted] - S. of Tower Rd.

External Sample Number: [redacted] - 2 FD S

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

		Date	Time(24 hr)
Latitude: 36 54 408	**Sample Collection: Start:**	2/13/17	12:35
Longitude: 94 17 862	**End:**	2/13/17	12:35

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES + Bio Pb.
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Sieved sample
Field Duplicate of PT-2 S

Sample Collected By: EPA

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

ASR Number: 7372 **Sample Number:** 4 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7372-4-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: West of Granby - [redacted] - S. of Tower Rd

External Sample Number: [redacted]-2 B

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

Latitude: 36 54 434 **Sample Collection: Start:** 2/13/17 12:35
Longitude: 94 17 862 **End:** 2/13/17 12:35

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES + Bio Pb.
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:
(N/A)
Bulk sample

Sample Collected By: EPA

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

ASR Number: 7372 **Sample Number:** 6 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7372-6-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: West of Granby - [redacted] - S. of Tower Rd.
External Sample Number: [redacted] - 3 S

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

			Date	Time(24 hr)
Latitude:	36 54 395	**Sample Collection: Start:**	2/13/17	12:44
Longitude:	94 17 043	**End:**	2/13/17	12:44

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES + Bio Pb.
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:
(N/A)
sieved sample

Sample Collected By: EPA

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

6 ✓ 2/23/17

6 FD1 2/23/17

ASR Number: 7372 **Sample Number:** ~~7~~ 6 **QC Code:** FD **Matrix:** Solid **Tag ID:** 7372-~~7~~-~~FD~~

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: West of Granby - [redacted] - S. of Tower Rd

External Sample Number: [redacted] - 3 FD S

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

			Date	Time(24 hr)
Latitude:	36 54 395	**Sample Collection: Start:**	2/13/17	12:44
Longitude:	94 17 843	**End:**	2/13/17	12:44

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES + Bio Pb.
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

sieved sample
field duplicate of PT-3 S

Sample Collected By: EPA

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

ASR Number: 7372 **Sample Number:** 8 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7372-8-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: West of Granby - [redacted] - S. of Tower Rd.
External Sample Number: [redacted]-4S

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

			Date	Time(24 hr)
Latitude:	36 54 393	**Sample Collection: Start:**	2/13/17	12:46
Longitude:	94 17 833	**End:**	2/13/17	12:46

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES + Bio Pb
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:
(N/A)
sieved sample

Sample Collected By: EPA

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

ASR Number: 7372 **Sample Number:** 9 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7372-9-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: West of Granby - [redacted] - S. on Tower Rd.
External Sample Number: [redacted] -5 S

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

			Date	Time(24 hr)
Latitude:	36 54 381	**Sample Collection: Start:**	2/13/17	12:50
Longitude:	94 17 823	**End:**	2/13/17	12:50

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES + Bio Pb.
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:
(N/A)
sieved sample

Sample Collected By: EPA

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

ASR Number: 7372 **Sample Number:** 10 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7372-10-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: West of Granby - [redacted] - S. on Tower Rd.
External Sample Number: [redacted]-6S

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

			Date	Time(24 hr)
Latitude: 36 54 392	**Sample Collection:**	**Start:**	2/13/17	12:54
Longitude: 94 17 787		**End:**	2/13/17	12:54

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES + Bio Pb.
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:
(N/A) Sieved sample

Sample Collected By: EPA

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

ASR Number: 7372 **Sample Number:** 11 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7372-11-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: West of Granby [redacted] - S. on Tower Rd.

External Sample Number: [redacted] - 7 S

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

			Date	Time(24 hr)
Latitude:	36 54 413	**Sample Collection: Start:**	2/13/17	13:00
Longitude:	94 17 778	**End:**	2/13/17	13:00

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES + Bio Pb
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Sieved sample

Sample Collected By: EPA

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

ASR Number: 7372 **Sample Number:** 12 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7372-12-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: West of Granby - [redacted] - S. on Tower Rd

External Sample Number: [redacted]-B

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

		Date	Time(24 hr)
Latitude: 36 54 434	**Sample Collection: Start:**	2/13/17	13:03
Longitude: 94 17 774	**End:**	2/13/17	13:03

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES + Bio Pb
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Bulk sample

Sample Collected By: EPA

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

ASR Number: 7372 **Sample Number:** 13 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7372-13-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: West of Granby - [redacted] - S. on Tower Rd.

External Sample Number: [redacted] - 8 S

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

		Date	Time(24 hr)
Latitude: 36 54 434	**Sample Collection: Start:**	2/13/17	13:03
Longitude: 94 17 776	**End:**	2/13/17	13:03

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES + Bio Pb
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A) Sieved sample

Sample Collected By: EPA

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

ASR Number: 7372 **Sample Number:** 14 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7372-14-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: West of Granby - [redacted] - S. on Tower Rd.

External Sample Number: [redacted] - 9 B

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

		Date	Time(24 hr)
Latitude: 36 54 445	**Sample Collection: Start:**	2/13/17	13:09
Longitude: 94 17 818	**End:**	2/13/17	13:09

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES + Bio Pb.
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Bulk sample

Sample Collected By: EPA

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

ASR Number: 7372 **Sample Number:** 15 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7372-15-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: West of Granby - [redacted] - S. on Tower Rd

External Sample Number: [redacted] - 95

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

Latitude: 36 54 445 **Sample Collection: Start:** 2/13/17 13:09
Longitude: 94 17 818 **End:** 2/13/17 13:09

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES + Bio Pb.
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Sieved sample

Sample Collected By: EPA

Sample Collection Field Sheet

US EPA Region 7
Kansas City, KS

15 2/23/17

2/23/17 15 EMH 2/23/17

ASR Number: 7372 **Sample Number:** ~~27~~ 15 **QC Code:** FD **Matrix:** Solid **Tag ID:** 7372-~~27~~ 15-~~FD~~

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: West of Granby - [redacted] - S. on Tower Rd.

External Sample Number: [redacted]-9 S FD

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

		Date	Time(24 hr)
Latitude: 36 54 44.5	**Sample Collection: Start:**	2/13/17	13:09
Longitude: 94 17 8.18	**End:**	2/13/17	13:09

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES + Bio Pb.
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Sieved sample
field duplicate of PT-9 S

#15 2/23/17

Sample Collected By: EPA

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

ASR Number: 7372 **Sample Number:** 16 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7372-16-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: SE of Granby - [redacted] Property - W. of Circle Dr.
External Sample Number: [redacted] - 1 B

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

			Date	Time(24 hr)
Latitude:	36 54 28.1	**Sample Collection: Start:**	2/13/17	12:45
Longitude:	94 14 59.8	**End:**	2/13/17	12:45

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES + Bo Pb
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:
(N/A)

Bulk sample

Sample Collected By: EPA

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

ASR Number: 7372 **Sample Number:** 17 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7372-17-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: SE of Granby - [redacted] Property - E. of Circle Dr.
External Sample Number: [redacted]-2 B

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

Latitude: 36 54 29.1 **Sample Collection: Start:** 2/13/17 12:51
Longitude: 94 14 59.8 **End:** 2/13/17 12:51

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES + Bio Pb
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Bulk sample

Sample Collected By: EPA

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

ASR Number: 7372 **Sample Number:** 18 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7372-18-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: SE of Granby - [redacted] Property - W. of Circle Dr.
External Sample Number: [redacted]-3B

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

			Date	Time(24 hr)
Latitude:	36 54 30.0	**Sample Collection: Start:**	2/13/17	13:08
Longitude:	94 14 59.7	**End:**	2/13/17	13:08

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES + Bio Pb
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:
(N/A)

Bulk sample

Sample Collected By: EPA

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

ASR Number: 7372 **Sample Number:** 19 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7372-19-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: SE of Granby - [redacted] Property - W. of Circle Dr.

External Sample Number: [redacted]-4B

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

		Date	Time(24 hr)
Latitude: 36 54. ~~30.4~~ 516	**Sample Collection: Start:**	2/13/17	13:46
Longitude: 94 14. ~~57.0~~ 955	**End:**	2/13/17	13:46

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8.oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES + Bio Pb.
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Bulk sample

Sample Collected By: EPA

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

ASR Number: 7372 **Sample Number:** 20 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7372-20-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: SE of Granby - [redacted] Property - W. of Circle Dr.

External Sample Number: [redacted]-5 B

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

Latitude: 36 54.495 **Sample Collection: Start:** 2/13/17 13:52
Longitude: 94 14.944 **End:** 2/13/17 13:52

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES + Bio Pb.
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Bulk sample

Sample Collected By: EPA

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

ASR Number: 7372 **Sample Number:** 21 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7372-21-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: SE of Granby - [redacted] Properties

External Sample Number: [redacted] - 1 B

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

Latitude: 36 54. 436 **Sample Collection: Start:** 2/13/17 15:00
Longitude: 94 15. 052 **End:** 2/13/17 15:00

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES + Bio Pb.
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Bulk sample

Sample Collected By: EPA

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

ASR Number: 7372 **Sample Number:** 22 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7372-22-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: SE of Granby - [redacted] Properties

External Sample Number: [redacted]-2 B

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

		Date	Time(24 hr)
Latitude: 36 54.419	**Sample Collection: Start:**	2/13/17	15:03
Longitude: 94 15.634	**End:**	2/13/17	15:03

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES → Bio Pb.
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Bulk sample

Sample Collected By: EPA

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

ASR Number: 7372 **Sample Number:** 23 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7372-23-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: SE of Granby - [redacted] Properties

External Sample Number: [redacted] - 3B

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

		Date	Time(24 hr)
Latitude: 36 54.423	**Sample Collection: Start:**	2/13/17	15:10
Longitude: 94 15.004	**End:**	2/13/17	15:10

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES + Bio Pb.
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Bulk sample

Sample Collected By: EPA

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

ASR Number: 7372 **Sample Number:** 24 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7372-24-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: SE of Granby - [redacted] Properties

External Sample Number: [redacted] - 4B

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

Latitude: 36 54.383 **Sample Collection: Start:** 2/13/17 15:11
Longitude: 94 15.051 **End:** 2/13/17 15:11

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES + Bio Pb.
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Bulk sample

Sample Collected By: EPA

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

ASR Number: 7372 **Sample Number:** 25 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7372-25-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: SE of Granby - [redacted] Properties

External Sample Number: [redacted]-5B

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

		Date	Time(24 hr)
Latitude: 36 54.331	**Sample Collection: Start:**	2/13/17	15:30
Longitude: 94 15.066	**End:**	2/13/17	15:30

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES + Bio Pb.
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Bulk sample

Sample Collected By: EPA

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

ASR Number: 7372 **Sample Number:** 26 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7372-26-__

Project ID: EH07RZG **Project Manager:** Elizabeth Hagenmaier
Project Desc: Newton County Mine Tailings - Granby subdistrict
City: Granby **State:** Missouri
Program: Superfund
Site Name: NEWTON COUNTY MINE TAILINGS - REMAINDER OF NEWTON COUNTY **Site ID:** 07RZ **Site OU:** 02

Location Desc: SE of Granby - [redacted] Properties

External Sample Number: [redacted] - 6 B

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

		Date	Time(24 hr)
Latitude: 36 54.372	**Sample Collection: Start:**	2/13/17	15:44
Longitude: 94 15.166	**End:**	2/13/17	15:44

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES + Bio Pb.
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Bulk sample

Sample Collected By: EPA