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ANALYTICAL REPORT

Eurofins TestAmerica, St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

Laboratory Job ID: 160-41644-1
Laboratory Sample Delivery Group: SL41644-1
Client Project/Site: I21-020/W21-004/A21-004/S21-004

For:
Central Plateau Cleanup Company LLC
PO Box 1464
Richland, Washington 99352

Attn: Heather Medley

Authorized for release by:
4/19/2021 2:29:07 PM

Jayna Awalt, Project Manager II
(314)298-8566
Jayna.Awalt@Eurofinset.com

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

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

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Case Narrative

Client: Central Plateau Cleanup Company LLC
Project/Site: I21-020/W21-004/A21-004/S21-004

Job ID: 160-41644-1
SDG: SL41644-1

Job ID: 160-41644-1

Laboratory: Eurofins TestAmerica, St. Louis

Narrative

CASE NARRATIVE

Central Plateau Cleanup Company LLC
PO Box 1464
Richland, WA 99352
April 19, 2021
Attention: Scot Fitzgerald

SDG	: SL41644-1
Number of Samples	: 10 samples
Sample Matrix	: Water
Data Deliverable	: Summary
Date SDG Closed	: April 7, 2021

II. Introduction

On April 7, 10 samples were received by Eurofins TestAmerica for analysis. The samples were received within temperature criteria. See the COC and receipt checklists for documentation of any variations on receipt conditions and temperature. Upon receipt, samples were given laboratory Ids to correspond with specific client Ids. Please refer to the Sample Summary sheets attached to this case narrative. This report is incomplete without the narrative.

The following SAFs are associated with this SDG: I21-020, W21-004, A21-004 and S21-004

III. Analytical Results/ Methodology

The analytical results for this report are presented by analytical test. Each set of data includes sample identification information, analytical results and the appropriate detection limits. All results are based upon samples as they were received, i.e. wet weight, unless otherwise noted on the data sheets. See the attached Methods Summary Form for the methods used in this SDG.

MS/MSD/Dup analysis was done per the client requirements. Analytical batches that did not contain matrix QC were analyzed with an LCS/LCS duplicate.

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

The matrix for the Method Blank and LCS is as close to the samples as can be reasonably achieved.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

The method blank (MB) z-scores associated with the associated samples are reported in the level IV raw data.

Note: For Metals analyses performed in St. Louis, per standard practice, 6020 water and soil samples are initially prepared at 2x dilution. This standard dilution does not affect reporting limits as MDL studies are also prepared in the same manner. These dilutions do not necessitate a narrative note; however, they are flagged “D” due to a limitation in the LIMS.

For solid matrices, all Metals analyses (including Hg) use a Standard Reference Material for the Laboratory Control Sample (LCS). Certificate for this source material may be obtained from TASL/TADN.

For Anion analysis, samples have been started at a 2x dilution per SMO direction. The samples are flagged accordingly with a “D” flag if sample concentration is above the MDL/RL. Non-conformance will be included in the below section only if dilution is greater than 2x.

Per SMO direction, due to the short hold times for Nitrate, Nitrite and Phosphate by IC (48 hours) as well as Hexavalent Chromium and pH analysis (24 hours), a SIR request is not needed when samples are run outside 1x hold but within 2x hold. A narrative comment will be included below if a sample is run outside the lab-specified hold time for waters.

Case Narrative

Client: Central Plateau Cleanup Company LLC
Project/Site: I21-020/W21-004/A21-004/S21-004

Job ID: 160-41644-1
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Job ID: 160-41644-1 (Continued)

Laboratory: Eurofins TestAmerica, St. Louis (Continued)

For volatile organic analysis, several analytes are considered poor performers and may not meet client QC limits. Per SMO direction, excursions outside the client's requested limits will include a non-conformance in the sections below.

IV. Definitions

BLK-	Quality Control Blank, Method Blank
LCS-	Quality Control Laboratory Control Sample, Blank Spike
DUP-	Laboratory Duplicate
MS-	Matrix Spike
MSD-	Matrix Spike Duplicate

The term "Detection Limit" used in the analytical data report refers to either the lab's standard reporting limits or contractually required reporting limits, whichever is applicable.

The following data qualifiers may be applicable to the results in this report, as appropriate.

- **B** - For inorganic analyses, the sample result is greater than the MDL but less than the RL.
- **B** - For organic analyses, Method Blank contamination. The Method Blank contains the target analyte above the MDL/RL and Method Blank is greater than 5% of the sample concentration.
- **B** - For inorganics and radiochemistry, Method Blank reported above the MDC/MDL.
- **J** - For organic analyses, the sample is estimated and less than the RL. If on Method Blank, indicates Method Blank contamination.
- **C** - For inorganic analyses, Method Blank contamination. The Method Blank contains the target analyte at a concentration above the MDL/RL and Method Blank concentration is greater than 5% of the sample concentration.
- **D** - For all analyses, the sample result was obtained from the analysis of a dilution. For ICPMS Metals analyses, per standard practice, all samples are initially prepared at a 2x dilution. This standard dilution does not affect reporting limits as MDL studies are also prepared in the same manner and will not be narrated below. Only dilutions above 2x will be narrated and considered a true dilution for these samples.
- **N** - For inorganics, the spike/spike duplicate recoveries are outside QC limits.
- **T** - For GCMS analysis, the spike/spike duplicate recoveries are outside QC limits.
- **o** - For all analyses, the LCS (LCSD) recoveries are outside QC limits.
- **X-** Organics and Anions IC - Sample concentration over calibration and/or surrogate recovery outside QC limits.
- **X-** Inorganics - The analyte present in the original sample is > 4x the spike concentration.
- **X-** Radiochemistry - Carrier or Tracer recovery is outside limits.
- **Z-** Sample was prepped or analyzed beyond the specified sample holding time.
- **y -** RPD is outside established limits.

ICP Metals

Batch: 505417

Vanadium was detected in the method blank at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged "B". If the associated sample reported a result above the MDL and/or RL and MB is greater than 5% the sample concentration, the result has been flagged "C".

The post digestion spike % recovery for sodium and calcium associated with batch preparation batch 160-505088 and analytical batch 160-505417 was outside of control limits. The associated sample is: (160-41613-A-3-A PDS).

Mercury

Batch: 505771

The low level check (CCVL) was outside the upper QC limits for mercury. Associated samples which are below the reporting limit for the contaminant do not require re-analysis. Original results are reported. (CRI 160-505771/9)

Case Narrative

Client: Central Plateau Cleanup Company LLC
Project/Site: I21-020/W21-004/A21-004/S21-004

Job ID: 160-41644-1
SDG: SL41644-1

Job ID: 160-41644-1 (Continued)

Laboratory: Eurofins TestAmerica, St. Louis (Continued)

Tritium

Prep Batch: 505263

The Tritium matrix spike (MS) associated with the following samples in batch 160-505263 has a spike recovery outside of the control limits 60% (75-125%): (160-41588-A-3-B MS). Sample matrix interference and/or non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits. The data have been reported with this narrative.

There were no observations or non-conformances associated with the following methods:

ICPMS Metals
Iodine-129

We certify that this data package is in compliance with the SOW, both technically and for completeness, including a full description of, explanation of, and corrective actions for, any and all deviations, from either the analyses requested or the case narrative requested. Release of the data contained in this hard copy data package has been authorized by the Laboratory Analytical Manager or designee and the laboratory's client services representative as verified by their signature on this report.

Reviewed and approved:

Jayna Awalt
St. Louis Project Manager

Login Sample Receipt Checklist

Client: Central Plateau Cleanup Company LLC

Job Number: 160-41644-1
SDG Number: SL41644-1

Login Number: 41644
List Number: 1
Creator: Awalt, Jayna K

List Source: Eurofins TestAmerica, St. Louis

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST 74	C.O.C. # A21-004-005 Page 1 of 1

Collector: Janelle Zunker CPCC	**Contact/Requester:** Karen Waters-Husted	**Telephone No.:** 509-376-4650
SAF No.: A21-004	**Sampling Origin:** Hanford Site	**Purchase Order/Charge Code:** 900152
Project Title: LLWMA-3-PA, April 2021	**Logbook No.:** HNF-N-506 - 121 132	**Ice Chest No.:** GWS-012
Shipped To (Lab): TestAmerica St. Louis	**Method of Shipment** Commercial Carrier	**Bill of Lading/Air Bill No.:** 7733 5620 8664
Protocol: Monitoring	**Priority:** 30 Days	**Offsite Property No.:** NA AIZ 3/2/21

POSSIBLE SAMPLE HAZARDS/REMARK
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1

SPECIAL INSTRUCTIONS
N/A

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B408L8	N	W	APR 05 2021	1231	1x4-L G/P	SMR_I129LOWLEVEL_RAD	6 Months	None

160-41644 Chain of Custody

Relinquished By			Received By		
Print First and Last Name	*Signature*	*Date/Time*	*Print First and Last Name*	*Signature*	*Date/Time*
Janelle Zunker CPCC		APR 05 2021 1300	Kathy Turner CPCC	Kathy Turner	APR 05 2021 1300
Kathy Turner CPCC	Kathy Turner	APR 05 2021 1400	FEDEX		
FED EX			Sierra Worthington Sierra Worthington		4/7/21 0940

Matrix *

S	= Soil	DS	= Drum Solids
SE	= Sediment	DL	= Drum Liquids
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process):	Disposed By:	Date/Time:

Printed On 3/2/2021 FSR ID = FSR103501 A-6004-842 (REV 4)

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Central Plateau Cleanup Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # S21-004-267 Page 1 of 1

Collector: Chris Fulton /CHPRC	**Contact/Requester:** Karen Waters-Husted	**Telephone No.:** 509-376-4650
SAF No.: S21-004	**Sampling Origin:** Hanford Site	**Purchase Order/Charge Code:** 900152
Project Title: SURV, April 2021	**Logbook No.:** HNF-N-506 -122.	**Ice Chest No.:** GWS-012
Shipped To (Lab): TestAmerica St. Louis	**Method of Shipment** Commercial Carrier	**Bill of Lading/Air Bill No.:** 7733 5620 8664
Protocol: SURV	**Priority:** 30 Days	**Offsite Property No.:** NA 1452 2/24/21

POSSIBLE SAMPLE HAZARDS/REMARK
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1

SPECIAL INSTRUCTIONS
N/A

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B40BD2	N	W	4/5/21	1150	1x500-mL P	SMR_TRITIUM_LSC	6 Months	None

Relinquished By			Received By		
Print First and Last Name	*Signature*	*Date/Time*	*Print First and Last Name*	*Signature*	*Date/Time*
Chris Fulton /CHPRC		APR 05 2021 1220	Kathy Turner CPCC	Kathy Turner	APR 05 2021 1220
Kathy Turner CPCC	Kathy Turner	APR 05 2021 1400	FEDEX		
FED EX			Steven Wormington Sinclair		4/7/21 0940

Matrix *

S	= Soil	DS	= Drum Solids
SE	= Sediment	DL	= Drum Liquids
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process):	Disposed By:	Date/Time:

Printed On 2/22/2021 FSR ID = FSR103092 A-6004-842 (REV 4)

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Central Plateau Cleanup Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # S21-004-266 Page 1 of 1

Collector: Chris Fulton /CHPRC	**Contact/Requester:** Karen Waters-Husted	**Telephone No.:** 509-376-4650
SAF No.: S21-004	**Sampling Origin:** Hanford Site	**Purchase Order/Charge Code:** 900152
Project Title: SURV, April 2021	**Logbook No.:** HNF-N-506 -122	**Ice Chest No.:** GLUS 012
Shipped To (Lab): TestAmerica St. Louis	**Method of Shipment** Commercial Carrier	**Bill of Lading/Air Bill No.:** 7733 5620 8669
Protocol: SURV	**Priority:** 30 Days	**Offsite Property No.:** NA NRS 2/23/21

POSSIBLE SAMPLE HAZARDS/REMARK
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1

SPECIAL INSTRUCTIONS
N/A

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B40BD1	N	W	4/5/21	1150	1x500-mL P	SMR_TRITIUM_LSC	6 Months	None

Relinquished By			Received By		
Print First and Last Name	*Signature*	*Date/Time*	*Print First and Last Name*	*Signature*	*Date/Time*
Chris Fulton /CHPRC		APR 05 2021 1220	Kathy Turner CPCC	Kathy Turner	APR 05 2021 1220
Kathy Turner CPCC	Kathy Turner	APR 05 2021 1400	FEDEX		
FED EX			Sierra Worthington	Sierra Worthington	4/7/21 0940

Matrix *

S	= Soil	DS	= Drum Solids
SE	= Sediment	DL	= Drum Liquids
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process):	Disposed By:	Date/Time:

Printed On 2/22/2021

FSR ID = FSR103092

A-6004-842 (REV 4)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # W21-004-127 Page 1 of 1

Collector: Janelle Zunker CPCC	**Contact/Requester:** Karen Waters-Husted	**Telephone No.:** 509-376-4650
SAF No.: W21-004	**Sampling Origin:** Hanford Site	**Purchase Order/Charge Code:** 900152
Project Title: RCRA, April 2021	**Logbook No.:** HNF-N-506 -121/32	**Ice Chest No.:** GWS-012
Shipped To (Lab): TestAmerica St. Louis	**Method of Shipment** Commercial Carrier	**Bill of Lading/Air Bill No.:** 7733 5620 8664
Protocol: RCRA	**Priority:** 30 Days	**Offsite Property No.:** NA 19563/2/21

POSSIBLE SAMPLE HAZARDS/REMARK
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1

SPECIAL INSTRUCTIONS
N/A

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B40C65	N	W	APR 05 2021	1116	1x500-mL G/P	7470_MERCURY_CV: COMMON (AQUEOUS); 6010_METALS_ICP: GW 04; 6020_METALS_ICPMS: GW 01	28 Days	HNO3 to pH <2
B40C67	Y	W	APR 05 2021	↓	1x500-mL G/P	7470_MERCURY_CV: COMMON (AQUEOUS); 6010_METALS_ICP: GW 04; 6020_METALS_ICPMS: GW 01	28 Days	HNO3 to pH <2

Relinquished By			Received By		
Print First and Last Name	*Signature*	*Date/Time*	*Print First and Last Name*	*Signature*	*Date/Time*
Janelle Zunker CPCC		APR 05 2021 1140	Mike Esparza CPCC		APR 05 2021 1140
Mike Esparza CPCC		APR 05 2021 1400	FEDEX		
FED EX			Sierra Worthington		4/7/21 0940

Matrix *

S	= Soil	DS	= Drum Solids
SE	= Sediment	DL	= Drum Liquids
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process):	Disposed By:	Date/Time:

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FSR ID = FSR103500

A-6004-842 (REV 4)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # A21-004-006
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Collector: Janelle Zunker CPCC	**Contact/Requester:** Karen Waters-Husted	**Telephone No.:** 509-376-4650
SAF No.: A21-004	**Sampling Origin:** Hanford Site	**Purchase Order/Charge Code:** 900152
Project Title: LLWMA-3-PA, April 2021	**Logbook No.:** HNF-N-506 -121/32	**Ice Chest No.:** 6WS-012
Shipped To (Lab): TestAmerica St. Louis	**Method of Shipment:** Commercial Carrier	**Bill of Lading/Air Bill No.:** 7733 5620 8664
Protocol: Monitoring	**Priority:** 30 Days	**Offsite Property No.:** NA SCC 313191

POSSIBLE SAMPLE HAZARDS/REMARK
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1

SPECIAL INSTRUCTIONS
N/A

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B408M0	N	W	APR 05 2021	0926	1x4-L G/P	SMR_I129LOWLEVEL_RAD	6 Months	None

Relinquished By			Received By		
Print First and Last Name	*Signature*	*Date/Time*	*Print First and Last Name*	*Signature*	*Date/Time*
Janelle Zunker CPCC		APR 05 2021 0955	Kathy Turner CPCC		APR 05 2021 0955
Kathy Turner CPCC		APR 05 2021 1400	FEDEX		
FED EX			SierraWormington SimWalpus		4/7/21 0940

Matrix *

S	= Soil	DS	= Drum Solids
SE	= Sediment	DL	= Drum Liquids
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process):	Disposed By:	Date/Time:

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CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # I21-020-067 Page 1 of 1

Collector: Chris Fulton /CHPRC	**Contact/Requester:** Karen Waters-Husted	**Telephone No.:** 509-376-4650
SAF No.: I21-020	**Sampling Origin:** Hanford Site	**Purchase Order/Charge Code:** 900152
Project Title: AEA, April 2021	**Logbook No.:** HNF-N-506 -122	**Ice Chest No.:** 6WS-012
Shipped To (Lab): TestAmerica St. Louis	**Method of Shipment** Commercial Carrier	**Bill of Lading/Air Bill No.:** 7733 5620 8664
Protocol: SURV	**Priority:** 30 Days	**Offsite Property No.:** NA ~~AJ6~~ 3/2/21

POSSIBLE SAMPLE HAZARDS/REMARK
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1

SPECIAL INSTRUCTIONS
N/A

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B408X0	N	W	4/5/21	0743	1x4-L G/P	SMR_I129LOWLEVEL_RAD	6 Months	None

Relinquished By			Received By		
Print First and Last Name	*Signature*	*Date/Time*	*Print First and Last Name*	*Signature*	*Date/Time*
Chris Fulton /CHPRC		APR 05 2021 1010	Kathy Turner CPCC		APR 05 2021 1010
Kathy Turner CPCC		APR 05 2021 1400	FEDEX		
FED EX					4/7/21 0940

Matrix *

S	= Soil	DS	= Drum Solids
SE	= Sediment	DL	= Drum Liquids
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process):	Disposed By:	Date/Time:

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CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # W21-004-128 Page 1 of 1

Collector: Janelle Zunker CPCC	**Contact/Requester:** Karen Waters-Husted	**Telephone No.:** 509-376-4650
SAF No.: W21-004	**Sampling Origin:** Hanford Site	**Purchase Order/Charge Code:** 900152
Project Title: RCRA, April 2021	**Logbook No.:** HNF-N-506 -121 132	**Ice Chest No.:** GWS-012
Shipped To (Lab): TestAmerica St. Louis	**Method of Shipment:** Commercial Carrier	**Bill of Lading/Air Bill No.:** 7733 5620 8664
Protocol: RCRA	**Priority:** 30 Days	**Offsite Property No.:** NA SCC 313121

POSSIBLE SAMPLE HAZARDS/REMARK
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1

SPECIAL INSTRUCTIONS
N/A

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B40C79	Y	W	APR 05 2021	0926	1x500-mL G/P	7470_MERCURY_CV: COMMON (AQUEOUS); 6010_METALS_ICP: GW 04; 6020_METALS_ICPMS: GW 01	28 Days	HNO3 to pH <2
B40C77	N	W	↓	↓	1x500-mL G/P	7470_MERCURY_CV: COMMON (AQUEOUS); 6010_METALS_ICP: GW 04; 6020_METALS_ICPMS: GW 01	28 Days	HNO3 to pH <2

Relinquished By			Received By		
Print First and Last Name	*Signature*	*Date/Time*	*Print First and Last Name*	*Signature*	*Date/Time*
Janelle Zunker CPCC	Janelle Zunker	APR 05 2021 0955	Kathy Turner CPCC	Kathy Turner	APR 05 2021 0955
Kathy Turner CPCC	Kathy Turner	APR 05 2021 1400	FEDEX		
FED EX			General Washington Sinkholes		4/7/21 0940

Matrix *

S	= Soil	DS	= Drum Solids
SE	= Sediment	DL	= Drum Liquids
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process):	Disposed By:	Date/Time:

Printed On 3/3/2021

FSR ID = FSR103564

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CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # I21-020-068 Page 1 of 1

Collector: Chris Fulton /CHPRC	**Contact/Requester:** Karen Waters-Husted	**Telephone No.:** 509-376-4650
SAF No.: I21-020	**Sampling Origin:** Hanford Site	**Purchase Order/Charge Code:** 900152
Project Title: AEA, April 2021	**Logbook No.:** HNF-N-506 -122	**Ice Chest No.:** CWS-012
Shipped To (Lab): TestAmerica St. Louis	**Method of Shipment** Commercial Carrier	**Bill of Lading/Air Bill No.:** 7733 5620 8664
Protocol: SURV	**Priority:** 30 Days	**Offsite Property No.:** NA AJC 3/2/21

POSSIBLE SAMPLE HAZARDS/REMARK
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1

SPECIAL INSTRUCTIONS
N/A

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B408X1	N	W	4/5/21	0950	1x4-L G/P	SMR_I129LOWLEVEL_RAD	6 Months	None

Relinquished By			Received By		
Print First and Last Name	*Signature*	*Date/Time*	*Print First and Last Name*	*Signature*	*Date/Time*
Chris Fulton /CHPRC		APR 05 2021 1010	Kathy Turner CPCC		APR 05 2021 1010
Kathy Turner CPCC		APR 05 2021 1400	FEDEX		
FEDEX			Sierra Woerthwein Sierra Woerthwein		4/7/21 0940

Matrix *

S	= Soil	DS	= Drum Solids
SE	= Sediment	DL	= Drum Liquids
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process):	Disposed By:	Date/Time:

Printed On 3/2/2021

FSR ID = FSR103502

A-6004-842 (REV 4)

SL41644-1

April 19, 2021

Rev. 0

April 08, 2021

Dear Customer,

The following is the proof-of-delivery for tracking number: 773356208664

Delivery Information:

Status:	Delivered	**Delivered To:**	Shipping/Receiving
Signed for by:	C.WORTHINGTON	**Delivery Location:**	
Service type:	FedEx Priority Overnight		
Special Handling:	Deliver Weekday; Direct Signature Required		EARTH CITY, MO,
		Delivery date:	Apr 7, 2021 09:35

Shipping Information:

Tracking number:	773356208664	**Ship Date:**	Apr 5, 2021
		Weight:	74.0 LB/33.60 KG

Recipient:	**Shipper:**
EARTH CITY, MO, US,	RICHLAND, WA, US,

Reference 900152/GWS-012

Signature image is available. In order to view image and detailed information, the shipper or payor account number of the shipment must be provided.

Thank you for choosing FedEx

Definitions/Glossary

Client: Central Plateau Cleanup Company LLC
Project/Site: I21-020/W21-004/A21-004/S21-004

Job ID: 160-41644-1
SDG: SL41644-1

Qualifiers

Metals

Qualifier	Qualifier Description
B	Estimated result. Result is less than the RL, but greater than MDL
C	The analyte was detected in both the sample and the associated QC blank, and the sample concentration was </= 5% the blank concentration.
D	The reported value is from a dilution.
U	Analyzed for but not detected.

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Method Summary

Client: Central Plateau Cleanup Company LLC
Project/Site: I21-020/W21-004/A21-004/S21-004

Job ID: 160-41644-1
SDG: SL41644-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	TAL SL
6020B	Metals (ICP/MS)	SW846	TAL SL
7470A	Mercury (CVAA)	SW846	TAL SL
906.0	Tritium, Total (LSC)	EPA	TAL SL
SM 7500	Iodine-129 (LSC)	SM	TAL SL
3010A	Preparation, Total Metals	SW846	TAL SL
7470A	Preparation, Mercury	SW846	TAL SL
LSC_Dist_Susp	Distillation and Suspension (LSC)	None	TAL SL
SM 7500	Preparation, Reduction / Precipitation (SM7500 I B)	SM	TAL SL

Protocol References:

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Central Plateau Cleanup Company LLC
Project/Site: I21-020/W21-004/A21-004/S21-004

Job ID: 160-41644-1
SDG: SL41644-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
160-41644-1	B408L8	Water	04/05/21 12:39	04/07/21 09:40	
160-41644-2	B40BD2	Water	04/05/21 11:50	04/07/21 09:40	
160-41644-3	B40BD1	Water	04/05/21 11:50	04/07/21 09:40	
160-41644-4	B40C65	Water	04/05/21 11:16	04/07/21 09:40	
160-41644-5	B40C67	Water	04/05/21 11:16	04/07/21 09:40	
160-41644-6	B408M0	Water	04/05/21 09:26	04/07/21 09:40	
160-41644-7	B408X0	Water	04/05/21 07:45	04/07/21 09:40	
160-41644-8	B40C79	Water	04/05/21 09:26	04/07/21 09:40	
160-41644-9	B40C77	Water	04/05/21 09:26	04/07/21 09:40	
160-41644-10	B408X1	Water	04/05/21 09:50	04/07/21 09:40	

Client Sample Results

Client: Central Plateau Cleanup Company LLC
Project/Site: I21-020/W21-004/A21-004/S21-004

Job ID: 160-41644-1
SDG: SL41644-1

Method: 6010D - Metals (ICP)

Client Sample ID: B40C65
Date Collected: 04/05/21 11:16
Date Received: 04/07/21 09:40

Lab Sample ID: 160-41644-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**26.7**	**B**	50.0	25.0	ug/L		04/09/21 10:15	04/12/21 19:58	1
Calcium	**49500**		1000	300	ug/L		04/09/21 10:15	04/12/21 19:58	1
Iron	53.0	U	100	53.0	ug/L		04/09/21 10:15	04/12/21 19:58	1
Magnesium	**13800**		1000	300	ug/L		04/09/21 10:15	04/12/21 19:58	1
Potassium	**5080**		5000	1500	ug/L		04/09/21 10:15	04/12/21 19:58	1
Sodium	**10500**		1000	300	ug/L		04/09/21 10:15	04/12/21 19:58	1
Vanadium	**27.6**	**B C**	50.0	4.0	ug/L		04/09/21 10:15	04/12/21 19:58	1

Client Sample ID: B40C77
Date Collected: 04/05/21 09:26
Date Received: 04/07/21 09:40

Lab Sample ID: 160-41644-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**27.5**	**B**	50.0	25.0	ug/L		04/09/21 10:15	04/12/21 20:12	1
Calcium	**64700**		1000	300	ug/L		04/09/21 10:15	04/12/21 20:12	1
Iron	53.0	U	100	53.0	ug/L		04/09/21 10:15	04/12/21 20:12	1
Magnesium	**18600**		1000	300	ug/L		04/09/21 10:15	04/12/21 20:12	1
Potassium	**5690**		5000	1500	ug/L		04/09/21 10:15	04/12/21 20:12	1
Sodium	**11700**		1000	300	ug/L		04/09/21 10:15	04/12/21 20:12	1
Vanadium	**26.7**	**B C**	50.0	4.0	ug/L		04/09/21 10:15	04/12/21 20:12	1

Method: 6010D - Metals (ICP) - Dissolved

Client Sample ID: B40C67
Date Collected: 04/05/21 11:16
Date Received: 04/07/21 09:40

Lab Sample ID: 160-41644-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	25.0	U	50.0	25.0	ug/L		04/09/21 10:15	04/12/21 20:03	1
Calcium	**51600**		1000	300	ug/L		04/09/21 10:15	04/12/21 20:03	1
Iron	53.0	U	100	53.0	ug/L		04/09/21 10:15	04/12/21 20:03	1
Magnesium	**14600**		1000	300	ug/L		04/09/21 10:15	04/12/21 20:03	1
Potassium	**5390**		5000	1500	ug/L		04/09/21 10:15	04/12/21 20:03	1
Sodium	**11100**		1000	300	ug/L		04/09/21 10:15	04/12/21 20:03	1
Vanadium	**32.6**	**B C**	50.0	4.0	ug/L		04/09/21 10:15	04/12/21 20:03	1

Client Sample ID: B40C79
Date Collected: 04/05/21 09:26
Date Received: 04/07/21 09:40

Lab Sample ID: 160-41644-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	25.0	U	50.0	25.0	ug/L		04/09/21 10:15	04/12/21 20:07	1
Calcium	**63100**		1000	300	ug/L		04/09/21 10:15	04/12/21 20:07	1
Iron	53.0	U	100	53.0	ug/L		04/09/21 10:15	04/12/21 20:07	1
Magnesium	**18100**		1000	300	ug/L		04/09/21 10:15	04/12/21 20:07	1
Potassium	**5210**		5000	1500	ug/L		04/09/21 10:15	04/12/21 20:07	1
Sodium	**11300**		1000	300	ug/L		04/09/21 10:15	04/12/21 20:07	1
Vanadium	**25.1**	**B C**	50.0	4.0	ug/L		04/09/21 10:15	04/12/21 20:07	1

Client Sample Results

Client: Central Plateau Cleanup Company LLC
Project/Site: I21-020/W21-004/A21-004/S21-004

Job ID: 160-41644-1
SDG: SL41644-1

Method: 6020B - Metals (ICP/MS)

Client Sample ID: B40C65
Date Collected: 04/05/21 11:16
Date Received: 04/07/21 09:40

Lab Sample ID: 160-41644-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	20.0	U D	50.0	20.0	ug/L		04/09/21 10:34	04/14/21 18:53	2
Antimony	2.0	U D	5.0	2.0	ug/L		04/09/21 10:34	04/14/21 18:53	2
Arsenic	4.0	U D	10.0	4.0	ug/L		04/09/21 10:34	04/14/21 18:53	2
Barium	**36.3**	**D**	2.0	0.90	ug/L		04/09/21 10:34	04/14/21 18:53	2
Beryllium	0.20	U D	0.50	0.20	ug/L		04/09/21 10:34	04/14/21 18:53	2
Cadmium	0.20	U D	0.50	0.20	ug/L		04/09/21 10:34	04/14/21 18:53	2
Chromium	4.0	U D	10.0	4.0	ug/L		04/09/21 10:34	04/14/21 18:53	2
Cobalt	0.90	U D	2.0	0.90	ug/L		04/09/21 10:34	04/14/21 18:53	2
Copper	1.9	U D	3.0	1.9	ug/L		04/09/21 10:34	04/14/21 18:53	2
Lead	1.0	U D	3.0	1.0	ug/L		04/09/21 10:34	04/14/21 18:53	2
Manganese	**1.9**	**B D**	4.0	1.5	ug/L		04/09/21 10:34	04/14/21 18:53	2
Molybdenum	**3.1**	**B D**	5.0	2.0	ug/L		04/09/21 10:34	04/14/21 18:53	2
Nickel	**2.8**	**B D**	5.0	2.0	ug/L		04/09/21 10:34	04/14/21 18:53	2
Selenium	**6.1**	**D**	5.0	2.0	ug/L		04/09/21 10:34	04/14/21 18:53	2
Silver	0.90	U D	2.0	0.90	ug/L		04/09/21 10:34	04/14/21 18:53	2
Strontium	**183**	**D**	5.0	1.5	ug/L		04/09/21 10:34	04/14/21 18:53	2
Thallium	0.90	U D	2.0	0.90	ug/L		04/09/21 10:34	04/14/21 18:53	2
Thorium	0.90	U D	2.0	0.90	ug/L		04/09/21 10:34	04/14/21 18:53	2
Tin	1.2	U D	2.0	1.2	ug/L		04/09/21 10:34	04/14/21 18:53	2
Uranium	**0.80**	**B D**	1.0	0.40	ug/L		04/09/21 10:34	04/14/21 18:53	2
Zinc	7.5	U D	20.0	7.5	ug/L		04/09/21 10:34	04/14/21 18:53	2

Client Sample ID: B40C77
Date Collected: 04/05/21 09:26
Date Received: 04/07/21 09:40

Lab Sample ID: 160-41644-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	20.0	U D	50.0	20.0	ug/L		04/09/21 10:34	04/14/21 19:04	2
Antimony	2.0	U D	5.0	2.0	ug/L		04/09/21 10:34	04/14/21 19:04	2
Arsenic	4.0	U D	10.0	4.0	ug/L		04/09/21 10:34	04/14/21 19:04	2
Barium	**48.2**	**D**	2.0	0.90	ug/L		04/09/21 10:34	04/14/21 19:04	2
Beryllium	0.20	U D	0.50	0.20	ug/L		04/09/21 10:34	04/14/21 19:04	2
Cadmium	0.20	U D	0.50	0.20	ug/L		04/09/21 10:34	04/14/21 19:04	2
Chromium	**9.3**	**B D**	10.0	4.0	ug/L		04/09/21 10:34	04/14/21 19:04	2
Cobalt	0.90	U D	2.0	0.90	ug/L		04/09/21 10:34	04/14/21 19:04	2
Copper	1.9	U D	3.0	1.9	ug/L		04/09/21 10:34	04/14/21 19:04	2
Lead	1.0	U D	3.0	1.0	ug/L		04/09/21 10:34	04/14/21 19:04	2
Manganese	**5.8**	**D**	4.0	1.5	ug/L		04/09/21 10:34	04/14/21 19:04	2
Molybdenum	**3.2**	**B D**	5.0	2.0	ug/L		04/09/21 10:34	04/14/21 19:04	2
Nickel	**3.8**	**B D**	5.0	2.0	ug/L		04/09/21 10:34	04/14/21 19:04	2
Selenium	**6.8**	**D**	5.0	2.0	ug/L		04/09/21 10:34	04/14/21 19:04	2
Silver	0.90	U D	2.0	0.90	ug/L		04/09/21 10:34	04/14/21 19:04	2
Strontium	**253**	**D**	5.0	1.5	ug/L		04/09/21 10:34	04/14/21 19:04	2
Thallium	0.90	U D	2.0	0.90	ug/L		04/09/21 10:34	04/14/21 19:04	2
Thorium	0.90	U D	2.0	0.90	ug/L		04/09/21 10:34	04/14/21 19:04	2
Tin	1.2	U D	2.0	1.2	ug/L		04/09/21 10:34	04/14/21 19:04	2
Uranium	**1.6**	**D**	1.0	0.40	ug/L		04/09/21 10:34	04/14/21 19:04	2
Zinc	7.5	U D	20.0	7.5	ug/L		04/09/21 10:34	04/14/21 19:04	2

Client Sample Results

Client: Central Plateau Cleanup Company LLC
Project/Site: I21-020/W21-004/A21-004/S21-004

Job ID: 160-41644-1
SDG: SL41644-1

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

Client Sample ID: B40C67
Date Collected: 04/05/21 11:16
Date Received: 04/07/21 09:40

Lab Sample ID: 160-41644-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	20.0	U D	50.0	20.0	ug/L		04/09/21 10:34	04/14/21 18:57	2
Antimony	2.0	U D	5.0	2.0	ug/L		04/09/21 10:34	04/14/21 18:57	2
Arsenic	4.0	U D	10.0	4.0	ug/L		04/09/21 10:34	04/14/21 18:57	2
Barium	**38.3**	**D**	2.0	0.90	ug/L		04/09/21 10:34	04/14/21 18:57	2
Beryllium	0.20	U D	0.50	0.20	ug/L		04/09/21 10:34	04/14/21 18:57	2
Cadmium	0.20	U D	0.50	0.20	ug/L		04/09/21 10:34	04/14/21 18:57	2
Chromium	4.0	U D	10.0	4.0	ug/L		04/09/21 10:34	04/14/21 18:57	2
Cobalt	0.90	U D	2.0	0.90	ug/L		04/09/21 10:34	04/14/21 18:57	2
Copper	1.9	U D	3.0	1.9	ug/L		04/09/21 10:34	04/14/21 18:57	2
Lead	1.0	U D	3.0	1.0	ug/L		04/09/21 10:34	04/14/21 18:57	2
Manganese	**1.7**	**B D**	4.0	1.5	ug/L		04/09/21 10:34	04/14/21 18:57	2
Molybdenum	**3.3**	**B D**	5.0	2.0	ug/L		04/09/21 10:34	04/14/21 18:57	2
Nickel	**3.1**	**B D**	5.0	2.0	ug/L		04/09/21 10:34	04/14/21 18:57	2
Selenium	**7.0**	**D**	5.0	2.0	ug/L		04/09/21 10:34	04/14/21 18:57	2
Silver	0.90	U D	2.0	0.90	ug/L		04/09/21 10:34	04/14/21 18:57	2
Strontium	**193**	**D**	5.0	1.5	ug/L		04/09/21 10:34	04/14/21 18:57	2
Thallium	0.90	U D	2.0	0.90	ug/L		04/09/21 10:34	04/14/21 18:57	2
Thorium	0.90	U D	2.0	0.90	ug/L		04/09/21 10:34	04/14/21 18:57	2
Tin	1.2	U D	2.0	1.2	ug/L		04/09/21 10:34	04/14/21 18:57	2
Uranium	**0.78**	**B D**	1.0	0.40	ug/L		04/09/21 10:34	04/14/21 18:57	2
Zinc	7.5	U D	20.0	7.5	ug/L		04/09/21 10:34	04/14/21 18:57	2

Client Sample ID: B40C79
Date Collected: 04/05/21 09:26
Date Received: 04/07/21 09:40

Lab Sample ID: 160-41644-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	20.0	U D	50.0	20.0	ug/L		04/09/21 10:34	04/14/21 19:00	2
Antimony	2.0	U D	5.0	2.0	ug/L		04/09/21 10:34	04/14/21 19:00	2
Arsenic	4.0	U D	10.0	4.0	ug/L		04/09/21 10:34	04/14/21 19:00	2
Barium	**49.1**	**D**	2.0	0.90	ug/L		04/09/21 10:34	04/14/21 19:00	2
Beryllium	0.20	U D	0.50	0.20	ug/L		04/09/21 10:34	04/14/21 19:00	2
Cadmium	0.20	U D	0.50	0.20	ug/L		04/09/21 10:34	04/14/21 19:00	2
Chromium	4.0	U D	10.0	4.0	ug/L		04/09/21 10:34	04/14/21 19:00	2
Cobalt	0.90	U D	2.0	0.90	ug/L		04/09/21 10:34	04/14/21 19:00	2
Copper	1.9	U D	3.0	1.9	ug/L		04/09/21 10:34	04/14/21 19:00	2
Lead	1.0	U D	3.0	1.0	ug/L		04/09/21 10:34	04/14/21 19:00	2
Manganese	1.5	U D	4.0	1.5	ug/L		04/09/21 10:34	04/14/21 19:00	2
Molybdenum	**3.1**	**B D**	5.0	2.0	ug/L		04/09/21 10:34	04/14/21 19:00	2
Nickel	2.0	U D	5.0	2.0	ug/L		04/09/21 10:34	04/14/21 19:00	2
Selenium	**6.3**	**D**	5.0	2.0	ug/L		04/09/21 10:34	04/14/21 19:00	2
Silver	0.90	U D	2.0	0.90	ug/L		04/09/21 10:34	04/14/21 19:00	2
Strontium	**241**	**D**	5.0	1.5	ug/L		04/09/21 10:34	04/14/21 19:00	2
Thallium	0.90	U D	2.0	0.90	ug/L		04/09/21 10:34	04/14/21 19:00	2
Thorium	0.90	U D	2.0	0.90	ug/L		04/09/21 10:34	04/14/21 19:00	2
Tin	1.2	U D	2.0	1.2	ug/L		04/09/21 10:34	04/14/21 19:00	2
Uranium	**1.3**	**D**	1.0	0.40	ug/L		04/09/21 10:34	04/14/21 19:00	2
Zinc	7.5	U D	20.0	7.5	ug/L		04/09/21 10:34	04/14/21 19:00	2

Client Sample Results

Client: Central Plateau Cleanup Company LLC
Project/Site: I21-020/W21-004/A21-004/S21-004

Job ID: 160-41644-1
SDG: SL41644-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: B40C65
Date Collected: 04/05/21 11:16
Date Received: 04/07/21 09:40
Lab Sample ID: 160-41644-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.060	U	0.20	0.060	ug/L		04/14/21 12:25	04/14/21 21:35	1

Client Sample ID: B40C77
Date Collected: 04/05/21 09:26
Date Received: 04/07/21 09:40
Lab Sample ID: 160-41644-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.060	U	0.20	0.060	ug/L		04/14/21 12:25	04/14/21 21:56	1

Method: 7470A - Mercury (CVAA) - Dissolved

Client Sample ID: B40C67
Date Collected: 04/05/21 11:16
Date Received: 04/07/21 09:40
Lab Sample ID: 160-41644-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.060	U	0.20	0.060	ug/L		04/14/21 12:25	04/14/21 21:50	1

Client Sample ID: B40C79
Date Collected: 04/05/21 09:26
Date Received: 04/07/21 09:40
Lab Sample ID: 160-41644-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.060	U	0.20	0.060	ug/L		04/14/21 12:25	04/14/21 21:54	1

Method: 906.0 - Tritium, Total (LSC)

Client Sample ID: B40BD2
Date Collected: 04/05/21 11:50
Date Received: 04/07/21 09:40
Lab Sample ID: 160-41644-2
Matrix: Water

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	**11100**		637	1160	500	284	pCi/L	04/12/21 10:19	04/14/21 05:14	1

Client Sample ID: B40BD1
Date Collected: 04/05/21 11:50
Date Received: 04/07/21 09:40
Lab Sample ID: 160-41644-3
Matrix: Water

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	**12600**		693	1310	500	297	pCi/L	04/12/21 10:19	04/14/21 05:37	1

Method: SM 7500 - Iodine-129 (LSC)

Client Sample ID: B408L8
Date Collected: 04/05/21 12:39
Date Received: 04/07/21 09:40
Lab Sample ID: 160-41644-1
Matrix: Water

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Iodine-129	0.250	U	0.294	0.295	1.00	0.486	pCi/L	04/11/21 10:28	04/15/21 00:26	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
I Carrier	*88.7*		*40 - 110*	*04/11/21 10:28*	*04/15/21 00:26*	*1*

Client Sample Results

Client: Central Plateau Cleanup Company LLC
Project/Site: I21-020/W21-004/A21-004/S21-004

Job ID: 160-41644-1
SDG: SL41644-1

Method: SM 7500 - Iodine-129 (LSC)

Client Sample ID: B408M0
Date Collected: 04/05/21 09:26
Date Received: 04/07/21 09:40

Lab Sample ID: 160-41644-6
Matrix: Water

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Iodine-129	**0.500**		0.300	0.302	1.00	0.474	pCi/L	04/11/21 10:28	04/15/21 02:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
I Carrier	*90.0*		*40 - 110*	*04/11/21 10:28*	*04/15/21 02:39*	*1*

Client Sample ID: B408X0
Date Collected: 04/05/21 07:45
Date Received: 04/07/21 09:40

Lab Sample ID: 160-41644-7
Matrix: Water

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Iodine-129	0.250	U	0.270	0.271	1.00	0.444	pCi/L	04/11/21 10:28	04/15/21 03:45	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
I Carrier	*94.7*		*40 - 110*	*04/11/21 10:28*	*04/15/21 03:45*	*1*

Client Sample ID: B408X1
Date Collected: 04/05/21 09:50
Date Received: 04/07/21 09:40

Lab Sample ID: 160-41644-10
Matrix: Water

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Iodine-129	0.280	U	0.275	0.275	1.00	0.449	pCi/L	04/11/21 10:28	04/15/21 04:51	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
I Carrier	*94.0*		*40 - 110*	*04/11/21 10:28*	*04/15/21 04:51*	*1*

QC Sample Results

Client: Central Plateau Cleanup Company LLC
Project/Site: I21-020/W21-004/A21-004/S21-004

Job ID: 160-41644-1
SDG: SL41644-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 160-505088/1-A
Matrix: Water
Analysis Batch: 505417

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 505088

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	25.0	U	50.0	25.0	ug/L		04/09/21 10:15	04/12/21 19:01	1
Calcium	300	U	1000	300	ug/L		04/09/21 10:15	04/12/21 19:01	1
Iron	53.0	U	100	53.0	ug/L		04/09/21 10:15	04/12/21 19:01	1
Magnesium	300	U	1000	300	ug/L		04/09/21 10:15	04/12/21 19:01	1
Potassium	1500	U	5000	1500	ug/L		04/09/21 10:15	04/12/21 19:01	1
Sodium	300	U	1000	300	ug/L		04/09/21 10:15	04/12/21 19:01	1
Vanadium	4.20	B	50.0	4.0	ug/L		04/09/21 10:15	04/12/21 19:01	1

Lab Sample ID: LCS 160-505088/2-A
Matrix: Water
Analysis Batch: 505417

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 505088

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	200	189.8		ug/L		95	80 - 120
Calcium	10000	10680		ug/L		107	80 - 120
Iron	10000	9833		ug/L		98	80 - 120
Magnesium	10000	9583		ug/L		96	80 - 120
Potassium	10000	10450		ug/L		105	80 - 120
Sodium	10000	9784		ug/L		98	80 - 120
Vanadium	1000	974.9		ug/L		97	80 - 120

Lab Sample ID: 160-41613-A-2-B MS
Matrix: Water
Analysis Batch: 505417

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 505088

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	25.0	U	200	208.3		ug/L		104	75 - 125
Calcium	30600		10000	41470		ug/L		109	75 - 125
Iron	53.0	U	10000	9472		ug/L		95	75 - 125
Magnesium	11300		10000	20520		ug/L		92	75 - 125
Potassium	5370		10000	14660		ug/L		93	75 - 125
Sodium	20900		10000	30370		ug/L		94	75 - 125
Vanadium	14.8	B C	1000	940.5		ug/L		93	75 - 125

Lab Sample ID: 160-41613-A-2-C MSD
Matrix: Water
Analysis Batch: 505417

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 505088

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	25.0	U	200	201.0		ug/L		101	75 - 125	4	20
Calcium	30600		10000	41310		ug/L		107	75 - 125	0	20
Iron	53.0	U	10000	9689		ug/L		97	75 - 125	2	20
Magnesium	11300		10000	20700		ug/L		94	75 - 125	1	20
Potassium	5370		10000	14980		ug/L		96	75 - 125	2	20
Sodium	20900		10000	30960		ug/L		100	75 - 125	2	20
Vanadium	14.8	B C	1000	963.1		ug/L		95	75 - 125	2	20

QC Sample Results

Client: Central Plateau Cleanup Company LLC
Project/Site: I21-020/W21-004/A21-004/S21-004

Job ID: 160-41644-1
SDG: SL41644-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 160-505090/1-A ^2
Matrix: Water
Analysis Batch: 505738

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 505090

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	20.0	U D	50.0	20.0	ug/L		04/09/21 10:34	04/14/21 18:09	2
Antimony	2.0	U D	5.0	2.0	ug/L		04/09/21 10:34	04/14/21 18:09	2
Arsenic	4.0	U D	10.0	4.0	ug/L		04/09/21 10:34	04/14/21 18:09	2
Barium	0.90	U D	2.0	0.90	ug/L		04/09/21 10:34	04/14/21 18:09	2
Beryllium	0.20	U D	0.50	0.20	ug/L		04/09/21 10:34	04/14/21 18:09	2
Cadmium	0.20	U D	0.50	0.20	ug/L		04/09/21 10:34	04/14/21 18:09	2
Chromium	4.0	U D	10.0	4.0	ug/L		04/09/21 10:34	04/14/21 18:09	2
Cobalt	0.90	U D	2.0	0.90	ug/L		04/09/21 10:34	04/14/21 18:09	2
Copper	1.9	U D	3.0	1.9	ug/L		04/09/21 10:34	04/14/21 18:09	2
Lead	1.0	U D	3.0	1.0	ug/L		04/09/21 10:34	04/14/21 18:09	2
Manganese	1.5	U D	4.0	1.5	ug/L		04/09/21 10:34	04/14/21 18:09	2
Molybdenum	2.0	U D	5.0	2.0	ug/L		04/09/21 10:34	04/14/21 18:09	2
Nickel	2.0	U D	5.0	2.0	ug/L		04/09/21 10:34	04/14/21 18:09	2
Selenium	2.0	U D	5.0	2.0	ug/L		04/09/21 10:34	04/14/21 18:09	2
Silver	0.90	U D	2.0	0.90	ug/L		04/09/21 10:34	04/14/21 18:09	2
Strontium	1.5	U D	5.0	1.5	ug/L		04/09/21 10:34	04/14/21 18:09	2
Thallium	0.90	U D	2.0	0.90	ug/L		04/09/21 10:34	04/14/21 18:09	2
Thorium	0.90	U D	2.0	0.90	ug/L		04/09/21 10:34	04/14/21 18:09	2
Tin	1.2	U D	2.0	1.2	ug/L		04/09/21 10:34	04/14/21 18:09	2
Uranium	0.40	U D	1.0	0.40	ug/L		04/09/21 10:34	04/14/21 18:09	2
Zinc	7.5	U D	20.0	7.5	ug/L		04/09/21 10:34	04/14/21 18:09	2

Lab Sample ID: LCS 160-505090/2-A ^2
Matrix: Water
Analysis Batch: 505738

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 505090

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10000	10340	D	ug/L		103	80 - 120
Antimony	500	461.2	D	ug/L		92	80 - 120
Arsenic	1000	1004	D	ug/L		100	80 - 120
Barium	1000	954.6	D	ug/L		95	80 - 120
Beryllium	100	95.53	D	ug/L		96	80 - 120
Cadmium	1000	966.4	D	ug/L		97	80 - 120
Chromium	1000	1063	D	ug/L		106	80 - 120
Cobalt	1000	1014	D	ug/L		101	80 - 120
Copper	1000	1064	D	ug/L		106	80 - 120
Lead	1000	975.2	D	ug/L		98	80 - 120
Manganese	1000	1052	D	ug/L		105	80 - 120
Molybdenum	500	513.9	D	ug/L		103	80 - 120
Nickel	1000	1033	D	ug/L		103	80 - 120
Selenium	500	505.8	D	ug/L		101	80 - 120
Silver	200	191.8	D	ug/L		96	80 - 120
Strontium	1000	1022	D	ug/L		102	80 - 120
Thallium	200	192.9	D	ug/L		96	80 - 120
Thorium	1000	975.0	D	ug/L		98	80 - 120
Tin	1000	943.0	D	ug/L		94	80 - 120
Uranium	1000	967.0	D	ug/L		97	80 - 120
Zinc	1000	1025	D	ug/L		102	80 - 120

QC Sample Results

Client: Central Plateau Cleanup Company LLC
Project/Site: I21-020/W21-004/A21-004/S21-004

Job ID: 160-41644-1
SDG: SL41644-1

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

Lab Sample ID: 160-41613-A-2-E MS ^2
Matrix: Water
Analysis Batch: 505738

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 505090

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	20.0	U D	10000	9789	D	ug/L		98	75 - 125
Antimony	2.0	U D	500	478.9	D	ug/L		96	75 - 125
Arsenic	4.6	B D	1000	973.3	D	ug/L		97	75 - 125
Barium	32.3	D	1000	959.9	D	ug/L		93	75 - 125
Beryllium	0.20	U D	100	92.28	D	ug/L		92	75 - 125
Cadmium	0.20	U D	1000	935.1	D	ug/L		94	75 - 125
Chromium	11.0	D	1000	1006	D	ug/L		99	75 - 125
Cobalt	0.90	U D	1000	961.0	D	ug/L		96	75 - 125
Copper	1.9	U D	1000	975.8	D	ug/L		98	75 - 125
Lead	1.0	U D	1000	933.8	D	ug/L		93	75 - 125
Manganese	1.5	U D	1000	988.7	D	ug/L		99	75 - 125
Molybdenum	5.9	D	500	498.3	D	ug/L		98	75 - 125
Nickel	2.0	U D	1000	960.5	D	ug/L		96	75 - 125
Selenium	2.0	U D	500	479.1	D	ug/L		96	75 - 125
Silver	0.90	U D	200	182.4	D	ug/L		91	75 - 125
Strontium	235	D	1000	1195	D	ug/L		96	75 - 125
Thallium	0.90	U D	200	189.8	D	ug/L		95	75 - 125
Thorium	0.90	U D	1000	961.2	D	ug/L		96	75 - 125
Tin	1.2	U D	1000	950.3	D	ug/L		95	75 - 125
Uranium	2.6	D	1000	956.8	D	ug/L		95	75 - 125
Zinc	7.5	U D	1000	965.4	D	ug/L		97	75 - 125

Lab Sample ID: 160-41613-A-2-F MSD ^2
Matrix: Water
Analysis Batch: 505738

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 505090

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	20.0	U D	10000	10140	D	ug/L		101	75 - 125	4	20
Antimony	2.0	U D	500	474.4	D	ug/L		95	75 - 125	1	20
Arsenic	4.6	B D	1000	982.4	D	ug/L		98	75 - 125	1	20
Barium	32.3	D	1000	978.9	D	ug/L		95	75 - 125	2	20
Beryllium	0.20	U D	100	93.12	D	ug/L		93	75 - 125	1	20
Cadmium	0.20	U D	1000	970.7	D	ug/L		97	75 - 125	4	20
Chromium	11.0	D	1000	1044	D	ug/L		103	75 - 125	4	20
Cobalt	0.90	U D	1000	963.9	D	ug/L		96	75 - 125	0	20
Copper	1.9	U D	1000	969.6	D	ug/L		97	75 - 125	1	20
Lead	1.0	U D	1000	949.7	D	ug/L		95	75 - 125	2	20
Manganese	1.5	U D	1000	1010	D	ug/L		101	75 - 125	2	20
Molybdenum	5.9	D	500	502.5	D	ug/L		99	75 - 125	1	20
Nickel	2.0	U D	1000	977.4	D	ug/L		98	75 - 125	2	20
Selenium	2.0	U D	500	500.9	D	ug/L		100	75 - 125	4	20
Silver	0.90	U D	200	190.7	D	ug/L		95	75 - 125	4	20
Strontium	235	D	1000	1218	D	ug/L		98	75 - 125	2	20
Thallium	0.90	U D	200	190.0	D	ug/L		95	75 - 125	0	20
Thorium	0.90	U D	1000	966.9	D	ug/L		97	75 - 125	1	20
Tin	1.2	U D	1000	950.0	D	ug/L		95	75 - 125	0	20
Uranium	2.6	D	1000	971.7	D	ug/L		97	75 - 125	2	20
Zinc	7.5	U D	1000	990.8	D	ug/L		99	75 - 125	3	20

QC Sample Results

Client: Central Plateau Cleanup Company LLC
Project/Site: I21-020/W21-004/A21-004/S21-004

Job ID: 160-41644-1
SDG: SL41644-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 160-505613/1-A
Matrix: Water
Analysis Batch: 505771

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 505613

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.060	U	0.20	0.060	ug/L		04/14/21 12:25	04/14/21 21:16	1

Lab Sample ID: LCS 160-505613/2-A
Matrix: Water
Analysis Batch: 505771

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 505613

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	5.08		ug/L		102	80 - 120

Lab Sample ID: 160-41644-4 MS
Matrix: Water
Analysis Batch: 505771

Client Sample ID: B40C65
Prep Type: Total/NA
Prep Batch: 505613

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.060	U	5.00	5.31		ug/L		106	80 - 120

Lab Sample ID: 160-41644-4 MSD
Matrix: Water
Analysis Batch: 505771

Client Sample ID: B40C65
Prep Type: Total/NA
Prep Batch: 505613

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.060	U	5.00	5.35		ug/L		107	80 - 120	1	20

Method: 906.0 - Tritium, Total (LSC)

Lab Sample ID: MB 160-505263/1-A
Matrix: Water
Analysis Batch: 505560

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 505263

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	216.7	U	190	191	500	305	pCi/L	04/12/21 10:19	04/14/21 02:58	1

Lab Sample ID: LCS 160-505263/2-A
Matrix: Water
Analysis Batch: 505560

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 505263

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Tritium	2340	2239		381	500	294	pCi/L	96	80 - 120

Lab Sample ID: 160-41588-A-3-B MS
Matrix: Water
Analysis Batch: 505560

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 505263

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Tritium	8720		2330	10120		1080	500	289	pCi/L	60	75 - 125

QC Sample Results

Client: Central Plateau Cleanup Company LLC
Project/Site: I21-020/W21-004/A21-004/S21-004

Job ID: 160-41644-1
SDG: SL41644-1

Method: 906.0 - Tritium, Total (LSC) (Continued)

Lab Sample ID: 160-41644-3 DU
Matrix: Water
Analysis Batch: 505560

Client Sample ID: B40BD1
Prep Type: Total/NA
Prep Batch: 505263

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RPD	RPD Limit
Tritium	12600			11870		1240	500	289	pCi/L			6	20

Method: SM 7500 - Iodine-129 (LSC)

Lab Sample ID: MB 160-505245/1-A
Matrix: Water
Analysis Batch: 505744

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 505245

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Iodine-129	0.274	U	0.288	0.289	1.00	0.473	pCi/L	04/11/21 10:28	04/14/21 18:56	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
I Carrier	*88.7*		*40 - 110*	*04/11/21 10:28*	*04/14/21 18:56*	*1*

Lab Sample ID: LCS 160-505245/2-A
Matrix: Water
Analysis Batch: 505744

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 505245

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Iodine-129			13.9	13.46		1.21	1.00	0.468	pCi/L	97	80 - 120		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
I Carrier	*90.7*		*40 - 110*

Lab Sample ID: 160-41644-1 DU
Matrix: Water
Analysis Batch: 505744

Client Sample ID: B408L8
Prep Type: Total/NA
Prep Batch: 505245

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RPD	RPD Limit
Iodine-129	0.250	U		0.232	U	0.275	1.00	0.453	pCi/L			7	20

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
I Carrier	*95.3*		*40 - 110*

QC Association Summary

Client: Central Plateau Cleanup Company LLC
Project/Site: I21-020/W21-004/A21-004/S21-004

Job ID: 160-41644-1
SDG: SL41644-1

Metals

Prep Batch: 505088

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-41644-4	B40C65	Total/NA	Water	3010A	
160-41644-5	B40C67	Dissolved	Water	3010A	
160-41644-8	B40C79	Dissolved	Water	3010A	
160-41644-9	B40C77	Total/NA	Water	3010A	
MB 160-505088/1-A	Method Blank	Total/NA	Water	3010A	
LCS 160-505088/2-A	Lab Control Sample	Total/NA	Water	3010A	
160-41613-A-2-B MS	Matrix Spike	Dissolved	Water	3010A	
160-41613-A-2-C MSD	Matrix Spike Duplicate	Dissolved	Water	3010A	

Prep Batch: 505090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-41644-4	B40C65	Total/NA	Water	3010A	
160-41644-5	B40C67	Dissolved	Water	3010A	
160-41644-8	B40C79	Dissolved	Water	3010A	
160-41644-9	B40C77	Total/NA	Water	3010A	
MB 160-505090/1-A ^2	Method Blank	Total/NA	Water	3010A	
LCS 160-505090/2-A ^2	Lab Control Sample	Total/NA	Water	3010A	
160-41613-A-2-E MS ^2	Matrix Spike	Dissolved	Water	3010A	
160-41613-A-2-F MSD ^2	Matrix Spike Duplicate	Dissolved	Water	3010A	

Analysis Batch: 505417

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-41644-4	B40C65	Total/NA	Water	6010D	505088
160-41644-5	B40C67	Dissolved	Water	6010D	505088
160-41644-8	B40C79	Dissolved	Water	6010D	505088
160-41644-9	B40C77	Total/NA	Water	6010D	505088
MB 160-505088/1-A	Method Blank	Total/NA	Water	6010D	505088
LCS 160-505088/2-A	Lab Control Sample	Total/NA	Water	6010D	505088
160-41613-A-2-B MS	Matrix Spike	Dissolved	Water	6010D	505088
160-41613-A-2-C MSD	Matrix Spike Duplicate	Dissolved	Water	6010D	505088

Prep Batch: 505613

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-41644-4	B40C65	Total/NA	Water	7470A	
160-41644-5	B40C67	Dissolved	Water	7470A	
160-41644-8	B40C79	Dissolved	Water	7470A	
160-41644-9	B40C77	Total/NA	Water	7470A	
MB 160-505613/1-A	Method Blank	Total/NA	Water	7470A	
LCS 160-505613/2-A	Lab Control Sample	Total/NA	Water	7470A	
160-41644-4 MS	B40C65	Total/NA	Water	7470A	
160-41644-4 MSD	B40C65	Total/NA	Water	7470A	

Analysis Batch: 505738

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-41644-4	B40C65	Total/NA	Water	6020B	505090
160-41644-5	B40C67	Dissolved	Water	6020B	505090
160-41644-8	B40C79	Dissolved	Water	6020B	505090
160-41644-9	B40C77	Total/NA	Water	6020B	505090
MB 160-505090/1-A ^2	Method Blank	Total/NA	Water	6020B	505090
LCS 160-505090/2-A ^2	Lab Control Sample	Total/NA	Water	6020B	505090
160-41613-A-2-E MS ^2	Matrix Spike	Dissolved	Water	6020B	505090

QC Association Summary

Client: Central Plateau Cleanup Company LLC
Project/Site: I21-020/W21-004/A21-004/S21-004

Job ID: 160-41644-1
SDG: SL41644-1

Metals (Continued)

Analysis Batch: 505738 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-41613-A-2-F MSD ^2	Matrix Spike Duplicate	Dissolved	Water	6020B	505090

Analysis Batch: 505771

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-41644-4	B40C65	Total/NA	Water	7470A	505613
160-41644-5	B40C67	Dissolved	Water	7470A	505613
160-41644-8	B40C79	Dissolved	Water	7470A	505613
160-41644-9	B40C77	Total/NA	Water	7470A	505613
MB 160-505613/1-A	Method Blank	Total/NA	Water	7470A	505613
LCS 160-505613/2-A	Lab Control Sample	Total/NA	Water	7470A	505613
160-41644-4 MS	B40C65	Total/NA	Water	7470A	505613
160-41644-4 MSD	B40C65	Total/NA	Water	7470A	505613

Rad

Prep Batch: 505245

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-41644-1	B408L8	Total/NA	Water	SM 7500	
160-41644-6	B408M0	Total/NA	Water	SM 7500	
160-41644-7	B408X0	Total/NA	Water	SM 7500	
160-41644-10	B408X1	Total/NA	Water	SM 7500	
MB 160-505245/1-A	Method Blank	Total/NA	Water	SM 7500	
LCS 160-505245/2-A	Lab Control Sample	Total/NA	Water	SM 7500	
160-41644-1 DU	B408L8	Total/NA	Water	SM 7500	

Prep Batch: 505263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-41644-2	B40BD2	Total/NA	Water	LSC_Dist_Susp	
160-41644-3	B40BD1	Total/NA	Water	LSC_Dist_Susp	
MB 160-505263/1-A	Method Blank	Total/NA	Water	LSC_Dist_Susp	
LCS 160-505263/2-A	Lab Control Sample	Total/NA	Water	LSC_Dist_Susp	
160-41588-A-3-B MS	Matrix Spike	Total/NA	Water	LSC_Dist_Susp	
160-41644-3 DU	B40BD1	Total/NA	Water	LSC_Dist_Susp	

Tracer/Carrier Summary

Client: Central Plateau Cleanup Company LLC
Project/Site: I21-020/W21-004/A21-004/S21-004

Job ID: 160-41644-1
SDG: SL41644-1

Method: SM 7500 - Iodine-129 (LSC)

Matrix: Water **Prep Type: Total/NA**

		Percent Yield (Acceptance Limits)						
Lab Sample ID	Client Sample ID	I (C) (40-110)						
160-41644-1	B408L8	88.7						
160-41644-1 DU	B408L8	95.3						
160-41644-6	B408M0	90.0						
160-41644-7	B408X0	94.7						
160-41644-10	B408X1	94.0						
LCS 160-505245/2-A	Lab Control Sample	90.7						
MB 160-505245/1-A	Method Blank	88.7						

Tracer/Carrier Legend

I (C) = I Carrier