TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 160-26764-1
TestAmerica Sample Delivery Group: SL2806
Client Project/Site: S18-002 / W18-002

For:
CH2M Hill Plateau Remediation Company
PO BOX 1600, MS H8-41
Richland, Washington 99352

Attn: Mr. Scot Fitzgerald

Authorized for release by:
3/12/2018 3:08:17 PM

Jayna Awalt, Project Manager II
(314)298-8566
jayna.awalt@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.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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Job ID: 160-26764-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

CH2MHill Plateau Remediation Company
P.O. Box 1600
Richland, Washington 99352
March 12, 2018
Attention: Scot Fitzgerald

SDG	: SL2806
Number of Samples	: 18 samples
Sample Matrix	: Water
Data Deliverable	: Summary
Date SDG Closed	: February 14, 2018

II. Introduction

On February 14, 18 samples were received by TestAmerica - St. Louis 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: S18-002 and W18-002

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.

Note: For Metals analyses, per standard practice, all 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.

For Anion analysis, samples have been started at a 2x dilution per CHPRC 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.

For WTPH methods, the lab utilizes method 8015B. Per CHPRC direction, the method name in the electronic data has been modified to read WTPH in the place of 8015B.

Per CHPRC direction, due to the short hold times for Nitrate, Nitrite and Phosphate by IC (48 hours) as well as 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.

For extractable and volatile organic analyses, several analytes are considered poor performers and will not meet CHPRC QC limits. Per CHPRC direction, the lab’s statistical limits have been reported. Excursions outside these statistical limits will include a non-conformance in the sections below.

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Job ID: 160-26764-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

IV. Definitions

QCBLK- Quality Control Blank, Method Blank
QCLCS- 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, rad and GC analyses, the spike/spike duplicate recoveries are outside QC limits.
- **T** - For GCMS analyses, the spike/spike duplicate recoveries are outside QC limits.
- **o** - For all analyses, the LCS (LCSD) recoveries are outside QC limits.
- **P -** For organic analyses (PCB/Pests only), the aroclor target analyte has greater than 25% difference for detected concentrations between the two GC columns.
- **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: 352191

Due to the high concentration of Calcium, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 160-351373 and analytical batch 160-352191 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria. (160-26764-A-2-E MS ^) and (160-26764-A-2-F MSD) This analyte has been qualified accordingly with an "X" flag in the associated samples.

The following samples were diluted to bring the concentration of target analytes within the calibration range: B3H508 (160-26764-2), (160-26764-A-2-E MS ^), (160-26764-A-2-F MSD) and (160-26764-A-2-D SD ^). Elevated reporting limits (RLs) are provided. These analytes have been qualified accordingly with a "D" flag in the associated samples.

ICPMS Metals

Batch: 354868

Copper was detected in method blank MB 160-351372/1-A 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

Job ID: 160-26764-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

and/or RL and MB is greater than 5% the sample concentration, the result has been flagged “C”.

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

Alkalinity
TOC
Tritium

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: CH2M Hill Plateau Remediation Company

Job Number: 160-26764-1
SDG Number: SL2806

Login Number: 26764
List Number: 1
Creator: Clarke, Jill C

List Source: 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	0.3
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").	N/A	
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

C.O.C. # S18-002-536

Collector: Daniel Klug CHPRC SL2806	**Contact/Requester:** Karen Waters-Husted	**Telephone No.:** 509-376-4650
SAF No.: S18-002	**Sampling Origin:** Hanford Site	**Purchase Order/Charge Code:** 300071
Project Title: Sitewide Surv, February 2018	**Logbook No.:** HNF-N-506-96/94	**Ice Chest No.:** 6605-6081
Shipped To (Lab): TestAmerica St. Louis	**Method of Shipment** Commercial Carrier	**Bill of Lading/Air Bill No.:** 771474206671
Protocol SURV	**Priority:** 30 Days	**Offsite Property No.:** N/A

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
B3H511	Y	W	FEB 12 2018	1216	1x500-mL G/P	6020_METALS_ICPMS: Uranium (1); 6020_METALS_ICPMS: Chromium (1)	6 Months	HNO3 to pH <2
B3H508	N	W	FEB 12 2018	1216	1x500-mL G/P	6010_METALS_ICP: GW 04; 6020_METALS_ICPMS: GW 01	6 Months	HNO3 to pH <2

Relinquished By	Print First and Last Name	Signature	Date/Time	Received By	Print First and Last Name	Signature	Date/Time
Daniel Klug CHPRC	D. Klug		FEB 12 2018 1325	SSU-1			FEB 12 2018 1325
SSU-1			FEB 13 2018 1100	Lesly Wall /CHPRC		Lesly Wall	FEB 13 2018 1100
Lesly Wall /CHPRC		Lesly Wall	FEB 13 2018 1400	FEDEX			
FEDEX				Gil Claude Jill Clark			2.14.18 0940

Matrix *

S = Soil	DS = Drum Solids
SE = Sediment	DL = Drum Liquid
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:

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S18-002-537

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Collector: Daniel Klug CHPRC SL28D6	**Contact/Requester:** Karen Waters-Husted	**Telephone No.:** 509-376-4650	2/10.2/13/18
SAF No.: S18-002	**Sampling Origin:** Hanford Site	**Purchase Order/Charge Code:** 300071	
Project Title: Sitewide Surv, February 2018	**Logbook No.:** HNF-N-506 96/94	**Ice Chest No.:** 6605-681	
Shipped To (Lab): TestAmerica St. Louis	**Method of Shipment** Commercial Carrier	**Bill of Lading/Air Bill No.:** 7714 7420 6671	
Protocol SURV	**Priority:** 30 Days	**Offsite Property No.:** N/A	

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
B3H4J6	N	W	FEB 12 2018	1020	1x250-mL G/P	310.1_ALKALINITY: COMMON	14 Days	Cool <=6C

Relinquished By	Print First and Last Name	Signature	Date/Time	Received By	Print First and Last Name	Signature	Date/Time
Daniel Klug CHPRC	D. Klug		FEB 12 2018 1120	Troy Bacon CHPRC	Troy L. Bacon		FEB 12 2018 1120
Troy Bacon CHPRC	Troy L. Bacon		FEB 12 2018 1240	SSU-1			FEB 12 2018 1240
SSU-1			FEB 13 2018 1100	Lesly Wall /CHPRC	Lesly Wall		FEB 13 2018 1100
Lesly Wall /CHPRC	Lesly Wall		FEB 13 2018 1400	FEDEX			

Matrix *

S = Soil	DS = Drum Solids
SE = Sediment	DL = Drum Liquid
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 2/1/2018 FSR ID = FSR57460 A-6004-842 (REV 3)

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST (continued)

C.O.C. No. S18-002-537

Page 2 of 2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
		FED EX		Jill Clark	Jill Clark		2.14.18 0940
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time

A-6003-962 (03/05)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S18-002-601

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Collector:	Dan Woehle CHPRC SL2806	**Contact/Requester:**	Karen Waters-Husted	**Telephone No.:**	509-376-4650 RO.2/13/18
SAF No.:	S18-002	**Sampling Origin:**	Hanford Site	**Purchase Order/Charge Code:**	300071
Project Title:	Sitewide Surv, February 2018	**Logbook No.:**	HNF-N-506 - 95/91	**Ice Chest No.:**	6605-6681
Shipped To (Lab):	TestAmerica St. Louis	**Method of Shipment**	Commercial Carrier	**Bill of Lading/Air Bill No.:**	7714 7420 6671
Protocol	SURV	**Priority:**	30 Days	**Offsite Property No.:**	N/A

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
B3H7D2	Y		FEB 12 2018	0930	1x500-mL G/P	6010_METALS_ICP: GW 04	6 Months	HNO3 to pH <2
B3H7D3	N	W	↓	↓	1x250-mL G/P	310.1_ALKALINITY: GW 01	14 Days	Cool <=6C
B3H7D3	N	W	FEB 12 2018	0930	1x500-mL G/P	6010_METALS_ICP: GW 04	6 Months	HNO3 to pH <2

	Print First and Last Name	Signature	Date/Time
Relinquished By:	Dan Woehle CHPRC		FEB 12 2018 1105
Received By:	Troy Bacon CHPRC	Troy L. Bacon	FEB 12 2018 1105
Relinquished By:	Troy Bacon CHPRC	Troy L. Bacon	FEB 12 2018 1240
Received By:	SSU-1		FEB 12 2018 1240
Relinquished By:	SSU-1		FEB 13 2018 1100
Received By:	Lesly Wall /CHPRC	Lesly Wall	FEB 13 2018 1100
Relinquished By:	Lesly Wall /CHPRC	Lesly Wall	FEB 13 2018 1400
Received By:	FEDEX		

Matrix *

S = Soil	DS = Drum Solids
SE = Sediment	DL = Drum Liquid
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 12/13/2017 FSR ID = FSR55485 A-6004-842 (REV 3)

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST (continued)

C.O.C. No. SIB-002-601

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Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
		FED EX		Jill Clark	Jill Clark	2.14.18	0940
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time

A-6003-962 (03/05)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S18-002-610

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Collector:	Dan Woehle CHPRC SL28D6	**Contact/Requester:**	Karen Waters-Husted	**Telephone No.:**	509-376-4650
SAF No.:	S18-002	**Sampling Origin:**	Hanford Site	**Purchase Order/Charge Code:**	300071
Project Title:	Sitewide Surv, February 2018	**Logbook No.:**	HNF-N-506 -95/91	**Ice Chest No.:**	GWS-6681
Shipped To (Lab):	TestAmerica St. Louis	**Method of Shipment**	Commercial Carrier	**Bill of Lading/Air Bill No.:**	7714 7420 6671
Protocol	SURV	**Priority:**	30 Days	**Offsite Property No.:**	N/A

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
B3H7F5	N	W	FEB 12 2018	1015	1x250-mL G/P	310.1_ALKALINITY: GW 01	14 Days	Cool <=6C

Relinquished By:	Received By:
Dan Woehle CHPRC — Print First and Last Name; Signature; FEB 12 2018 1105 — Date/Time	Troy Bacon CHPRC — Print First and Last Name; Troy L. Bacon — Signature; FEB 12 2018 1105 — Date/Time
Troy Bacon CHPRC — Print First and Last Name; Troy L. Bacon — Signature; FEB 12 2018 1240 — Date/Time	SSU-1 — Print First and Last Name; Signature; FEB 12 2018 1240 — Date/Time
SSU-1 — Print First and Last Name; Signature; FEB 13 2018 1100 — Date/Time	Lesly Wall /CHPRC — Print First and Last Name; Lesly Wall — Signature; FEB 13 2018 1100 — Date/Time
Lesly Wall /CHPRC — Print First and Last Name; Lesly Wall — Signature; FEB 13 2018 1400 — Date/Time	FEDEX — Print First and Last Name; Signature; Date/Time

Matrix *

S = Soil	DS = Drum Solids
SE = Sediment	DL = Drum Liquid
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 12/13/2017 FSR ID = FSR55488 A-6004-842 (REV 3)

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST (continued)

C.O.C. No. 518-002-610

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Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
		FEDEX			Jill Clarke	Jill Clarke	2-14-18 0940
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time

A-6003-962 (03/05)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S18-002-630

Page 1 of 1

Collector:	Daniel Klug CHPRC SL2806	**Contact/Requester:**	Karen Waters-Husted	**Telephone No.:**	509-376-4650
SAF No.:	S18-002	**Sampling Origin:**	Hanford Site	**Purchase Order/Charge Code:**	300071
Project Title:	Sitewide Surv, February 2018	**Logbook No.:**	HNF-N-506 98/38	**Ice Chest No.:**	6605-6881
Shipped To (Lab):	TestAmerica St. Louis	**Method of Shipment**	Commercial Carrier	**Bill of Lading/Air Bill No.:**	7714 7420 6671
Protocol	SURV	**Priority:**	30 Days	**Offsite Property No.:**	N/A

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
B3H881	N	W	FEB 13 2018	0923	1x250-mL P	906.0_TRITIUM_LSC: COMMON	6 Months	None

FEB 13 2018

Relinquished By:	Received By:
Daniel Klug CHPRC — Print First and Last Name: D. Klug; Signature; Date/Time: FEB 13 2018 1105	Roger Friesz Jr. /CHPRC — Print First and Last Name; Signature; Date/Time: FEB 13 2018 1105
Relinquished By: Roger Friesz Jr. /CHPRC — Print First and Last Name; Signature; Date/Time: FEB 13 2018 1400	Received By: FEDEX — Print First and Last Name; Signature; Date/Time
Relinquished By: FED EX — Print First and Last Name; Signature; Date/Time	Received By: Jill Clarke — Print First and Last Name: Jill Clarke; Signature; Date/Time
Relinquished By: — Print First and Last Name; Signature; Date/Time	Received By: — Print First and Last Name; Signature; Date/Time

Matrix *

S = Soil	DS = Drum Solids
SE = Sediment	DL = Drum Liquid
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 1/18/2018 FSR ID = FSR57317 A-6004-842 (REV 3)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S18-002-631

Page 1 of 1

Collector:	Daniel Klug CHPRC SL2806	**Contact/Requester:**	Karen Waters-Husted	**Telephone No.:**	509-376-4650
SAF No.:	S18-002	**Sampling Origin:**	Hanford Site	**Purchase Order/Charge Code:**	300071
Project Title:	Sitewide Surv, February 2018	**Logbook No.:**	HNF-N-506 98/38	**Ice Chest No.:**	GW5-681
Shipped To (Lab):	TestAmerica St. Louis	**Method of Shipment**	Commercial Carrier	**Bill of Lading/Air Bill No.:**	7714 7420 6671
Protocol	SURV	**Priority:**	30 Days	**Offsite Property No.:**	N/A

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
B3H883	N	W	FEB 13 2018	0800	1x250-mL P	906.0_TRITIUM_LSC: COMMON	6 Months	None

Relinquished By:	Signature	Date/Time	Received By:	Signature	Date/Time
Daniel Klug CHPRC		FEB 13 2018 1105	Roger Friesz Jr. /CHPRC		FEB 13 2018 1105
Roger Friesz Jr. /CHPRC		FEB 13 2018 1400	FEDEX		
	FED EX		Jill Clarke	Jill Clarke	2-14-18 0940

Matrix *

S = Soil	DS = Drum Solids
SE = Sediment	DL = Drum Liquid
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 1/18/2018 FSR ID = FSR57318 A-6004-842 (REV 3)

IMPORTANT!
FedEx is closely monitoring the winter storms across the U.S. Learn More

FedEx ® Tracking

771474206671

Ship date:		Actual delivery:
Tue 2/13/2018		**Wed 2/14/2018 9:24 am**
Richland, WA US	**Delivered** *Signed for by: J.CLARKE*	EARTH CITY, MO US

Travel History

Date/Time	Activity	Location
2/14/2018 - Wednesday		
9:24 am	Delivered	EARTH CITY, MO
7:47 am	On FedEx vehicle for delivery	EARTH CITY, MO
7:40 am	At local FedEx facility	EARTH CITY, MO
6:09 am	At destination sort facility	BERKELEY, MO
5:20 am	Departed FedEx location	MEMPHIS, TN
1:01 am	Arrived at FedEx location	MEMPHIS, TN
2/13/2018 - Tuesday		
5:12 pm	Left FedEx origin facility	PASCO, WA
3:23 pm	Picked up	PASCO, WA
3:03 pm	Shipment information sent to FedEx	

Shipment Facts

Tracking Number	771474206671	**Service**	FedEx Standard Overnight
Weight	68 lbs / 30.84 kgs	**Delivered To**	Shipping/Receiving
Total pieces	1	**Total shipment weight**	68 lbs / 30.84 kgs
Terms	Recipient	**Shipper reference**	GWS-681
Packaging	Your Packaging	**Special handling section**	Deliver Weekday
Standard transit	2/14/2018 by 3:00 pm		

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Login Sample Receipt Checklist

Client: CH2M Hill Plateau Remediation Company

Job Number: 160-26773-1
SDG Number: SL2806

Login Number: 26773
List Number: 1
Creator: Clarke, Jill C

List Source: 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	0.3
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").	N/A	
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	C.O.C. # W18-002-013 Page 1 of 1

Collector: Juan Aguilar /CHPRC SL2806	**Contact/Requester:** Karen Waters-Husted	**Telephone No.:** 509-376-4650
SAF No.: W18-002	**Sampling Origin:** Hanford Site	**Purchase Order/Charge Code:** 300071
Project Title: RCRA, February 2018	**Logbook No.:** HNF-N-506-95193	**Ice Chest No.:** GWS-681
Shipped To (Lab): TestAmerica St. Louis	**Method of Shipment** Commercial Carrier	**Bill of Lading/Air Bill No.:** 7741 7420 6671
Protocol RCRA	**Priority:** 30 Days	**Offsite Property No.:** N/A

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
B3H378	N	W	2-13-18	1247	1x500-mL G/P	6010_METALS_ICP: COMMON; 6020_METALS_ICPMS: Chromium (1)	6 Months	HNO3 to pH <2

Relinquished By	Signature	Date/Time	Received By	Signature	Date/Time
Juan Aguilar /CHPRC		FEB 13 2018 1306	Troy Bacon CHPRC	Troy L. Bacon	FEB 13 2018 1306
Troy Bacon CHPRC	Troy L. Bacon	FEB 13 2018 1400	FEDEX		
FED EX			Jill Clarke	Jill Clarke	2.14.18 0940

Matrix *
S = Soil, DS = Drum Solids, SE = Sediment, DL = Drum Liquid, 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 12/13/2017 FSR ID = FSR55492 A-6004-842 (REV 3)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # W18-002-014 Page 1 of 12

Collector:	IVAN SCHAEFFER CHPRC SL2806	**Contact/Requester:**	Karen Waters-Husted	**Telephone No.:**	509-376-4650
SAF No.:	W18-002	**Sampling Origin:**	Hanford Site	**Purchase Order/Charge Code:**	300071
Project Title:	RCRA, February 2018	**Logbook No.:**	HNF-N-506-78/37	**Ice Chest No.:**	GWS-681
Shipped To (Lab):	TestAmerica St. Louis	**Method of Shipment**	Commercial Carrier	**Bill of Lading/Air Bill No.:**	7714 7420 6671
Protocol	RCRA	**Priority:**	30 Days	**Offsite Property No.:**	N/A

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
Low Volume Wells. Do not use for QC.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B3H3C0	N	W	FEB 12 2018	0947	1x125-mL G/P	6010_METALS_ICP: COMMON; 6020_METALS_ICPMS: Chromium (1)	6 Months	HNO3 to pH <2

Relinquished By:	Print First and Last Name	Signature	Date/Time	Received By:	Print First and Last Name	Signature	Date/Time
IVAN SCHAEFFER CHPRC			FEB 12 2018 1154	Troy Bacon CHPRC		Troy L. Bacon	FEB 12 2018 1154
Troy Bacon CHPRC		Troy L. Bacon	FEB 12 2018 1240	SSU-1			FEB 12 2018 1240
SSU-1			FEB 13 2018 1100	Lesly Wall /CHPRC		Lesly Wall	FEB 13 2018 1100
Lesly Wall /CHPRC		Lesly Wall	FEB 13 2018 1400	FEDEX			

Matrix *

S = Soil	DS = Drum Solids
SE = Sediment	DL = Drum Liquid
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 1/4/2018 FSR ID = FSR55847 A-6004-842 (REV 3)

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST (continued)

C.O.C. No. 4018-002-014

Page 2 of 2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
		FED EX		Jill Clark	Jill Clark	2-14-18	0940
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time

A-6003-962 (03/05)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W18-002-015

Page 1 of 1

Collector:	Juan Aguilar /CHPRC SL2806	**Contact/Requester:**	Karen Waters-Husted	**Telephone No.:**	509-376-4650
SAF No.:	W18-002	**Sampling Origin:**	Hanford Site	**Purchase Order/Charge Code:**	300071
Project Title:	RCRA, February 2018	**Logbook No.:**	HNF-N-506 - 95193	**Ice Chest No.:**	GWS-681
Shipped To (Lab):	TestAmerica St. Louis	**Method of Shipment**	Commercial Carrier	**Bill of Lading/Air Bill No.:**	7747420 6671
Protocol	RCRA	**Priority:**	30 Days	**Offsite Property No.:**	N/A

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
B3H3N0	N	W	2-13-18	1027	1x500-mL G/P	6010_METALS_ICP: COMMON; 6020_METALS_ICPMS: Chromium (1)	6 Months	HNO3 to pH <2

Relinquished By	Print First and Last Name	Signature	Date/Time	Received By	Print First and Last Name	Signature	Date/Time
Juan Aguilar /CHPRC			FEB 13 2018 1120	Troy Bacon CHPRC		Troy L Bacon	FEB 13 2018 1120
Troy Bacon CHPRC		Troy L Bacon	FEB 13 2018 1400	FEDEX			
FED EX				Jill Clarke		Jill Clarke	2-14-18 0940

Matrix *

S = Soil	DS = Drum Solids
SE = Sediment	DL = Drum Liquid
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 12/13/2017 FSR ID = FSR55494 A-6004-842 (REV 3)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W18-002-160

Page 1 of 1

Collector:	Daniel Klug CHPRC SL2806	**Contact/Requester:**	Karen Waters-Husted	**Telephone No.:**	509-376-4650
SAF No.:	W18-002	**Sampling Origin:**	Hanford Site	**Purchase Order/Charge Code:**	300071
Project Title:	RCRA, February 2018	**Logbook No.:**	HNF-N-506 98/38	**Ice Chest No.:**	GLOS-6801
Shipped To (Lab):	TestAmerica St. Louis	**Method of Shipment**	Commercial Carrier	**Bill of Lading/Air Bill No.:**	7714742016071
Protocol	RCRA	**Priority:**	30 Days	**Offsite Property No.:**	N/A

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
B3H354	N	W	FEB 13 2018	0800	1x250-mL aG	9060_TOC: COMMON	28 Days	HCl or H2SO4 to pH <2 / Cool <=6C

Relinquished By:	Received By:
Daniel Klug CHPRC — D.K.O. — FEB 13 2018 — 1105 (Print First and Last Name / Signature / Date/Time)	Roger Friesz Jr. /CHPRC — FEB 13 2018 — 1105 (Print First and Last Name / Signature / Date/Time)
Roger Friesz Jr. /CHPRC — FEB 13 2018 — 1400 (Print First and Last Name / Signature / Date/Time)	FEDEX (Print First and Last Name / Signature / Date/Time)
FED EX (Print First and Last Name / Signature / Date/Time)	Jill Clark — Jill Clark — 2.14.18 — 0940 (Print First and Last Name / Signature / Date/Time)
(Print First and Last Name / Signature / Date/Time)	(Print First and Last Name / Signature / Date/Time)

Matrix *

S = Soil	DS = Drum Solids
SE = Sediment	DL = Drum Liquid
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 1/18/2018 FSR ID = FSR57318 A-6004-842 (REV 3)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W18-002-161

Collector:	Daniel Klug CHPRC SL2806	**Contact/Requester:**	Karen Waters-Husted	**Telephone No.:**	509-376-4650
SAF No.:	W18-002	**Sampling Origin:**	Hanford Site	**Purchase Order/Charge Code:**	300071
Project Title:	RCRA, February 2018	**Logbook No.:**	HNF-N-506 98/38	**Ice Chest No.:**	6605-681
Shipped To (Lab):	TestAmerica St. Louis	**Method of Shipment**	Commercial Carrier	**Bill of Lading/Air Bill No.:**	7714 7420 6671
Protocol	RCRA	**Priority:**	30 Days	**Offsite Property No.:**	N/A

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
B3H355	N	W	FEB 13 2018	0923	1x250-mL aG	9060_TOC: COMMON	28 Days	HCl or H2SO4 to pH <2 / Cool <=6C

Relinquished By	Print First and Last Name	Signature	Date/Time	Received By	Print First and Last Name	Signature	Date/Time
Daniel Klug CHPRC	D. Klug		FEB 13 2018 1105	Roger Friesz Jr. /CHPRC			FEB 13 2018 1105
Roger Friesz Jr. /CHPRC			FEB 13 2018 1400	FEDEX			
FED EX				Jill Clarke	Jill Clarke		2.14.18 0940

Matrix *

S = Soil	DS = Drum Solids
SE = Sediment	DL = Drum Liquid
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 1/18/2018 FSR ID = FSR57317 A-6004-842 (REV 3)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W18-002-162

Page 1 of 1

Collector:	Daniel Klug CHPRC SL3806	**Contact/Requester:**	Karen Waters-Husted	**Telephone No.:**	509-376-4650
SAF No.:	W18-002	**Sampling Origin:**	Hanford Site	**Purchase Order/Charge Code:**	300071
Project Title:	RCRA, February 2018	**Logbook No.:**	HNF-N-506 98/38	**Ice Chest No.:**	GW05-681
Shipped To (Lab):	TestAmerica St. Louis	**Method of Shipment**	Commercial Carrier	**Bill of Lading/Air Bill No.:**	7714 7420 6671
Protocol	RCRA	**Priority:**	30 Days	**Offsite Property No.:**	N/A

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

* Sample was inavertenly filled in a poly/HCL bottle, then poured into an aG 250

SPECIAL INSTRUCTIONS

N/A

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B3H370	N	W	FEB 13 2018	1015	1x250-mL aG *	9060_TOC: COMMON	28 Days	HCl or H2SO4 to pH <2 / Cool <=6C

Relinquished By:	Received By:
Daniel Klug CHPRC — Print First and Last Name / Signature / FEB 13 2018 1105 Date/Time	Roger Friesz Jr. /CHPRC — Print First and Last Name / Signature / FEB 13 2018 1105 Date/Time
Roger Friesz Jr. /CHPRC — Print First and Last Name / Signature / FEB 13 2018 1400 Date/Time	FEDEX — Print First and Last Name / Signature / Date/Time
FED EX — Print First and Last Name / Signature / Date/Time	Jill Clark — Print First and Last Name / Jill Clark — Signature / 2.14.18 0940 Date/Time
Print First and Last Name / Signature / Date/Time	Print First and Last Name / Signature / Date/Time

Matrix *

S = Soil	DS = Drum Solids
SE = Sediment	DL = Drum Liquid
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 12/13/2017 FSR ID = FSR55491 A-6004-842 (REV 3)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # W18-002-163 Page 1 of 1

Collector: Juan Aguilar /CHPRC SL28016	**Contact/Requester:** Karen Waters-Husted	**Telephone No.:** 509-376-4650
SAF No.: W18-002	**Sampling Origin:** Hanford Site	**Purchase Order/Charge Code:** 300071
Project Title: RCRA, February 2018	**Logbook No.:** HNF-N-506-95193	**Ice Chest No.:** GWS-681
Shipped To (Lab): TestAmerica St. Louis	**Method of Shipment** Commercial Carrier	**Bill of Lading/Air Bill No.:** 7714 7420 6671
Protocol RCRA	**Priority:** 30 Days	**Offsite Property No.:** N/A

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
B3H345	N	W	2-13-18	1247	1x250-mL G/P	310.1_ALKALINITY: COMMON	14 Days	Cool <=6C

Relinquished By	Print First and Last Name	Signature	Date/Time	Received By	Print First and Last Name	Signature	Date/Time
Juan Aguilar /CHPRC		FEB 13 2018	1306	Troy Bacon CHPRC		Troy L. Bacon	FEB 13 2018 1306
Troy Bacon CHPRC		Troy L. Bacon	FEB 13 2018 1400	FEDEX			
		FED EX		Jill Clarke		Jill Clarke	2.14.18 0940

Matrix *

S = Soil	DS = Drum Solids
SE = Sediment	DL = Drum Liquid
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 12/13/2017 FSR ID = FSR55492 A-6004-842 (REV 3)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W18-002-165

Page 1 of 2

Collector:	IVAN SCHAEFFER CHPRC SL2806	**Contact/Requester:**	Karen Waters-Husted	**Telephone No.:**	509-376-4650
SAF No.:	W18-002	**Sampling Origin:**	Hanford Site	**Purchase Order/Charge Code:**	300071
Project Title:	RCRA, February 2018	**Logbook No.:**	HNF-N-506 98/37	**Ice Chest No.:**	GUS-681
Shipped To (Lab):	TestAmerica St. Louis	**Method of Shipment**	Commercial Carrier	**Bill of Lading/Air Bill No.:**	7714 7420 6671
Protocol	RCRA	**Priority:**	30 Days	**Offsite Property No.:**	N/A

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

Low Volume Wells. Do not use for QC.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B3H3C2	N	W	FEB 1 2 2018	0947	1x125-mL G/P	310.1_ALKALINITY: COMMON	14 Days	Cool <=6C

Relinquished By	Print First and Last Name	Signature	Date/Time	Received By	Print First and Last Name	Signature	Date/Time
IVAN SCHAEFFER CHPRC			FEB 1 2 2018 1154	Troy Bacon CHPRC		Troy L. Bacon	FEB 1 2 2018 1154
Troy Bacon CHPRC		Troy L. Bacon	FEB 1 2 2018 1240	SSU-1			FEB 1 2 2018 1240
SSU-1			FEB 1 3 2018 1100	Lesly Wall /CHPRC		Lesly Wall	FEB 1 3 2018 1100
Lesly Wall /CHPRC		Lesly Wall	FEB 1 3 2018 1400	FEDEX			

Matrix *

S = Soil	DS = Drum Solids
SE = Sediment	DL = Drum Liquid
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 1/4/2018 FSR ID = FSR55847 A-6004-842 (REV 3)

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST (continued)

C.O.C. No. W18-002-165

Page 2 of 2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
		FED EX		Jill Clark	Jill Clark	2.14.18	0940
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time

A-6003-962 (03/05)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W18-002-166

Collector:	Juan Aguilar /CHPRC SL2806	**Contact/Requester:**	Karen Waters-Husted	**Telephone No.:**	509-376-4650
SAF No.:	W18-002	**Sampling Origin:**	Hanford Site	**Purchase Order/Charge Code:**	300071
Project Title:	RCRA, February 2018	**Logbook No.:**	HNF-N-506-95193	**Ice Chest No.:**	6W25-681
Shipped To (Lab):	TestAmerica St. Louis	**Method of Shipment**	Commercial Carrier	**Bill of Lading/Air Bill No.:**	7714 7420 6671
Protocol	RCRA	**Priority:**	30 Days	**Offsite Property No.:**	N/A

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

Low Volume Wells. Do not use for QC.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B3H3M7	N	W	2-13-18	1108	1x125-mL G/P	6010_METALS_ICP: COMMON; 6020_METALS_ICPMS: Chromium (1)	6 Months	HNO3 to pH <2

Relinquished By:	Print First and Last Name	Signature	Date/Time	Received By:	Print First and Last Name	Signature	Date/Time
Juan Aguilar /CHPRC		FEB 13 2018	1120	Troy Bacon CHPRC		Troy L. Bacon FEB 13 2018	1120
Troy Bacon CHPRC		Troy L. Bacon FEB 13 2018	1400	FEDEX			
FED EX				Jill Clarke		Jill Clarke 2-14-18	0940

Matrix *

S = Soil	DS = Drum Solids
SE = Sediment	DL = Drum Liquid
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 1/4/2018 FSR ID = FSR55855 A-6004-842 (REV 3)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # W18-002-167 Page 1 of 1

Collector:	Juan Aguilar /CHPRC SL2806	**Contact/Requester:**	Karen Waters-Husted	**Telephone No.:**	509-376-4650
SAF No.:	W18-002	**Sampling Origin:**	Hanford Site	**Purchase Order/Charge Code:**	300071
Project Title:	RCRA, February 2018	**Logbook No.:**	HNF-N-506 -95193	**Ice Chest No.:**	GWS-1681
Shipped To (Lab):	TestAmerica St. Louis	**Method of Shipment**	Commercial Carrier	**Bill of Lading/Air Bill No.:**	7714 7420 6671
Protocol	RCRA	**Priority:**	30 Days	**Offsite Property No.:**	N/A

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
B3H3N2	N	W	2-13-18	1027	1x250-mL G/P	310.1_ALKALINITY: COMMON	14 Days	Cool <=6C

Relinquished By	Signature	Date/Time	Received By	Signature	Date/Time
Juan Aguilar /CHPRC		FEB 13 2018 1120	Troy Bacon CHPRC	Troy L. Bacon	FEB 13 2018 1120
Troy Bacon CHPRC	Troy L. Bacon	FEB 13 2018 1400	FEDEX		
FED EX			Jill Clarke	Jill Clarke	2-14-18 0940

Matrix *

S = Soil	DS = Drum Solids
SE = Sediment	DL = Drum Liquid
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 12/13/2017 FSR ID = FSR55494 A-6004-842 (REV 3)

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FedEx ® Tracking

771474206671

Ship date:
Tue 2/13/2018

Richland, WA US

Delivered
Signed for by: J.CLARKE

Actual delivery:
Wed 2/14/2018 9:24 am

EARTH CITY, MO US

Travel History

Date/Time	Activity	Location
2/14/2018 - Wednesday		
9:24 am	Delivered	EARTH CITY, MO
7:47 am	On FedEx vehicle for delivery	EARTH CITY, MO
7:40 am	At local FedEx facility	EARTH CITY, MO
6:09 am	At destination sort facility	BERKELEY, MO
5:20 am	Departed FedEx location	MEMPHIS, TN
1:01 am	Arrived at FedEx location	MEMPHIS, TN
2/13/2018 - Tuesday		
5:12 pm	Left FedEx origin facility	PASCO, WA
3:23 pm	Picked up	PASCO, WA
3:03 pm	Shipment information sent to FedEx	

Shipment Facts

Tracking Number	771474206671	**Service**	FedEx Standard Overnight
Weight	68 lbs / 30.84 kgs	**Delivered To**	Shipping/Receiving
Total pieces	1	**Total shipment weight**	68 lbs / 30.84 kgs
Terms	Recipient	**Shipper reference**	GWS-681
Packaging	Your Packaging	**Special handling section**	Deliver Weekday
Standard transit	2/14/2018 by 3:00 pm		

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Definitions/Glossary

Client: CH2M Hill Plateau Remediation Company
Project/Site: S18-002 / W18-002

TestAmerica Job ID: 160-26764-1
SDG: SL2806

Qualifiers

Metals

Qualifier	Qualifier Description
D	The reported value is from a dilution.
U	Analyzed for but not detected.
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 </= 5X the blank concentration.
X	See case narrative notes for explanation of the 'X' flag

General Chemistry

Qualifier	Qualifier Description
U	Analyzed for but not detected.
B	Estimated result. Result is less than the RL, but greater than MDL

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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Method Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: S18-002 / W18-002

TestAmerica Job ID: 160-26764-1
SDG: SL2806

Method	Method Description	Protocol	Laboratory
6010C	Metals (ICP)	SW846	TAL SL
6020A	Metals (ICP/MS)	SW846	TAL SL
310.1	Alkalinity	MCAWW	TAL SL
9060	Organic Carbon, Total (TOC)	SW846	TAL SL
906.0	Tritium, Total (LSC)	EPA	TAL SL

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

Laboratory References:

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

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Sample Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: S18-002 / W18-002

TestAmerica Job ID: 160-26764-1
SDG: SL2806

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-26764-1	B3H511	Water	02/12/18 12:16	02/14/18 09:40
160-26764-2	B3H508	Water	02/12/18 12:16	02/14/18 09:40
160-26764-3	B3H4J6	Water	02/12/18 10:20	02/14/18 09:40
160-26764-4	B3H7D2	Water	02/12/18 09:30	02/14/18 09:40
160-26764-5	B3H7D3	Water	02/12/18 09:30	02/14/18 09:40
160-26764-6	B3H7F5	Water	02/12/18 10:15	02/14/18 09:40
160-26764-7	B3H881	Water	02/13/18 09:23	02/14/18 09:40
160-26764-8	B3H883	Water	02/13/18 08:00	02/14/18 09:40
160-26773-1	B3H378	Water	02/13/18 12:47	02/14/18 09:40
160-26773-2	B3H3C0	Water	02/12/18 09:47	02/14/18 09:40
160-26773-3	B3H3N0	Water	02/13/18 10:27	02/14/18 09:40
160-26773-4	B3H354	Water	02/13/18 08:00	02/14/18 09:40
160-26773-5	B3H355	Water	02/13/18 09:23	02/14/18 09:40
160-26773-6	B3H370	Water	02/13/18 10:15	02/14/18 09:40
160-26773-7	B3H345	Water	02/13/18 12:47	02/14/18 09:40
160-26773-8	B3H3C2	Water	02/12/18 09:47	02/14/18 09:40
160-26773-9	B3H3M7	Water	02/13/18 11:08	02/14/18 09:40
160-26773-10	B3H3N2	Water	02/13/18 10:27	02/14/18 09:40

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: S18-002 / W18-002

TestAmerica Job ID: 160-26764-1
SDG: SL2806

Method: 6010C - Metals (ICP)

Client Sample ID: B3H508 — **Lab Sample ID: 160-26764-2**
Date Collected: 02/12/18 12:16 — **Matrix: Water**
Date Received: 02/14/18 09:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**101000**	**D**	2000	600	ug/L		02/15/18 14:57	02/20/18 14:11	2
Iron	60.0	U D	200	60.0	ug/L		02/15/18 14:57	02/20/18 14:11	2
Magnesium	**17400**	**D**	2000	600	ug/L		02/15/18 14:57	02/20/18 14:11	2
Potassium	**6040**	**B D**	10000	3000	ug/L		02/15/18 14:57	02/20/18 14:11	2
Sodium	**35800**	**D**	2000	600	ug/L		02/15/18 14:57	02/20/18 14:11	2
Vanadium	**13.2**	**B D**	100	8.0	ug/L		02/15/18 14:57	02/20/18 14:11	2
Boron	50.0	U D	200	50.0	ug/L		02/15/18 14:57	02/20/18 14:11	2

Client Sample ID: B3H7D3 — **Lab Sample ID: 160-26764-5**
Date Collected: 02/12/18 09:30 — **Matrix: Water**
Date Received: 02/14/18 09:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**88800**		1000	300	ug/L		02/15/18 14:57	02/20/18 14:47	1
Iron	30.0	U	100	30.0	ug/L		02/15/18 14:57	02/20/18 14:47	1
Magnesium	**31500**		1000	300	ug/L		02/15/18 14:57	02/20/18 14:47	1
Potassium	**5970**		5000	1500	ug/L		02/15/18 14:57	02/20/18 14:47	1
Sodium	**88500**		1000	300	ug/L		02/15/18 14:57	02/20/18 14:47	1
Vanadium	**12.4**	**B**	50.0	4.0	ug/L		02/15/18 14:57	02/20/18 14:47	1
Boron	**29.8**	**B**	100	25.0	ug/L		02/15/18 14:57	02/20/18 14:47	1

Client Sample ID: B3H378 — **Lab Sample ID: 160-26773-1**
Date Collected: 02/13/18 12:47 — **Matrix: Water**
Date Received: 02/14/18 09:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	3.0	U	10.0	3.0	ug/L		02/15/18 14:57	02/20/18 14:52	1
Arsenic	4.0	U	10.0	4.0	ug/L		02/15/18 14:57	02/20/18 14:52	1
Barium	**39.2**	**B**	50.0	15.0	ug/L		02/15/18 14:57	02/20/18 14:52	1
Cadmium	1.5	U	5.0	1.5	ug/L		02/15/18 14:57	02/20/18 14:52	1
Calcium	**46200**		1000	300	ug/L		02/15/18 14:57	02/20/18 14:52	1
Chromium	**31.0**		10.0	3.0	ug/L		02/15/18 14:57	02/20/18 14:52	1
Cobalt	15.0	U	50.0	15.0	ug/L		02/15/18 14:57	02/20/18 14:52	1
Copper	7.0	U	25.0	7.0	ug/L		02/15/18 14:57	02/20/18 14:52	1
Iron	**781**		100	30.0	ug/L		02/15/18 14:57	02/20/18 14:52	1
Magnesium	**14500**		1000	300	ug/L		02/15/18 14:57	02/20/18 14:52	1
Manganese	**33.8**		15.0	4.0	ug/L		02/15/18 14:57	02/20/18 14:52	1
Nickel	**25.7**	**B**	40.0	10.0	ug/L		02/15/18 14:57	02/20/18 14:52	1
Potassium	**4150**	**B**	5000	1500	ug/L		02/15/18 14:57	02/20/18 14:52	1
Silver	3.0	U	10.0	3.0	ug/L		02/15/18 14:57	02/20/18 14:52	1
Sodium	**10500**		1000	300	ug/L		02/15/18 14:57	02/20/18 14:52	1
Vanadium	**24.8**	**B**	50.0	4.0	ug/L		02/15/18 14:57	02/20/18 14:52	1
Zinc	6.0	U	20.0	6.0	ug/L		02/15/18 14:57	02/20/18 14:52	1

Client Sample ID: B3H3C0 — **Lab Sample ID: 160-26773-2**
Date Collected: 02/12/18 09:47 — **Matrix: Water**
Date Received: 02/14/18 09:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	3.0	U	10.0	3.0	ug/L		02/15/18 14:57	02/20/18 14:56	1
Arsenic	4.0	U	10.0	4.0	ug/L		02/15/18 14:57	02/20/18 14:56	1
Barium	**32.4**	**B**	50.0	15.0	ug/L		02/15/18 14:57	02/20/18 14:56	1
Cadmium	1.5	U	5.0	1.5	ug/L		02/15/18 14:57	02/20/18 14:56	1

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: S18-002 / W18-002

TestAmerica Job ID: 160-26764-1
SDG: SL2806

Method: 6010C - Metals (ICP) (Continued)

Client Sample ID: B3H3C0 — **Lab Sample ID: 160-26773-2**
Date Collected: 02/12/18 09:47 — **Matrix: Water**
Date Received: 02/14/18 09:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**27300**		1000	300	ug/L		02/15/18 14:57	02/20/18 14:56	1
Chromium	**20.4**		10.0	3.0	ug/L		02/15/18 14:57	02/20/18 14:56	1
Cobalt	15.0	U	50.0	15.0	ug/L		02/15/18 14:57	02/20/18 14:56	1
Copper	7.0	U	25.0	7.0	ug/L		02/15/18 14:57	02/20/18 14:56	1
Iron	30.0	U	100	30.0	ug/L		02/15/18 14:57	02/20/18 14:56	1
Magnesium	**8760**		1000	300	ug/L		02/15/18 14:57	02/20/18 14:56	1
Manganese	4.0	U	15.0	4.0	ug/L		02/15/18 14:57	02/20/18 14:56	1
Nickel	10.0	U	40.0	10.0	ug/L		02/15/18 14:57	02/20/18 14:56	1
Potassium	**3720**	**B**	5000	1500	ug/L		02/15/18 14:57	02/20/18 14:56	1
Silver	3.0	U	10.0	3.0	ug/L		02/15/18 14:57	02/20/18 14:56	1
Sodium	**92900**		1000	300	ug/L		02/15/18 14:57	02/20/18 14:56	1
Vanadium	**42.8**	**B**	50.0	4.0	ug/L		02/15/18 14:57	02/20/18 14:56	1
Zinc	6.0	U	20.0	6.0	ug/L		02/15/18 14:57	02/20/18 14:56	1

Client Sample ID: B3H3N0 — **Lab Sample ID: 160-26773-3**
Date Collected: 02/13/18 10:27 — **Matrix: Water**
Date Received: 02/14/18 09:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	3.0	U	10.0	3.0	ug/L		02/15/18 14:57	02/20/18 15:01	1
Arsenic	4.0	U	10.0	4.0	ug/L		02/15/18 14:57	02/20/18 15:01	1
Barium	**34.7**	**B**	50.0	15.0	ug/L		02/15/18 14:57	02/20/18 15:01	1
Cadmium	1.5	U	5.0	1.5	ug/L		02/15/18 14:57	02/20/18 15:01	1
Calcium	**30200**		1000	300	ug/L		02/15/18 14:57	02/20/18 15:01	1
Chromium	**27.4**		10.0	3.0	ug/L		02/15/18 14:57	02/20/18 15:01	1
Cobalt	15.0	U	50.0	15.0	ug/L		02/15/18 14:57	02/20/18 15:01	1
Copper	7.0	U	25.0	7.0	ug/L		02/15/18 14:57	02/20/18 15:01	1
Iron	**35.7**	**B**	100	30.0	ug/L		02/15/18 14:57	02/20/18 15:01	1
Magnesium	**9500**		1000	300	ug/L		02/15/18 14:57	02/20/18 15:01	1
Manganese	4.0	U	15.0	4.0	ug/L		02/15/18 14:57	02/20/18 15:01	1
Nickel	10.0	U	40.0	10.0	ug/L		02/15/18 14:57	02/20/18 15:01	1
Potassium	**3990**	**B**	5000	1500	ug/L		02/15/18 14:57	02/20/18 15:01	1
Silver	3.0	U	10.0	3.0	ug/L		02/15/18 14:57	02/20/18 15:01	1
Sodium	**73700**		1000	300	ug/L		02/15/18 14:57	02/20/18 15:01	1
Vanadium	**34.5**	**B**	50.0	4.0	ug/L		02/15/18 14:57	02/20/18 15:01	1
Zinc	6.0	U	20.0	6.0	ug/L		02/15/18 14:57	02/20/18 15:01	1

Client Sample ID: B3H3M7 — **Lab Sample ID: 160-26773-9**
Date Collected: 02/13/18 11:08 — **Matrix: Water**
Date Received: 02/14/18 09:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	3.0	U	10.0	3.0	ug/L		02/15/18 14:57	02/20/18 15:06	1
Arsenic	**11.4**		10.0	4.0	ug/L		02/15/18 14:57	02/20/18 15:06	1
Barium	**34.8**	**B**	50.0	15.0	ug/L		02/15/18 14:57	02/20/18 15:06	1
Cadmium	1.5	U	5.0	1.5	ug/L		02/15/18 14:57	02/20/18 15:06	1
Calcium	**28600**		1000	300	ug/L		02/15/18 14:57	02/20/18 15:06	1
Chromium	**36.2**		10.0	3.0	ug/L		02/15/18 14:57	02/20/18 15:06	1
Cobalt	15.0	U	50.0	15.0	ug/L		02/15/18 14:57	02/20/18 15:06	1
Copper	7.0	U	25.0	7.0	ug/L		02/15/18 14:57	02/20/18 15:06	1
Iron	30.0	U	100	30.0	ug/L		02/15/18 14:57	02/20/18 15:06	1
Magnesium	**8880**		1000	300	ug/L		02/15/18 14:57	02/20/18 15:06	1

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: S18-002 / W18-002

TestAmerica Job ID: 160-26764-1
SDG: SL2806

Method: 6010C - Metals (ICP) (Continued)

Client Sample ID: B3H3M7
Date Collected: 02/13/18 11:08
Date Received: 02/14/18 09:40

Lab Sample ID: 160-26773-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	4.0	U	15.0	4.0	ug/L		02/15/18 14:57	02/20/18 15:06	1
Nickel	10.0	U	40.0	10.0	ug/L		02/15/18 14:57	02/20/18 15:06	1
Potassium	**3920**	**B**	5000	1500	ug/L		02/15/18 14:57	02/20/18 15:06	1
Silver	3.0	U	10.0	3.0	ug/L		02/15/18 14:57	02/20/18 15:06	1
Sodium	**80400**		1000	300	ug/L		02/15/18 14:57	02/20/18 15:06	1
Vanadium	**55.5**		50.0	4.0	ug/L		02/15/18 14:57	02/20/18 15:06	1
Zinc	**9.1**	**B**	20.0	6.0	ug/L		02/15/18 14:57	02/20/18 15:06	1

Method: 6010C - Metals (ICP) - Dissolved

Client Sample ID: B3H7D2
Date Collected: 02/12/18 09:30
Date Received: 02/14/18 09:40

Lab Sample ID: 160-26764-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**28.8**	**B**	100	25.0	ug/L		02/15/18 14:57	02/20/18 14:42	1
Calcium	**86900**		1000	300	ug/L		02/15/18 14:57	02/20/18 14:42	1
Iron	30.0	U	100	30.0	ug/L		02/15/18 14:57	02/20/18 14:42	1
Magnesium	**30500**		1000	300	ug/L		02/15/18 14:57	02/20/18 14:42	1
Potassium	**5770**		5000	1500	ug/L		02/15/18 14:57	02/20/18 14:42	1
Sodium	**87000**		1000	300	ug/L		02/15/18 14:57	02/20/18 14:42	1
Vanadium	**13.7**	**B**	50.0	4.0	ug/L		02/15/18 14:57	02/20/18 14:42	1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: B3H508
Date Collected: 02/12/18 12:16
Date Received: 02/14/18 09:40

Lab Sample ID: 160-26764-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	20.0	U D	50.0	20.0	ug/L		02/15/18 14:56	03/02/18 20:37	2
Antimony	2.0	U D	5.0	2.0	ug/L		02/15/18 14:56	03/02/18 20:37	2
Arsenic	4.0	U D	10.0	4.0	ug/L		02/15/18 14:56	03/02/18 20:37	2
Barium	**65.2**	**D**	2.0	0.90	ug/L		02/15/18 14:56	03/02/18 20:37	2
Beryllium	0.20	U D	0.50	0.20	ug/L		02/15/18 14:56	03/02/18 20:37	2
Cadmium	0.20	U D	0.50	0.20	ug/L		02/15/18 14:56	03/02/18 20:37	2
Chromium	**89.7**	**D**	10.0	4.0	ug/L		02/15/18 14:56	03/02/18 20:37	2
Cobalt	0.90	U D	2.0	0.90	ug/L		02/15/18 14:56	03/02/18 20:37	2
Copper	**3.4**	**D C**	1.0	0.40	ug/L		02/15/18 14:56	03/09/18 12:41	2
Lead	1.0	U D	3.0	1.0	ug/L		02/15/18 14:56	03/02/18 20:37	2
Manganese	**1.3**	**B D**	2.0	0.90	ug/L		02/15/18 14:56	03/02/18 20:37	2
Molybdenum	**2.0**	**B D**	5.0	2.0	ug/L		02/15/18 14:56	03/02/18 20:37	2
Nickel	**6.3**	**D**	5.0	2.0	ug/L		02/15/18 14:56	03/02/18 20:37	2
Selenium	**2.9**	**B D**	5.0	2.0	ug/L		02/15/18 14:56	03/09/18 12:41	2
Silver	0.90	U D	2.0	0.90	ug/L		02/15/18 14:56	03/02/18 20:37	2
Strontium	**491**	**D**	5.0	0.50	ug/L		02/15/18 14:56	03/02/18 20:37	2
Thallium	0.90	U D	2.0	0.90	ug/L		02/15/18 14:56	03/02/18 20:37	2
Thorium	0.90	U D	2.0	0.90	ug/L		02/15/18 14:56	03/02/18 20:37	2
Tin	1.2	U D	2.0	1.2	ug/L		02/15/18 14:56	03/02/18 20:37	2
Uranium	**42.7**	**D**	1.0	0.40	ug/L		02/15/18 14:56	03/02/18 20:37	2
Zinc	7.5	U D	20.0	7.5	ug/L		02/15/18 14:56	03/02/18 20:37	2

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: S18-002 / W18-002

TestAmerica Job ID: 160-26764-1
SDG: SL2806

Method: 6020A - Metals (ICP/MS)

Client Sample ID: B3H378 — **Lab Sample ID: 160-26773-1**
Date Collected: 02/13/18 12:47 — **Matrix: Water**
Date Received: 02/14/18 09:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	34.1	D	10.0	4.0	ug/L		02/15/18 14:56	03/02/18 21:04	2

Client Sample ID: B3H3C0 — **Lab Sample ID: 160-26773-2**
Date Collected: 02/12/18 09:47 — **Matrix: Water**
Date Received: 02/14/18 09:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	19.4	D	10.0	4.0	ug/L		02/15/18 14:56	03/02/18 21:31	2

Client Sample ID: B3H3N0 — **Lab Sample ID: 160-26773-3**
Date Collected: 02/13/18 10:27 — **Matrix: Water**
Date Received: 02/14/18 09:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	26.5	D	10.0	4.0	ug/L		02/15/18 14:56	03/02/18 21:38	2

Client Sample ID: B3H3M7 — **Lab Sample ID: 160-26773-9**
Date Collected: 02/13/18 11:08 — **Matrix: Water**
Date Received: 02/14/18 09:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	34.6	D	10.0	4.0	ug/L		02/15/18 14:56	03/02/18 21:44	2

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

Client Sample ID: B3H511 — **Lab Sample ID: 160-26764-1**
Date Collected: 02/12/18 12:16 — **Matrix: Water**
Date Received: 02/14/18 09:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	83.9	D	10.0	4.0	ug/L		02/15/18 14:56	03/02/18 20:31	2
Uranium	41.2	D	1.0	0.40	ug/L		02/15/18 14:56	03/02/18 20:31	2

General Chemistry

Client Sample ID: B3H4J6 — **Lab Sample ID: 160-26764-3**
Date Collected: 02/12/18 10:20 — **Matrix: Water**
Date Received: 02/14/18 09:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	234		5.0	0.54	mg/L			02/17/18 00:56	1

Client Sample ID: B3H7D3 — **Lab Sample ID: 160-26764-5**
Date Collected: 02/12/18 09:30 — **Matrix: Water**
Date Received: 02/14/18 09:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	306		5.0	0.54	mg/L			02/17/18 01:26	1
Bicarbonate Alkalinity	306		5.0	0.54	mg/L			02/17/18 01:26	1
Carbonate Alkalinity	0.54	U	5.0	0.54	mg/L			02/17/18 01:26	1
Hydroxide Alkalinity	0.54	U	5.0	0.54	mg/L			02/17/18 01:26	1

Client Sample ID: B3H7F5 — **Lab Sample ID: 160-26764-6**
Date Collected: 02/12/18 10:15 — **Matrix: Water**
Date Received: 02/14/18 09:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	188		5.0	0.54	mg/L			02/17/18 01:36	1

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: S18-002 / W18-002

TestAmerica Job ID: 160-26764-1
SDG: SL2806

General Chemistry (Continued)

Client Sample ID: B3H7F5 — **Lab Sample ID: 160-26764-6**
Date Collected: 02/12/18 10:15 — **Matrix: Water**
Date Received: 02/14/18 09:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity	**188**		5.0	0.54	mg/L			02/17/18 01:36	1
Carbonate Alkalinity	0.54	U	5.0	0.54	mg/L			02/17/18 01:36	1
Hydroxide Alkalinity	0.54	U	5.0	0.54	mg/L			02/17/18 01:36	1

Client Sample ID: B3H354 — **Lab Sample ID: 160-26773-4**
Date Collected: 02/13/18 08:00 — **Matrix: Water**
Date Received: 02/14/18 09:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	0.50	U	1.0	0.50	mg/L			02/19/18 23:51	1

Client Sample ID: B3H355 — **Lab Sample ID: 160-26773-5**
Date Collected: 02/13/18 09:23 — **Matrix: Water**
Date Received: 02/14/18 09:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	**0.56**	**B**	1.0	0.50	mg/L			02/20/18 00:03	1

Client Sample ID: B3H370 — **Lab Sample ID: 160-26773-6**
Date Collected: 02/13/18 10:15 — **Matrix: Water**
Date Received: 02/14/18 09:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	0.50	U	1.0	0.50	mg/L			02/20/18 00:15	1

Client Sample ID: B3H345 — **Lab Sample ID: 160-26773-7**
Date Collected: 02/13/18 12:47 — **Matrix: Water**
Date Received: 02/14/18 09:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**107**		5.0	0.54	mg/L			02/23/18 08:52	1

Client Sample ID: B3H3C2 — **Lab Sample ID: 160-26773-8**
Date Collected: 02/12/18 09:47 — **Matrix: Water**
Date Received: 02/14/18 09:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**128**		5.0	0.54	mg/L			02/17/18 01:46	1

Client Sample ID: B3H3N2 — **Lab Sample ID: 160-26773-10**
Date Collected: 02/13/18 10:27 — **Matrix: Water**
Date Received: 02/14/18 09:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**116**		5.0	0.54	mg/L			02/23/18 08:52	1

Method: 906.0 - Tritium, Total (LSC)

Client Sample ID: B3H881 — **Lab Sample ID: 160-26764-7**
Date Collected: 02/13/18 09:23 — **Matrix: Water**
Date Received: 02/14/18 09:40

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	**8920**		602	989	500	343	pCi/L	02/20/18 14:06	02/21/18 23:29	1

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: S18-002 / W18-002

TestAmerica Job ID: 160-26764-1
SDG: SL2806

Method: 906.0 - Tritium, Total (LSC)

Client Sample ID: B3H883
Date Collected: 02/13/18 08:00
Date Received: 02/14/18 09:40

Lab Sample ID: 160-26764-8
Matrix: Water

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	-62	U	177	177	500	329	pCi/L	02/20/18 14:06	02/22/18 11:28	1

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QC Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: S18-002 / W18-002

TestAmerica Job ID: 160-26764-1
SDG: SL2806

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 160-351373/1-A
Matrix: Water
Analysis Batch: 352191

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 351373

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	3.0	U	10.0	3.0	ug/L		02/15/18 14:57	02/20/18 14:02	1
Arsenic	4.0	U	10.0	4.0	ug/L		02/15/18 14:57	02/20/18 14:02	1
Barium	15.0	U	50.0	15.0	ug/L		02/15/18 14:57	02/20/18 14:02	1
Cadmium	1.5	U	5.0	1.5	ug/L		02/15/18 14:57	02/20/18 14:02	1
Calcium	300	U	1000	300	ug/L		02/15/18 14:57	02/20/18 14:02	1
Chromium	3.0	U	10.0	3.0	ug/L		02/15/18 14:57	02/20/18 14:02	1
Boron	25.0	U	100	25.0	ug/L		02/15/18 14:57	02/20/18 14:02	1
Cobalt	15.0	U	50.0	15.0	ug/L		02/15/18 14:57	02/20/18 14:02	1
Copper	7.0	U	25.0	7.0	ug/L		02/15/18 14:57	02/20/18 14:02	1
Iron	30.0	U	100	30.0	ug/L		02/15/18 14:57	02/20/18 14:02	1
Magnesium	300	U	1000	300	ug/L		02/15/18 14:57	02/20/18 14:02	1
Manganese	4.0	U	15.0	4.0	ug/L		02/15/18 14:57	02/20/18 14:02	1
Nickel	10.0	U	40.0	10.0	ug/L		02/15/18 14:57	02/20/18 14:02	1
Potassium	1500	U	5000	1500	ug/L		02/15/18 14:57	02/20/18 14:02	1
Silver	3.0	U	10.0	3.0	ug/L		02/15/18 14:57	02/20/18 14:02	1
Sodium	300	U	1000	300	ug/L		02/15/18 14:57	02/20/18 14:02	1
Vanadium	4.0	U	50.0	4.0	ug/L		02/15/18 14:57	02/20/18 14:02	1
Zinc	6.0	U	20.0	6.0	ug/L		02/15/18 14:57	02/20/18 14:02	1

Lab Sample ID: LCS 160-351373/2-A
Matrix: Water
Analysis Batch: 352191

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 351373

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	500	479.2		ug/L		96	80 - 120
Arsenic	1000	944.6		ug/L		94	80 - 120
Barium	1000	940.6		ug/L		94	80 - 120
Cadmium	1000	974.0		ug/L		97	80 - 120
Calcium	10000	10550		ug/L		106	80 - 120
Chromium	1000	1016		ug/L		102	80 - 120
Boron	200	186.3		ug/L		93	80 - 120
Cobalt	1000	1024		ug/L		102	80 - 120
Copper	1000	977.3		ug/L		98	80 - 120
Iron	10000	9693		ug/L		97	80 - 120
Magnesium	10000	9532		ug/L		95	80 - 120
Manganese	1000	957.5		ug/L		96	80 - 120
Nickel	1000	1021		ug/L		102	80 - 120
Potassium	10000	9446		ug/L		94	80 - 120
Silver	200	197.1		ug/L		99	80 - 120
Sodium	10000	9548		ug/L		95	80 - 120
Vanadium	1000	938.9		ug/L		94	80 - 120
Zinc	1000	993.7		ug/L		99	80 - 120

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: S18-002 / W18-002

TestAmerica Job ID: 160-26764-1
SDG: SL2806

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 160-26764-2 MS — **Client Sample ID: B3H508**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 352191 — **Prep Batch: 351373**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	6.0	U D	500	490.6	D	ug/L		98	75 - 125
Arsenic	8.0	U D	1000	984.8	D	ug/L		98	75 - 125
Barium	67.4	B D	1000	1002	D	ug/L		93	75 - 125
Cadmium	3.0	U D	1000	1000	D	ug/L		100	75 - 125
Calcium	101000	D	10000	113900	D X	ug/L		127	75 - 125
Chromium	92.0	D	1000	1109	D	ug/L		102	75 - 125
Boron	50.0	U D	200	212.4	D	ug/L		106	75 - 125
Cobalt	30.0	U D	1000	1022	D	ug/L		102	75 - 125
Copper	14.0	U D	1000	990.2	D	ug/L		99	75 - 125
Iron	60.0	U D	10000	9804	D	ug/L		98	75 - 125
Magnesium	17400	D	10000	27220	D	ug/L		98	75 - 125
Manganese	8.0	U D	1000	963.0	D	ug/L		96	75 - 125
Nickel	20.0	U D	1000	1036	D	ug/L		104	75 - 125
Potassium	6040	B D	10000	15570	D	ug/L		95	75 - 125
Silver	6.0	U D	200	200.0	D	ug/L		100	75 - 125
Sodium	35800	D	10000	45060	D	ug/L		92	75 - 125
Vanadium	13.2	B D	1000	961.0	D	ug/L		95	75 - 125
Zinc	12.0	U D	1000	1026	D	ug/L		103	75 - 125

Lab Sample ID: 160-26764-2 MSD — **Client Sample ID: B3H508**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 352191 — **Prep Batch: 351373**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	6.0	U D	500	489.2	D	ug/L		98	75 - 125	0	20
Arsenic	8.0	U D	1000	978.8	D	ug/L		98	75 - 125	1	20
Barium	67.4	B D	1000	989.4	D	ug/L		92	75 - 125	1	20
Cadmium	3.0	U D	1000	998.6	D	ug/L		100	75 - 125	0	20
Calcium	101000	D	10000	115000	D X	ug/L		137	75 - 125	1	20
Chromium	92.0	D	1000	1110	D	ug/L		102	75 - 125	0	20
Boron	50.0	U D	200	220.8	D	ug/L		110	75 - 125	4	20
Cobalt	30.0	U D	1000	1020	D	ug/L		102	75 - 125	0	20
Copper	14.0	U D	1000	983.0	D	ug/L		98	75 - 125	1	20
Iron	60.0	U D	10000	9732	D	ug/L		97	75 - 125	1	20
Magnesium	17400	D	10000	27380	D	ug/L		100	75 - 125	1	20
Manganese	8.0	U D	1000	960.4	D	ug/L		96	75 - 125	0	20
Nickel	20.0	U D	1000	1034	D	ug/L		103	75 - 125	0	20
Potassium	6040	B D	10000	15440	D	ug/L		94	75 - 125	1	20
Silver	6.0	U D	200	197.0	D	ug/L		98	75 - 125	2	20
Sodium	35800	D	10000	44980	D	ug/L		91	75 - 125	0	20
Vanadium	13.2	B D	1000	950.4	D	ug/L		94	75 - 125	1	20
Zinc	12.0	U D	1000	1025	D	ug/L		102	75 - 125	0	20

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: S18-002 / W18-002

TestAmerica Job ID: 160-26764-1
SDG: SL2806

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 160-351372/1-A
Matrix: Water
Analysis Batch: 353884

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 351372

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	20.0	U D	50.0	20.0	ug/L		02/15/18 14:56	03/02/18 20:17	2
Antimony	2.0	U D	5.0	2.0	ug/L		02/15/18 14:56	03/02/18 20:17	2
Arsenic	4.0	U D	10.0	4.0	ug/L		02/15/18 14:56	03/02/18 20:17	2
Barium	0.90	U D	2.0	0.90	ug/L		02/15/18 14:56	03/02/18 20:17	2
Beryllium	0.20	U D	0.50	0.20	ug/L		02/15/18 14:56	03/02/18 20:17	2
Cadmium	0.20	U D	0.50	0.20	ug/L		02/15/18 14:56	03/02/18 20:17	2
Chromium	4.0	U D	10.0	4.0	ug/L		02/15/18 14:56	03/02/18 20:17	2
Cobalt	0.90	U D	2.0	0.90	ug/L		02/15/18 14:56	03/02/18 20:17	2
Lead	1.0	U D	3.0	1.0	ug/L		02/15/18 14:56	03/02/18 20:17	2
Manganese	0.90	U D	2.0	0.90	ug/L		02/15/18 14:56	03/02/18 20:17	2
Molybdenum	2.0	U D	5.0	2.0	ug/L		02/15/18 14:56	03/02/18 20:17	2
Nickel	2.0	U D	5.0	2.0	ug/L		02/15/18 14:56	03/02/18 20:17	2
Silver	0.90	U D	2.0	0.90	ug/L		02/15/18 14:56	03/02/18 20:17	2
Strontium	0.50	U D	5.0	0.50	ug/L		02/15/18 14:56	03/02/18 20:17	2
Thallium	0.90	U D	2.0	0.90	ug/L		02/15/18 14:56	03/02/18 20:17	2
Thorium	0.90	U D	2.0	0.90	ug/L		02/15/18 14:56	03/02/18 20:17	2
Tin	1.2	U D	2.0	1.2	ug/L		02/15/18 14:56	03/02/18 20:17	2
Uranium	0.40	U D	1.0	0.40	ug/L		02/15/18 14:56	03/02/18 20:17	2
Zinc	7.5	U D	20.0	7.5	ug/L		02/15/18 14:56	03/02/18 20:17	2

Lab Sample ID: MB 160-351372/1-A
Matrix: Water
Analysis Batch: 354868

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 351372

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	0.868	B D	1.0	0.40	ug/L		02/15/18 14:56	03/09/18 12:28	2
Selenium	2.0	U D	5.0	2.0	ug/L		02/15/18 14:56	03/09/18 12:28	2

Lab Sample ID: LCS 160-351372/2-A
Matrix: Water
Analysis Batch: 353884

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 351372

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10000	9323	D	ug/L		93	80 - 120
Antimony	500	469.0	D	ug/L		94	80 - 120
Arsenic	1000	895.3	D	ug/L		90	80 - 120
Barium	1000	927.4	D	ug/L		93	80 - 120
Beryllium	100	90.24	D	ug/L		90	80 - 120
Cadmium	1000	936.2	D	ug/L		94	80 - 120
Chromium	1000	956.6	D	ug/L		96	80 - 120
Cobalt	1000	984.6	D	ug/L		98	80 - 120
Lead	1000	929.0	D	ug/L		93	80 - 120
Manganese	1000	975.3	D	ug/L		98	80 - 120
Molybdenum	500	516.9	D	ug/L		103	80 - 120
Nickel	1000	1035	D	ug/L		104	80 - 120
Silver	200	196.1	D	ug/L		98	80 - 120
Strontium	1000	974.4	D	ug/L		97	80 - 120
Thallium	200	187.0	D	ug/L		93	80 - 120

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: S18-002 / W18-002

TestAmerica Job ID: 160-26764-1
SDG: SL2806

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

Lab Sample ID: LCS 160-351372/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 353884 — **Prep Batch: 351372**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Thorium	1000	962.6	D	ug/L		96	80 - 120
Tin	1000	963.5	D	ug/L		96	80 - 120
Uranium	1000	961.7	D	ug/L		96	80 - 120
Zinc	1000	903.3	D	ug/L		90	80 - 120

Lab Sample ID: LCS 160-351372/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 354868 — **Prep Batch: 351372**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	1000	1066	D	ug/L		107	80 - 120
Selenium	500	453.9	D	ug/L		91	80 - 120

Lab Sample ID: 160-26764-2 MS — **Client Sample ID: B3H508**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 353884 — **Prep Batch: 351372**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	20.0	U D	10000	9379	D	ug/L		94	75 - 125
Antimony	2.0	U D	500	469.4	D	ug/L		94	75 - 125
Arsenic	4.0	U D	1000	931.9	D	ug/L		93	75 - 125
Barium	65.2	D	1000	977.8	D	ug/L		91	75 - 125
Beryllium	0.20	U D	100	91.72	D	ug/L		92	75 - 125
Cadmium	0.20	U D	1000	932.7	D	ug/L		93	75 - 125
Chromium	89.7	D	1000	1041	D	ug/L		95	75 - 125
Cobalt	0.90	U D	1000	952.9	D	ug/L		95	75 - 125
Lead	1.0	U D	1000	936.8	D	ug/L		94	75 - 125
Manganese	1.3	B D	1000	964.2	D	ug/L		96	75 - 125
Molybdenum	2.0	B D	500	521.9	D	ug/L		104	75 - 125
Nickel	6.3	D	1000	1000	D	ug/L		99	75 - 125
Silver	0.90	U D	200	193.4	D	ug/L		97	75 - 125
Strontium	491	D	1000	1464	D	ug/L		97	75 - 125
Thallium	0.90	U D	200	189.3	D	ug/L		95	75 - 125
Thorium	0.90	U D	1000	983.1	D	ug/L		98	75 - 125
Tin	1.2	U D	1000	945.3	D	ug/L		95	75 - 125
Uranium	42.7	D	1000	1025	D	ug/L		98	75 - 125
Zinc	7.5	U D	1000	898.0	D	ug/L		90	75 - 125

Lab Sample ID: 160-26764-2 MS — **Client Sample ID: B3H508**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 354868 — **Prep Batch: 351372**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	3.4	D C	1000	1054	D	ug/L		105	75 - 125
Selenium	2.9	B D	500	479.0	D	ug/L		95	75 - 125

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: S18-002 / W18-002

TestAmerica Job ID: 160-26764-1
SDG: SL2806

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

Lab Sample ID: 160-26764-2 MSD — **Client Sample ID: B3H508**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 353884 — **Prep Batch: 351372**

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	9294	D	ug/L		93	75 - 125	1	20
Antimony	2.0	U D	500	472.5	D	ug/L		94	75 - 125	1	20
Arsenic	4.0	U D	1000	934.2	D	ug/L		93	75 - 125	0	20
Barium	65.2	D	1000	993.5	D	ug/L		93	75 - 125	2	20
Beryllium	0.20	U D	100	91.01	D	ug/L		91	75 - 125	1	20
Cadmium	0.20	U D	1000	940.0	D	ug/L		94	75 - 125	1	20
Chromium	89.7	D	1000	1038	D	ug/L		95	75 - 125	0	20
Cobalt	0.90	U D	1000	962.8	D	ug/L		96	75 - 125	1	20
Lead	1.0	U D	1000	937.9	D	ug/L		94	75 - 125	0	20
Manganese	1.3	B D	1000	969.8	D	ug/L		97	75 - 125	1	20
Molybdenum	2.0	B D	500	532.7	D	ug/L		107	75 - 125	2	20
Nickel	6.3	D	1000	1008	D	ug/L		100	75 - 125	1	20
Silver	0.90	U D	200	191.9	D	ug/L		96	75 - 125	1	20
Strontium	491	D	1000	1498	D	ug/L		101	75 - 125	2	20
Thallium	0.90	U D	200	189.8	D	ug/L		95	75 - 125	0	20
Thorium	0.90	U D	1000	982.2	D	ug/L		98	75 - 125	0	20
Tin	1.2	U D	1000	960.9	D	ug/L		96	75 - 125	2	20
Uranium	42.7	D	1000	1036	D	ug/L		99	75 - 125	1	20
Zinc	7.5	U D	1000	903.9	D	ug/L		90	75 - 125	1	20

Lab Sample ID: 160-26764-2 MSD — **Client Sample ID: B3H508**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 354868 — **Prep Batch: 351372**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Copper	3.4	D C	1000	1037	D	ug/L		103	75 - 125	2	20
Selenium	2.9	B D	500	467.4	D	ug/L		93	75 - 125	2	20

Method: 310.1 - Alkalinity

Lab Sample ID: MB 160-351717/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 351717

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	0.54	U	5.0	0.54	mg/L			02/17/18 00:06	1
Bicarbonate Alkalinity	0.54	U	5.0	0.54	mg/L			02/17/18 00:06	1
Carbonate Alkalinity	0.54	U	5.0	0.54	mg/L			02/17/18 00:06	1
Hydroxide Alkalinity	0.54	U	5.0	0.54	mg/L			02/17/18 00:06	1

Lab Sample ID: HLCS 160-351717/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 351717

Analyte			Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Alkalinity			400	378.0		mg/L		94	90 - 110		
Bicarbonate Alkalinity			400	378.0		mg/L		94	90 - 110		

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: S18-002 / W18-002

TestAmerica Job ID: 160-26764-1
SDG: SL2806

Method: 310.1 - Alkalinity (Continued)

Lab Sample ID: LCS 160-351717/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 351717

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	200	192.0		mg/L		96	90 - 110
Bicarbonate Alkalinity	200	192.0		mg/L		96	90 - 110

Lab Sample ID: 160-26764-3 MS — **Client Sample ID: B3H4J6**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 351717

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	234		100	324.0		mg/L		90	80 - 120
Bicarbonate Alkalinity	234		100	324.0		mg/L		90	80 - 120

Lab Sample ID: 160-26764-3 DU — **Client Sample ID: B3H4J6**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 351717

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity	234		230.0		mg/L		2	20
Bicarbonate Alkalinity	234		230.0		mg/L		2	20
Carbonate Alkalinity	0.54	U	0.54	U	mg/L		NC	20
Hydroxide Alkalinity	0.54	U	0.54	U	mg/L		NC	20

Lab Sample ID: MB 160-352645/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 352645

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	0.54	U	5.0	0.54	mg/L			02/23/18 08:52	1

Lab Sample ID: HLCS 160-352645/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 352645

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	400	386.0		mg/L		96	90 - 110

Lab Sample ID: LCS 160-352645/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 352645

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	200	194.0		mg/L		97	90 - 110

Lab Sample ID: 160-26773-7 MS — **Client Sample ID: B3H345**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 352645

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	107		100	206.0		mg/L		99	80 - 120

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: S18-002 / W18-002

TestAmerica Job ID: 160-26764-1
SDG: SL2806

Method: 310.1 - Alkalinity (Continued)

Lab Sample ID: 160-26773-7 DU — **Client Sample ID: B3H345**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 352645

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Alkalinity	107			108.0		mg/L				0.9	20

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 160-352159/5 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 352159

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	0.50	U	1.0	0.50	mg/L			02/19/18 18:52	1

Lab Sample ID: LCS 160-352159/6 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 352159

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon			10.0	10.08		mg/L		101	90 - 110		

Lab Sample ID: 160-26796-C-2 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 352159

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon	1.9		5.00	6.40		mg/L		91	76 - 120		

Lab Sample ID: 160-26796-C-2 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 352159

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Organic Carbon	1.9			1.75		mg/L				7	20

Method: 906.0 - Tritium, Total (LSC)

Lab Sample ID: MB 160-352156/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 352663 — **Prep Batch: 352156**

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	-107	U	171	171	500	325	pCi/L	02/20/18 14:06	02/22/18 11:06	1

Lab Sample ID: LCS 160-352156/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 352497 — **Prep Batch: 352156**

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Tritium			2780	2901		454	500	340	pCi/L	104	80 - 120		

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: S18-002 / W18-002

TestAmerica Job ID: 160-26764-1
SDG: SL2806

Lab Sample ID: 160-26764-8 MS
Matrix: Water
Analysis Batch: 352663

Client Sample ID: B3H883
Prep Type: Total/NA
Prep Batch: 352156

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Tritium	-62	U	2780	2698		434	500	336	pCi/L	97	75 - 125		

Lab Sample ID: 160-26764-7 DU
Matrix: Water
Analysis Batch: 352497

Client Sample ID: B3H881
Prep Type: Total/NA
Prep Batch: 352156

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RPD	RPD Limit
Tritium	8920			9234		1010	500	339	pCi/L			3	20

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QC Association Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: S18-002 / W18-002

TestAmerica Job ID: 160-26764-1
SDG: SL2806

Metals

Prep Batch: 351372

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-26764-1	B3H511	Dissolved	Water	3010A	
160-26764-2	B3H508	Total/NA	Water	3010A	
160-26773-1	B3H378	Total/NA	Water	3010A	
160-26773-2	B3H3C0	Total/NA	Water	3010A	
160-26773-3	B3H3N0	Total/NA	Water	3010A	
160-26773-9	B3H3M7	Total/NA	Water	3010A	
MB 160-351372/1-A	Method Blank	Total/NA	Water	3010A	
LCS 160-351372/2-A	Lab Control Sample	Total/NA	Water	3010A	
160-26764-2 MS	B3H508	Total/NA	Water	3010A	
160-26764-2 MSD	B3H508	Total/NA	Water	3010A	

Prep Batch: 351373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-26764-2	B3H508	Total/NA	Water	3010A	
160-26764-4	B3H7D2	Dissolved	Water	3010A	
160-26764-5	B3H7D3	Total/NA	Water	3010A	
160-26773-1	B3H378	Total/NA	Water	3010A	
160-26773-2	B3H3C0	Total/NA	Water	3010A	
160-26773-3	B3H3N0	Total/NA	Water	3010A	
160-26773-9	B3H3M7	Total/NA	Water	3010A	
MB 160-351373/1-A	Method Blank	Total/NA	Water	3010A	
LCS 160-351373/2-A	Lab Control Sample	Total/NA	Water	3010A	
160-26764-2 MS	B3H508	Total/NA	Water	3010A	
160-26764-2 MSD	B3H508	Total/NA	Water	3010A	

Analysis Batch: 352191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-26764-2	B3H508	Total/NA	Water	6010C	351373
160-26764-4	B3H7D2	Dissolved	Water	6010C	351373
160-26764-5	B3H7D3	Total/NA	Water	6010C	351373
160-26773-1	B3H378	Total/NA	Water	6010C	351373
160-26773-2	B3H3C0	Total/NA	Water	6010C	351373
160-26773-3	B3H3N0	Total/NA	Water	6010C	351373
160-26773-9	B3H3M7	Total/NA	Water	6010C	351373
MB 160-351373/1-A	Method Blank	Total/NA	Water	6010C	351373
LCS 160-351373/2-A	Lab Control Sample	Total/NA	Water	6010C	351373
160-26764-2 MS	B3H508	Total/NA	Water	6010C	351373
160-26764-2 MSD	B3H508	Total/NA	Water	6010C	351373

Analysis Batch: 353884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-26764-1	B3H511	Dissolved	Water	6020A	351372
160-26764-2	B3H508	Total/NA	Water	6020A	351372
160-26773-1	B3H378	Total/NA	Water	6020A	351372
160-26773-2	B3H3C0	Total/NA	Water	6020A	351372
160-26773-3	B3H3N0	Total/NA	Water	6020A	351372
160-26773-9	B3H3M7	Total/NA	Water	6020A	351372
MB 160-351372/1-A	Method Blank	Total/NA	Water	6020A	351372
LCS 160-351372/2-A	Lab Control Sample	Total/NA	Water	6020A	351372
160-26764-2 MS	B3H508	Total/NA	Water	6020A	351372
160-26764-2 MSD	B3H508	Total/NA	Water	6020A	351372

QC Association Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: S18-002 / W18-002

TestAmerica Job ID: 160-26764-1
SDG: SL2806

Analysis Batch: 354868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-26764-2	B3H508	Total/NA	Water	6020A	351372
MB 160-351372/1-A	Method Blank	Total/NA	Water	6020A	351372
LCS 160-351372/2-A	Lab Control Sample	Total/NA	Water	6020A	351372
160-26764-2 MS	B3H508	Total/NA	Water	6020A	351372
160-26764-2 MSD	B3H508	Total/NA	Water	6020A	351372

General Chemistry

Analysis Batch: 351717

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-26764-3	B3H4J6	Total/NA	Water	310.1	
160-26764-5	B3H7D3	Total/NA	Water	310.1	
160-26764-6	B3H7F5	Total/NA	Water	310.1	
160-26773-8	B3H3C2	Total/NA	Water	310.1	
MB 160-351717/1	Method Blank	Total/NA	Water	310.1	
HLCS 160-351717/3	Lab Control Sample	Total/NA	Water	310.1	
LCS 160-351717/2	Lab Control Sample	Total/NA	Water	310.1	
160-26764-3 MS	B3H4J6	Total/NA	Water	310.1	
160-26764-3 DU	B3H4J6	Total/NA	Water	310.1	

Analysis Batch: 352159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-26773-4	B3H354	Total/NA	Water	9060	
160-26773-5	B3H355	Total/NA	Water	9060	
160-26773-6	B3H370	Total/NA	Water	9060	
MB 160-352159/5	Method Blank	Total/NA	Water	9060	
LCS 160-352159/6	Lab Control Sample	Total/NA	Water	9060	
160-26796-C-2 MS	Matrix Spike	Total/NA	Water	9060	
160-26796-C-2 DU	Duplicate	Total/NA	Water	9060	

Analysis Batch: 352645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-26773-7	B3H345	Total/NA	Water	310.1	
160-26773-10	B3H3N2	Total/NA	Water	310.1	
MB 160-352645/1	Method Blank	Total/NA	Water	310.1	
HLCS 160-352645/3	Lab Control Sample	Total/NA	Water	310.1	
LCS 160-352645/2	Lab Control Sample	Total/NA	Water	310.1	
160-26773-7 MS	B3H345	Total/NA	Water	310.1	
160-26773-7 DU	B3H345	Total/NA	Water	310.1	

Rad

Prep Batch: 352156

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-26764-7	B3H881	Total/NA	Water	LSC_Dist_Susp	
160-26764-8	B3H883	Total/NA	Water	LSC_Dist_Susp	
MB 160-352156/1-A	Method Blank	Total/NA	Water	LSC_Dist_Susp	
LCS 160-352156/2-A	Lab Control Sample	Total/NA	Water	LSC_Dist_Susp	
160-26764-8 MS	B3H883	Total/NA	Water	LSC_Dist_Susp	
160-26764-7 DU	B3H881	Total/NA	Water	LSC_Dist_Susp	

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