TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002
Tel: (303)736-0100

TestAmerica Job ID: 280-105343-1
TestAmerica Sample Delivery Group: DN0303
Client Project/Site: W18-001 / X18-005 / S18-001

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

Attn: Mr. Scot Fitzgerald

Darlene Bandy

Authorized for release by:
1/31/2018 6:30:16 PM

Darlene Bandy, Project Manager I
(303)736-0100
darlene.bandy@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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: 280-105343-1

Laboratory: TestAmerica Denver

Narrative

CASE NARRATIVE

Client: CH2M Hill Plateau Remediation Company

Project: W18-001 / X18-005 / S18-001

Report Number: 280-105343-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

The Chain of Custody requests “6020_METALS_ICPMS: GW 01” analysis. Service List “6020_METALS_ICPMS: GW 01” includes Thorium, and while TestAmerica Denver holds Washington State (WDOE) accreditation for method 6020B, Thorium is not on the accreditation certificate at this time. Please note that Thorium is on TestAmerica Denver's primary ORELAP certification, and TestAmerica Denver is pursuing full WDOE accreditation for this element. As instructed by the client, the laboratory proceeded with the requested Thorium analyses by method 6020B.

The laboratory is not able to achieve project specified Highest Allowable Practical Quantitation Limits (HAPQL limits) for several analytes. These include: Boron 6010D, Beryllium 6020B, Silver 6020B, Tin 6020B, Aroclor 1221 8082A. All analytes met statistical limits, unless otherwise detailed in the individual sections below. As instructed by the client, the data is reported.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 1/10/2018 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 1.0º C, 1.2º C and 1.4º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples B3H037 (280-105343-4), B3FY58 (280-105343-5), B3FY72 (280-105343-13) and B3FY71 (280-105343-19) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 01/15/2018 and 01/16/2018.

4-Methyl-2-pentanone (MIBK) failed the recovery criteria low for the MS of sample B3H037 (280-105343-4) in batch 280-401712, and Vinyl chloride failed the recovery criteria high. Methylene Chloride and Vinyl chloride failed the recovery criteria high for the MSD of sample B3H037 (280-105343-4) in batch 280-401712. All associated results have been flagged "T". In addition, Acetone exceeded the RPD limit for the MS/MSD, and the MSD result has been flagged "y". The acceptable LCS data demonstrates that the analytical system was operating within control; therefore, corrective action is not needed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ORGANOCHLORINE PESTICIDES (GC)

Samples B3FXD7 (280-105343-1), B3FYD4 (280-105343-8) and B3FYD7 (280-105343-21) were analyzed for Organochlorine Pesticides (GC) in accordance with SW 846 8081B. The samples were prepared on 01/11/2018 and analyzed on 01/24/2018.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Job ID: 280-105343-1 (Continued)

Laboratory: TestAmerica Denver (Continued)

POLYCHLORINATED BIPHENYLS (PCBS)
Sample B3FXD7 (280-105343-1) was analyzed for polychlorinated biphenyls (PCBs) in accordance with SW 846 8082A. The samples were prepared on 01/11/2018 and analyzed on 01/18/2018.

The following samples underwent a sulfuric acid clean-up, via EPA Method 3665A, to reduce matrix interferences: B3FXD7 (280-105343-1), B3FXD7 (280-105343-1[MS]), B3FXD7 (280-105343-1[MSD]), (LCS 280-401404/4-A), (LCSD 280-401404/5-A) and (MB 280-401404/1-A).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

CHLORINATED HERBICIDES
Samples B3FXD7 (280-105343-1), B3FYD4 (280-105343-8), B3FYC6 (280-105343-9) and B3FYC5 (280-105343-14) were analyzed for chlorinated herbicides in accordance with EPA SW-846 Method 8151A. The samples were prepared on 01/12/2018 and analyzed on 01/19/2018.

Dinoseb failed the project-specific recovery criteria low for LCS 280-401509/2-A and LCSD 280-401509/3-A on both primary (front) and confirmation (back) columns, and all associated results have been flagged "o". Please note that these recoveries were within TestAmerica Denver's standard limits of 25-132%. As instructed by the client, the data have been qualified and reported (SIR18-0417).

MS/MSD of sample B3FXD7 (280-105343-1) exhibited 0% Recoveries. Spike compounds were inadvertently omitted during the extraction process for the matrix spike/matrix spike duplicate (MS/MSD) for preparation batch 280-401509 and analytical batch 280-402056. It can be noted that a duplicate LCS (LCSD) was analyzed. As instructed by the client, the data have been qualified and reported (SIR18-0417).

The continuing calibration verification recovered outside control limits for multiple analytes on both columns. Samples are non-detect for the affected analytes; the following samples are affected: B3FXD7 (280-105343-1), B3FXD7 (280-105343-1[MS]), B3FXD7 (280-105343-1[MSD]), B3FYD4 (280-105343-8), B3FYC6 (280-105343-9) and B3FYC5 (280-105343-14). As instructed by the client, the data have been qualified and reported (SIR18-0417). The analytical sequence follows:

CCV (front) Dinoseb -23% (back) OK
MB, LCS, LCSD, 105343-1 (MS/MSD) -8,-9,-14
CCV (front) 2,4-DB +16% (back) 2,4,5-T +25%, 2,4-D +16%, 2,4-DB +29%, Silvex (2,4,5-TP) +22%

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DISSOLVED METALS (ICP)
Samples B3FTM0 (280-105343-2), B3FTL9 (280-105343-6), B3FTK9 (280-105343-11), B3FTK3 (280-105343-12), B3FR89 (280-105343-16), B3FR72 (280-105343-17) and B3FVD2 (280-105343-20) were analyzed for Dissolved Metals (ICP) in accordance with EPA SW846 6010D. The samples were prepared on 01/16/2018 and 01/18/2018 and analyzed on 01/16/2018, 01/18/2018 and 01/19/2018.

Iron and Manganese were detected in method blank MB 280-401429/1-A at levels that were above the method detection limit but below half the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL and the method blank concentration was greater than 5% of the sample concentration, the result has been flagged.

Calcium was detected in method blank MB 280-401429/1-A at a level that was above the method detection limit (MDL) but below the reporting limit (RL). The value should be considered an estimate, and has been flagged “B”. The MB contained Calcium at a level greater than one-half the reporting limit; however, the associated samples were >20x the method blank concentration; therefore, corrective action is deemed unnecessary.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)
Samples B3FTL2 (280-105343-3), B3FTL1 (280-105343-7), B3FTK5 (280-105343-10), B3FY72 (280-105343-13), B3FR85 (280-105343-15), B3FYD1 (280-105343-18) and B3FY71 (280-105343-19) were analyzed for Total Metals (ICP) in accordance with EPA

Job ID: 280-105343-1 (Continued)

Laboratory: TestAmerica Denver (Continued)

SW846 6010D. The samples were prepared on 01/16/2018 and 01/19/2018 and analyzed on 01/17/2018, 01/18/2018, 01/19/2018 and 01/22/2018.

Iron was detected in method blank MB 280-401442/1-A at a level that was above the method detection limit but below half the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL and the method blank concentration was greater than 5% of the sample concentration, the result has been flagged.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DISSOLVED METALS (ICP-MS)
Samples B3FTM0 (280-105343-2), B3FTL9 (280-105343-6), B3FTK9 (280-105343-11), B3FR89 (280-105343-16) and B3FR72 (280-105343-17) were analyzed for Dissolved Metals (CP-MS) in accordance with SW846 6020B. The samples were prepared on 01/16/2018 and analyzed on 01/16/2018 and 01/17/2018.

The Chain of Custody requests “6020_METALS_ICPMS: GW 01” analysis. Service List “6020_METALS_ICPMS: GW 01” includes Thorium, and while TestAmerica Denver holds Washington State (WDOE) accreditation for method 6020B, Thorium is not on the accreditation certificate at this time. Please note that Thorium is on TestAmerica Denver's primary ORELAP certification, and TestAmerica Denver is pursuing full WDOE accreditation for this element. As instructed by the client, the laboratory proceeded with the requested Thorium analyses by method 6020B.

The accuracy and precision of Strontium in the MS/MSD performed on sample B3FTK9 (280-105343-11) in prep batch 280-401430 could not be reliably calculated due to the sample concentration reading greater than four times the spike amount. Control limits are not applicable and the MS/MSD results have been flagged “X”.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP/MS)
Samples B3FTL2 (280-105343-3), B3FTL1 (280-105343-7), B3FTK5 (280-105343-10), B3FR85 (280-105343-15) and B3FYD1 (280-105343-18) were analyzed for Total Metals (ICP/MS) in accordance with SW846 6020B. The samples were prepared on 01/16/2018 and analyzed on 01/16/2018 and 01/17/2018.

The Chain of Custody requests “6020_METALS_ICPMS: GW 01” analysis. Service List “6020_METALS_ICPMS: GW 01” includes Thorium, and while TestAmerica Denver holds Washington State (WDOE) accreditation for method 6020B, Thorium is not on the accreditation certificate at this time. Please note that Thorium is on TestAmerica Denver's primary ORELAP certification, and TestAmerica Denver is pursuing full WDOE accreditation for this element. As instructed by the client, the laboratory proceeded with the requested Thorium analyses by method 6020B.

Zinc was detected in method blank MB 280-401443/1-A at a level that was above the method detection limit but below half the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL and the method blank concentration was greater than 5% of the sample concentration, the result has been flagged.

The accuracy and precision of Strontium in the MS/MSD performed on sample B3FTK5 (280-105343-10)in prep batch 280-401443 could not be reliably calculated due to the sample concentration reading greater than four times the spike amount. Control limits are not applicable and the MS/MSD results have been flagged “X”.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DISSOLVED MERCURY
Samples B3FTM0 (280-105343-2), B3FTL9 (280-105343-6), B3FTK9 (280-105343-11), B3FR89 (280-105343-16) and B3FR72 (280-105343-17) were analyzed for dissolved mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 01/16/2018.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY

Job ID: 280-105343-1 (Continued)

Laboratory: TestAmerica Denver (Continued)

Samples B3FTL2 (280-105343-3), B3FTL1 (280-105343-7), B3FTK5 (280-105343-10), B3FR85 (280-105343-15) and B3FYD1 (280-105343-18) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 01/16/2018.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ALKALINITY

Samples B3FY58 (280-105343-5), B3FY72 (280-105343-13) and B3FYH8 (280-105343-22) were analyzed for Alkalinity in accordance with SM20 2320B. The samples were analyzed on 01/11/2018.

Alkalinity as CaCO3 and Carbonate Alkalinity as CaCO3 were detected in method blank MB 280-401469/5 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL and the method blank concentration was greater than 5% of the sample concentration, the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

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:

Darlene Bandy
Project Manager

SAMPLE ISSUE RESOLUTION (SIR) REPORT

SIR Number: SIR18-0417
Rev. Number: 0
Date Initiated: 01/24/2018

SAMPLE EVENT INFORMATION

SAF NUM(S): W18-001

LABORATORY: TADN

SAMPLING INFORMATION

NUMBER OF SAMPLES: 4

SAMPLE NUMBERS: B3FXD7, B3FYC5, B3FYC6, B3FYD4

SAMPLE MATRIX: WATER

SDG NUM(S): DN0303

ISSUE BACKGROUND

CLASS: Laboratory Issue

TYPE: Quality Control Failure

DESCRIPTION: Method 8151A: The LCS associated with prep batch 280-401509 exhibited % Recoveries below the control limits for Dinoseb, both on the primary (front) and confirmation (back) columns. The recoveries were within TADN's standard LCS recovery limits. TADN's standard limits follow; the LCS % recoveries have been pasted below. The sample is more than 2x past holding time for the extraction.
TADN Standard % Recovery limits: Dinoseb: limits 25-132%

LCS recoveries: front: Dinoseb: 42% R, limits 70-130

back: Dinoseb: 36% R, limits 70-130

LCSD Recoveries: front: Dinoseb: 42% R, limits 70-130

back: Dinoseb: 36% R, limits 70-130

Two additional issues are noted:

The MS/MSD performed on sample B3FXD7 exhibited 0% recoveries; it is possible that the MS/MSD were not spiked. This issue is being investigated. A duplicate LCS (LCSD) was performed for this batch.

The continuing calibration verification recovered above and below the lower control limit for various analytes on the front and back columns. Samples were non-detects for affected analytes. B3FXD7 (280-105343-1), B3FXD7 (280-105343-1[MS]), B3FXD7 (280-105343-1[MSD]), B3FYD4 (280-105343-8), B3FYC6 (280-105343-9) and B3FYC5 (280-105343-14)

CCV (front) Dinoseb -23% (back) OK
MB, LCS, LCSD, 105343-1 (MS/MSD) -8,-9,-14
CCV (front) 2,4-DB +16% (back) 2,4,5-T +25%, 2,4-D +16%, 2,4-DB +29%, Silvex (2,4,5-TP) +22%

RESOLUTION

PROPOSED RESOLUTION:	TADN proposes to either report this data with appropriate o flags for the LCS failures and narrate the anomalies, reject the analysis, or re-extract the sample outside of 2x hold time (there may be insufficient sample for MS/MSD).
FINAL RESOLUTION:	Accept first proposal - report and flag appropriately.

SUBMITTED BY:

BANDY, DF 01/24/2018

ACCEPTED BY:

FITZGERALD, SL 01/24/2018

Login Sample Receipt Checklist

Client: CH2M Hill Plateau Remediation Company

Job Number: 280-105343-1
SDG Number: DN0303

Login Number: 105343
List Number: 1
Creator: Pottruff, Reed W

List Source: TestAmerica Denver

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	70 CPM
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	1.0, 1.2, 1.4 C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

CH2MHill Plateau Remediation Company	86 LBS.	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	86 lbs	C.O.C. # W18-001-293 Page 1 of 2

Collector:	Jeff Tucksen CHPRC DNC303	Contact/Requester:	Karen Waters-Husted	Telephone No.:	509-376-4650 10.1/8/18
SAF No.:	W18-001	Sampling Origin:	Hanford Site	Purchase Order/Charge Code:	300071
Project Title:	RCRA, JANUARY 2018	Logbook No.:	HNF-N-506 97-39	Ice Chest No.:	665-675
Shipped To (Lab):	TestAmerica Denver	Method of Shipment	Commercial Carrier	Bill of Lading/Air Bill No.:	7711 7360 5535
Protocol	RCRA	Priority:	30 Days	Offsite Property No.:	8927

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
B3FXD7	N	W	1-8-18	1200	4x1-L aG	8151_HERBICIDE_GC: COMMON	7/40 Days	Cool <=6C
B3FXD7	N	W	1-8-18	1200	4x1-L aG	8081_PEST_GC: COMMON; 8081_PEST_GC: CH 01	7/40 Days	Cool <=6C
B3FXD7	N	W	1-8-18	1200	4x1-L aG	8082_PCB_GC: COMMON	None	Cool <=6C

280-105343 Chain of Custody

0.9, 1.1, 1.3 IRM 8 to 1 Transfer RP 1-10-18

Relinquished By:	Received By:	Matrix *
Jeff Tucksen CHPRC — Print First and Last Name; Signature; JAN 08 2018 1235 Date/Time	Christina Aguilar /CHPRC — Print First and Last Name; Signature; JAN 08 2018 1235 Date/Time	S = Soil; SE = Sediment; SO = Solid; SL = Sludge; W = Water; O = Oil; A = Air; DS = Drum Solids; DL = Drum Liquid; T = Tissue; WI = Wipe; L = Liquid; V = Vegetation; X = Other
Relinquished By: Christina Aguilar /CHPRC — Print First and Last Name; Signature; JAN 08 2018 1305 Date/Time	Received By: SSU-1 — Print First and Last Name; Signature; JAN 08 2018 1305 Date/Time	
Relinquished By: SSU-1 — Print First and Last Name; Signature; JAN 09 2018 0900 Date/Time	Received By: Lesly Wall /CHPRC — Print First and Last Name; Signature; JAN 09 2018 0900 Date/Time	
Relinquished By: Lesly Wall /CHPRC — Print First and Last Name; Signature; JAN 09 2018 1400 Date/Time	Received By: FEDEX — Print First and Last Name; Signature; Date/Time	

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 = FSR55535 A-6004-842 (REV 3)

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST (continued)

C.O.C. No. 6018-001-293

Page 2 of 2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
		FedEx		Reed Poitrucf		Reed Poitrucf	1-10-18 0930
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
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A-6003-962 (03/05)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # W18-001-144 Page 1 of 1

Collector:	Jeff Tucksen CHPRC DN0303	**Contact/Requester:**	Karen Waters-Husted	**Telephone No.:**	509-376-4650
SAF No.:	W18-001	**Sampling Origin:**	Hanford Site	**Purchase Order/Charge Code:**	300071
Project Title:	RCRA, JANUARY 2018	**Logbook No.:**	HNF-N-506 97-39	**Ice Chest No.:**	GWS-675
Shipped To (Lab):	TestAmerica Denver	**Method of Shipment**	Commercial Carrier	**Bill of Lading/Air Bill No.:**	771173605535
Protocol	RCRA	**Priority:**	30 Days	**Offsite Property No.:**	8927

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
B3FTM0	Y	W	1-8-18	1338	1x500-mL G/P	7470_MERCURY_CV: COMMON (AQUEOUS); 6020_METALS_ICPMS: GW 01; 6010_METALS_ICP: GW 04	28 Days	HNO3 to pH <2
B3FTL2	N	W	1-8-18	1338	1x500-mL G/P	7470_MERCURY_CV: COMMON (AQUEOUS); 6020_METALS_ICPMS: GW 01; 6010_METALS_ICP: GW 04	28 Days	HNO3 to pH <2

Relinquished By	Signature	Date/Time	Received By	Signature	Date/Time
Jeff Tucksen CHPRC		JAN 08 2018 1435	SSU-1		JAN 08 2018 1435
SSU-1		JAN 09 2018 0900	Lesly Wall /CHPRC	Lesly Wall	JAN 09 2018 0900
Lesly Wall /CHPRC	Lesly Wall	JAN 09 2018 1400	FEDEX		
Fed Ex			Reed Pottruff	Reed Pot	1-10-18 0930

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 = FSR55536 A-6004-842 (REV 3)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X18-005-133 Page 1 of 12

Collector:	Jeff Tucksen CHPRC DN0303	Contact/Requester:	WATERS-HUSTED, K	Telephone No.:	376-4650 XW 1/8/18
SAF No.:	X18-005	Sampling Origin:	Hanford Site	Purchase Order/Charge Code:	300071
Project Title:	Groundwater Background Study,	Logbook No.:	HNF-N-506 97-39	Ice Chest No.:	GWS-675
Shipped To (Lab):	TestAmerica Denver	Method of Shipment	Commercial Carrier	Bill of Lading/Air Bill No.:	771117360 5535
Protocol	SURV	Priority:	30 Days	Offsite Property No.:	8927

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

SPECIAL INSTRUCTIONS
Batch with A, I, S, and W SAFs.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B3H037	N	W	1-8-18	1012	5x40-mL aGs*	8260_VOA_GCMS: COMMON	14 Days	HCl or H2SO4 to pH <2 / Cool <=6C

Relinquished By:	Signature	Date/Time	Received By:	Signature	Date/Time
Jeff Tucksen CHPRC	JAN 0 8 2018	1110	Roger Friesz Jr JCHPRC	JAN 0 8 2018	1110
Roger Friesz Jr. JCHPRC	JAN 0 8 2018	1245	SSU-1	JAN 0 8 2018	1245
SSU-1	JAN 0 9 2018	0900	Lesly Wall JCHPRC	JAN 0 9 2018	0900
Lesly Wall JCHPRC	JAN 0 9 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 11/21/2017 FSR ID = FSR54025 A-6004-842 (REV 3)

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST (continued)

C.O.C. No. K18-005-133

Page 2 of 2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	FedEx				Reed Pottruff	Reed Pottruff	1-10-18 0930
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. # W18-001-371 Page 1 of 2

Collector:	Jeff Tucksen CHPRC DN0303	Contact/Requester:	Karen Waters-Husted	Telephone No.:	509-376-4650
SAF No.:	W18-001	Sampling Origin:	Hanford Site	Purchase Order/Charge Code:	300071
Project Title:	RCRA, JANUARY 2018	Logbook No.:	HNF-N-506 -9739	Ice Chest No.:	GWS-675
Shipped To (Lab):	TestAmerica Denver	Method of Shipment	Commercial Carrier	Bill of Lading/Air Bill No.:	7711 7360 5535
Protocol	RCRA	Priority:	30 Days	Offsite Property No.:	8927

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
B3FY58	N	W	1-8-18	1012	1x250-mL G/P	2320_ALKALINITY: GW 01	14 Days	Cool <=6C
B3FY58	N	W	1-8-18	1012	5x40-mL aGs*	8260_VOA_GCMS: COMMON	14 Days	HCl or H2SO4 to pH <2 / Cool <=6C

Relinquished By:	Signature	Date/Time	Received By:	Signature	Date/Time
Jeff Tucksen CHPRC		JAN 0 8 2018 1110	Roger Friesz Jr. /CHPRC		JAN 0 8 2018 1110
Roger Friesz Jr. /CHPRC		JAN 0 8 2018 1245	SSU-1		JAN 0 8 2018 1245
SSU-1		JAN 0 9 2018 0900	Lesly Wall /CHPRC		JAN 0 9 2018 0900
Lesly Wall /CHPRC		JAN 0 9 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 12/13/2017 FSR ID = FSR55532 A-6004-842 (REV 3)

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST (continued)

C.O.C. No. W18-001-371

Page 2 of 2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	FedEx				Reed Pottruff	Reed Pottruff	1-10-18 0930
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)

93165

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # W18-001-143 Page 1 of 1

Collector:	Jeff Tucksen CHPRC DN0303	Contact/Requester:	Karen Waters-Husted	Telephone No.:	509-376-4650
SAF No.:	W18-001	Sampling Origin:	Hanford Site	Purchase Order/Charge Code:	300071
Project Title:	RCRA, JANUARY 2018	Logbook No.:	HNF-N-506 -97-39	Ice Chest No.:	GWS-408
Shipped To (Lab):	TestAmerica Denver	Method of Shipment	Commercial Carrier	Bill of Lading/Air Bill No.:	7711 7360 5719
Protocol	RCRA	Priority:	30 Days	Offsite Property No.:	8927

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
B3FTL9	Y	W	1-8-18	1338	1x500-mL G/P	7470_MERCURY_CV: COMMON (AQUEOUS); 6020_METALS_ICPMS: GW 01; 6010_METALS_ICP: GW 04	28 Days	HNO3 to pH <2
B3FTL1	N	W	1-8-18	1338	1x500-mL G/P	7470_MERCURY_CV: COMMON (AQUEOUS); 6020_METALS_ICPMS: GW 01; 6010_METALS_ICP: GW 04	28 Days	HNO3 to pH <2

Relinquished By:	Print First and Last Name	Signature	Date/Time	Received By:	Print First and Last Name	Signature	Date/Time
Jeff Tucksen CHPRC			JAN 08 2018 1435	SSU-1			JAN 08 2018 1435
SSU-1			JAN 09 2018 0900	Lesly Wall /CHPRC			JAN 09 2018 0900
Lesly Wall /CHPRC			JAN 09 2018 1400	FEDEX			
Fed Ex				Reed Pittman			1-10-18 0930

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 = FSR55536 A-6004-842 (REV 3)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C.# W18-001-384 Page 1 of 1

Collector: Daniel Klug CHPRC DW0303	**Contact/Requester:** Karen Waters-Husted	**Telephone No.:** 509-376-4650
SAF No.: W18-001	**Sampling Origin:** Hanford Site	**Purchase Order/Charge Code:** 300071
Project Title: RCRA, JANUARY 2018	**Logbook No.:** HNF-N-506 -95 /74	**Ice Chest No.:** 6605-408
Shipped To (Lab): TestAmerica Denver	**Method of Shipment** Commercial Carrier	**Bill of Lading/Air Bill No.:** 7711 7360 5719
Protocol RCRA	**Priority:** 30 Days	**Offsite Property No.:** 8927

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
B3FYD4	N	W	JAN 0 8 2018	1325	4x1-L aG	8151_HERBICIDE_GC: COMMON	7/40 Days	Cool <=6C
B3FYD4	N	W	/	/	4x1-L aG	8081_PEST_GC: COMMON; 8081_PEST_GC: CH 01	7/40 Days	Cool <=6C

Relinquished By:	Received By:
Daniel Klug CHPRC — D. Klug — JAN 0 8 2018 1415 (Print First and Last Name / Signature / Date/Time)	SSU-1 — JAN 0 8 2018 1415 (Print First and Last Name / Signature / Date/Time)
SSU-1 — JAN 0 9 2018 0900 (Print First and Last Name / Signature / Date/Time)	Lesly Wall /CHPRC — Lesly Wall — JAN 0 9 2018 0900 (Print First and Last Name / Signature / Date/Time)
Lesly Wall /CHPRC — Lesly Wall — JAN 0 9 2018 1400 (Print First and Last Name / Signature / Date/Time)	FEDEX (Print First and Last Name / Signature / Date/Time)
FedEx (Print First and Last Name / Signature / Date/Time)	Reed Pothrue — Reed P — 1-10-18 0930 (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 = FSR55541 A-6004-842 (REV 3)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # W18-001-377 Page 1 of 1

Collector:	Jeff Tucksen CHPRC DN0303	Contact/Requester:	Karen Waters-Husted	Telephone No.:	509-376-4650
SAF No.:	W18-001	Sampling Origin:	Hanford Site	Purchase Order/Charge Code:	300071
Project Title:	RCRA, JANUARY 2018	Logbook No.:	HNF-N-506 97-39	Ice Chest No.:	6605-408
Shipped To (Lab):	TestAmerica Denver	Method of Shipment	Commercial Carrier	Bill of Lading/Air Bill No.:	7711 7360 5719
Protocol	RCRA	Priority:	30 Days	Offsite Property No.:	8927

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
B3FYC6	N	W	1-8-18	1338	4x1-L aG	8151_HERBICIDE_GC: COMMON	7/40 Days	Cool <=6C

Relinquished By:	Signature	Date/Time	Received By:	Signature	Date/Time
Jeff Tucksen CHPRC	JAN 0 8 2018	1435	SSU-1	JAN 0 8 2018	1435
SSU-1	JAN 0 9 2018	0900	Lesly Wall /CHPRC	Kesly Wall JAN 0 9 2018	0900
Lesly Wall /CHPRC	Kesly Wall JAN 0 9 2018	1400	FEDEX		
FedEx			Reed P. Hruff	Reed P. Hruff 1-10-18	0930

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 = FSR55536 A-6004-842 (REV 3)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # W18-001-142 Page 1 of 12

Collector:	Jeff Tucksen CHPRC DN0303	Contact/Requester:	Karen Waters-Husted	Telephone No.:	509-376-4650
SAF No.:	W18-001	Sampling Origin:	Hanford Site	Purchase Order/Charge Code:	300071
Project Title:	RCRA, JANUARY 2018	Logbook No.:	HNF-N-506 -97-39	Ice Chest No.:	6605-408
Shipped To (Lab):	TestAmerica Denver	Method of Shipment	Commercial Carrier	Bill of Lading/Air Bill No.:	7711736057719
Protocol	RCRA	Priority:	30 Days	Offsite Property No.:	8927

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
B3FTK5	N	W	1-8-18	1206	1x500-mL G/P	7470_MERCURY_CV: COMMON (AQUEOUS); 6020_METALS_ICPMS: GW 01; 6010_METALS_ICP: GW 04	28 Days	HNO3 to pH <2
B3FTK9	Y	W	1-8-18	1206	1x500-mL G/P	7470_MERCURY_CV: COMMON (AQUEOUS); 6020_METALS_ICPMS: GW 01; 6010_METALS_ICP: GW 04	28 Days	HNO3 to pH <2

Relinquished By	Print First and Last Name	Signature	Date/Time	Received By	Print First and Last Name	Signature	Date/Time
Relinquished By:	Jeff Tucksen CHPRC		JAN 08 2018 1235	Received By:	Christina Aguilar /CHPRC		JAN 08 2018 1235
Relinquished By:	Christina Aguilar /CHPRC		JAN 08 2018 1305	Received By:	SSU-1		JAN 08 2018 1305
Relinquished By:	SSU-1		JAN 09 2018 0900	Received By:	Lesly Wall /CHPRC		JAN 09 2018 0900
Relinquished By:	Lesly Wall /CHPRC		JAN 09 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 = FSR55535 A-6004-842 (REV 3)

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST (continued)

C.O.C. No. W18-001-142

Page 2 of 2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	FedEx			Reed Pottmuff	Reed Pottmuff		1-10-18 0930
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	82 LBS. CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # W18-001-373 Page 1 of 12

Collector: Daniel Klug CHPRC DN0303	**Contact/Requester:** Karen Waters-Husted	**Telephone No.:** 509-376-4650
SAF No.: W18-001	**Sampling Origin:** Hanford Site	**Purchase Order/Charge Code:** 300071
Project Title: RCRA, JANUARY 2018	**Logbook No.:** HNF-N-506 - 85 / 74	**Ice Chest No.:** GWS-738
Shipped To (Lab): TestAmerica Denver	**Method of Shipment** Commercial Carrier	**Bill of Lading/Air Bill No.:** 771117360 5638
Protocol RCRA	**Priority:** 30 Days	**Offsite Property No.:** 8927

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
B3FTK3	Y	W	JAN 0 8 2018	1019	1x500-mL G/P	6010_METALS_ICP: COMMON	6 Months	HNO3 to pH <2
B3FY72	N	W			1x500-mL G/P	6010_METALS_ICP: COMMON	6 Months	HNO3 to pH <2
B3FY72	N	W			1x250-mL G/P	2320_ALKALINITY: GW 01	14 Days	Cool <=6C
B3FY72	N	W			5x40-mL aGs*	8260_VOA_GCMS: COMMON	14 Days	HCl or H2SO4 to pH <2 / Cool <=6C

Relinquished By:	Received By:
Daniel Klug CHPRC — JAN 0 8 2018 1135 (Print First and Last Name / Signature / Date/Time)	Roger Friesz Jr. /CHPRC — JAN 0 8 2018 1135 (Print First and Last Name / Signature / Date/Time)
Roger Friesz Jr. /CHPRC — JAN 0 8 2018 1245 (Print First and Last Name / Signature / Date/Time)	SSU-1 — JAN 0 8 2018 1245 (Print First and Last Name / Signature / Date/Time)
SSU-1 — JAN 0 9 2018 0900 (Print First and Last Name / Signature / Date/Time)	Lesly Wall /CHPRC — JAN 0 9 2018 0900 (Print First and Last Name / Signature / Date/Time)
Lesly Wall /CHPRC — JAN 0 9 2018 1400 (Print First and Last Name / Signature / Date/Time)	FEDEX (Print First and Last Name / Signature / Date/Time)

Matrix *
S = Soil, SE = Sediment, SO = Solid, SL = Sludge, W = Water, O = Oil, A = Air
DS = Drum Solids, DL = Drum Liquid, T = Tissue, WI = Wipe, L = Liquid, V = Vegetation, 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 = FSR55534 A-6004-842 (REV 3)

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST (continued)

C.O.C. No. 6018-001-373

Page 2 of 2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	FedEx			Reed	Pottruff	[signature]	1-10-18 0930
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. # W18-001-376 Page 1 of 1

Collector:	Jeff Tucksen CHPRC DW0303	**Contact/Requester:**	Karen Waters-Husted	**Telephone No.:**	509-376-4650
SAF No.:	W18-001	**Sampling Origin:**	Hanford Site	**Purchase Order/Charge Code:**	300071
Project Title:	RCRA, JANUARY 2018	**Logbook No.:**	HNF-N-506-47-39	**Ice Chest No.:**	GWS-738
Shipped To (Lab):	TestAmerica Denver	**Method of Shipment**	Commercial Carrier	**Bill of Lading/Air Bill No.:**	771173605638
Protocol	RCRA	**Priority:**	30 Days	**Offsite Property No.:**	8927

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
B3FYC5	N	W	1-8-18	1338	4x1-L aG	8151_HERBICIDE_GC: COMMON	7/40 Days	Cool <=6C

Relinquished By:	Signature	Date/Time	Received By:	Signature	Date/Time
Jeff Tucksen CHPRC	JAN 08 2018	1435	SSU-1	JAN 08 2018	1435
Relinquished By: SSU-1	JAN 09 2018	0900	Received By: Lesly Wall /CHPRC	JAN 09 2018	0900
Relinquished By: Lesly Wall /CHPRC	JAN 09 2018	1400	Received By: FEDEX		
Relinquished By: FedEx			Received By: Reed Poinnoff	1-10-18	0930

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 = FSR55536 A-6004-842 (REV 3)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C.# W18-001-145 Page 1 of 72

Collector:	Daniel Klug CHPRC DN0353	Contact/Requester:	Karen Waters-Husted	Telephone No.:	509-376-4650
SAF No.:	W18-001	Sampling Origin:	Hanford Site	Purchase Order/Charge Code:	300071
Project Title:	RCRA, JANUARY 2018	Logbook No.:	HNF-N-506 -95/74	Ice Chest No.:	GWS-738
Shipped To (Lab):	TestAmerica Denver	Method of Shipment	Commercial Carrier	Bill of Lading/Air Bill No.:	771173605638
Protocol	RCRA	Priority:	30 Days	Offsite Property No.:	8927

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
B3FR85	N	W	JAN 08 2018	1109	1x500-mL G/P	7470_MERCURY_CV: COMMON (AQUEOUS); 6020_METALS_ICPMS: GW 01; 6010_METALS_ICP: GW 04	28 Days	HNO3 to pH <2
B3FR89	Y	W	/	/	1x500-mL G/P	7470_MERCURY_CV: COMMON (AQUEOUS); 6020_METALS_ICPMS: GW 01; 6010_METALS_ICP: GW 04	28 Days	HNO3 to pH <2

Relinquished By:	Signature	Date/Time	Received By:	Signature	Date/Time
Daniel Klug CHPRC	D.K.	JAN 08 2018 1135	Roger Friesz Jr. /CHPRC		JAN 08 2018 1135
Roger Friesz Jr. /CHPRC		JAN 08 2018 1245	SSU-1		JAN 08 2018 1245
SSU-1		JAN 09 2018 0900	Lesly Wall /CHPRC	Lesly Wall	JAN 09 2018 0900
Lesly Wall /CHPRC	Lesly Wall	JAN 09 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 12/13/2017 FSR ID = FSR55542 A-6004-842 (REV 3)

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST (continued)

C.O.C. No. W18-601-145

Page 2 of 2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	FedEx				Reed Portmuff	Reed P	1-10-18 0930
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
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Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
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Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
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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. # W18-001-382 Page 1 of 2

Collector:	Daniel Klug CHPRC DN0307	Contact/Requester:	Karen Waters-Husted	Telephone No.:	509-376-4650 2/02/18
SAF No.:	W18-001	Sampling Origin:	Hanford Site	Purchase Order/Charge Code:	300071
Project Title:	RCRA, JANUARY 2018	Logbook No.:	HNF-N-506 -95/74	Ice Chest No.:	GWS-738
Shipped To (Lab):	TestAmerica Denver	Method of Shipment	Commercial Carrier	Bill of Lading/Air Bill No.:	771173605638
Protocol	RCRA	Priority:	30 Days	Offsite Property No.:	8927

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
B3FR72	Y	W	JAN 08 2018	1211	1x500-mL G/P	7470_MERCURY_CV: COMMON (AQUEOUS); 6020_METALS_ICPMS: GW 01; 6010_METALS_ICP: GW 04	28 Days	HNO3 to pH <2
B3FYD1	N	W	/	/	1x500-mL G/P	7470_MERCURY_CV: COMMON (AQUEOUS); 6020_METALS_ICPMS: GW 01; 6010_METALS_ICP: GW 04	28 Days	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			JAN 08 2018 1230	Christina Aguilar /CHPRC			JAN 08 2018 1230
Christina Aguilar /CHPRC			JAN 08 2018 1305	SSU-1			JAN 08 2018 1305
SSU-1			JAN 09 2018 0900	Lesly Wall /CHPRC			JAN 09 2018 0900
Lesly Wall /CHPRC			JAN 09 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 12/13/2017 FSR ID = FSR55540 A-6004-842 (REV 3)

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST (continued)

C.O.C. No. 018-001-382

Page 2 of 2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	FedEx			Ryed Pottrnf			1-10-18 0930
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Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
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Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
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A-6003-962 (03/05)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C.# W18-001-372 Page 1 of 2

Collector:	Jeff Tucksen CHPRC DN0303	Contact/Requester:	Karen Waters-Husted	Telephone No.:	509-376-4650
SAF No.:	W18-001	Sampling Origin:	Hanford Site	Purchase Order/Charge Code:	300071
Project Title:	RCRA, JANUARY 2018	Logbook No.:	HNF-N-506 -97-34	Ice Chest No.:	GWS-738
Shipped To (Lab):	TestAmerica Denver	Method of Shipment	Commercial Carrier	Bill of Lading/Air Bill No.:	771173605638
Protocol	RCRA	Priority:	30 Days	Offsite Property No.:	8927

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
B3FY71	N	W	1-8-18	1050	1x500-mL G/P	6010_METALS_ICP: COMMON	6 Months	HNO3 to pH <2
B3FY71	N	W	1-8-18	1050	5x40-mL aGs*	8260_VOA_GCMS: COMMON	14 Days	HCl or H2SO4 to pH <2 / Cool <=6C
B3FVD2	Y	W	1-8-18	1050	1x500-mL G/P	6010_METALS_ICP: COMMON	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
Jeff Tucksen CHPRC		JAN 0 8 2018 1110	Roger Friesz Jr. /CHPRC		JAN 0 8 2018 1110
Roger Friesz Jr. /CHPRC		JAN 0 8 2018 1245	SSU-1		JAN 0 8 2018 1245
SSU-1		JAN 0 9 2018 0900	Lesly Wall /CHPRC		JAN 0 9 2018 0900
Lesly Wall /CHPRC		JAN 0 9 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 12/13/2017 FSR ID = FSR55533 A-6004-842 (REV 3)

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST (continued)

C.O.C. No. 1018-001-372

Page 2 of 2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	FedEx			Reed	Pothruff	Reed Po	1-10-18 0930
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A-6003-962 (03/05)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C.# W18-001-388 Page 1 of 2

Collector:	Daniel Klug CHPRC DN0303	Contact/Requester:	Karen Waters-Husted	Telephone No.:	509-376-4650
SAF No.:	W18-001	Sampling Origin:	Hanford Site	Purchase Order/Charge Code:	300071
Project Title:	RCRA, JANUARY 2018	Logbook No.:	HNF-N-506 - 95/74	Ice Chest No.:	GWS-738
Shipped To (Lab):	TestAmerica Denver	Method of Shipment	Commercial Carrier	Bill of Lading/Air Bill No.:	771117360563 8
Protocol	RCRA	Priority:	30 Days	Offsite Property No.:	8927

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
B3FYD7	N	W	JAN 08 2018	1109	4x1-L aG	8081_PEST_GC: COMMON; 8081_PEST_GC: CH 01	7/40 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		JAN 08 2018 1135	Roger Friesz Jr. /CHPRC			JAN 08 2018 1135
Roger Friesz Jr. /CHPRC			JAN 08 2018 1245	SSU-1			JAN 08 2018 1245
SSU-1			JAN 09 2018 0900	Lesly Wall /CHPRC			JAN 09 2018 0900
Lesly Wall /CHPRC			JAN 09 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 12/13/2017 FSR ID = FSR55542 A-6004-842 (REV 3)

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST (continued)

C.O.C. No. W18-001-388

Page 2 of 2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	FedEx				Reed Pottruff	Reed P	1-10-18 0830
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A-6003-962 (03/05)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C.# S18-001-374 Page 1 of 2

Collector: IVAN SCHAEFFER CHPRC IPN6303	**Contact/Requester:** Karen Waters-Husted	**Telephone No.:** 509-376-4650 α 01/18/18
SAF No.: S18-001	**Sampling Origin:** Hanford Site	**Purchase Order/Charge Code:** 300071
Project Title: SURV, JANUARY 2018	**Logbook No.:** HNF-N-506 96 177	**Ice Chest No.:** GWS-571
Shipped To (Lab): TestAmerica Denver	**Method of Shipment** Commercial Carrier	**Bill of Lading/Air Bill No.:** 7711 6308 6038
Protocol SURV	**Priority:** 30 Days	**Offsite Property No.:** 8921

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
B3FYH8	N	W	JAN 04 2018	0946	1x250-mL G/P	2320_ALKALINITY: GW 01	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		JAN 04 2018 1030		Christina Aguilar /CHPRC		JAN 04 2018 1030
	Christina Aguilar /CHPRC		JAN 04 2018 1100		SSU-1		JAN 04 2018 1100
	SSU-1		JAN 08 2018 1045		Lesly Wall /CHPRC		JAN 08 2018 1045
	Lesly Wall /CHPRC		JAN 08 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 11/21/2017 FSR ID = FSR53955 A-6004-842 (REV 3)

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST (continued)

C.O.C. No. 518-001-374

Page 2 of 2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	Fed Ex			Reed Pettruff	Reed P		1-10-17 0930
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
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A-6003-962 (03/05)

FedEx® Tracking

771173605535

Ship date:		Actual delivery:
Tue 1/09/2018		**Wed 1/10/2018 9:22 am**
Richland, WA US	**Delivered** *Signed for by: R.POTRUFF*	ARVADA, CO US

3 Piece shipment

Travel History

Date/Time	Activity	Location
1/10/2018 - Wednesday		
9:22 am	Delivered	ARVADA, CO
7:52 am	At local FedEx facility	ARVADA, CO
3:17 am	Departed FedEx location	MEMPHIS, TN
3:17 am	At destination sort facility	DENVER, CO
12:22 am	Arrived at FedEx location	MEMPHIS, TN
1/09/2018 - Tuesday		
4:47 pm	Left FedEx origin facility	PASCO, WA
12:22 pm	Shipment information sent to FedEx	
11:37 am	Picked up	PASCO, WA

Shipment Facts

Tracking Number	771173605535	**Service**	FedEx Priority Overnight
Master tracking number	771173605719	**Weight**	86 lbs / 39.01 kgs
Signature services	Direct signature required	**Delivered To**	Shipping/Receiving
Total pieces	3	**Total shipment weight**	86 lbs / 39.01 kgs
Terms	Third Party	**Shipper reference**	ptr# 8927
Packaging	Your Packaging	**Special handling section**	Deliver Weekday, Direct Signature Required
Standard transit	1/10/2018 by 10:30 am		

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FedEx® Tracking

771173605719

Ship date.		Actual delivery
Tue 1/09/2018		**Wed 1/10/2018 9:22 am**
Richland, WA US	**Delivered** *Signed for by R.POTRUFF*	ARVADA, CO US

3 Piece shipment

Travel History

Date/Time	Activity	Location
- 1/10/2018 - Wednesday		
9:22 am	Delivered	ARVADA, CO
7:33 am	At local FedEx facility	ARVADA, CO
3:17 am	Departed FedEx location	MEMPHIS, TN
3.17 am	At destination sort facility	DENVER, CO
12 22 am	Arrived at FedEx location	MEMPHIS, TN
- 1/09/2018 - Tuesday		
4.47 pm	Left FedEx origin facility	PASCO, WA
12:22 pm	Shipment information sent to FedEx	
11 37 am	Picked up	PASCO, WA

Shipment Facts

Tracking Number	771173605719	**Service**	FedEx Priority Overnight
Master tracking number	771173605719	**Weight**	93 lbs / 42.18 kgs
Dimensions	28x16x16 in	**Signature services**	Direct signature required
Delivered To	Shipping/Receiving	**Total pieces**	3
Total shipment weight	261 lbs / 118.39 kgs	**Terms**	Third Party
Shipper reference	pir# 8927	**Packaging**	Your Packaging
Special handling section	Deliver Weekday, Additional Handling Surcharge, Direct Signature Required	**Standard transit**	1/10/2018 by 10 30 am

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771173605638

Ship date:		Actual delivery.
Tue 1/09/2018		**Wed 1/10/2018 9:18 am**
Richland, WA US	**Delivered** *Signed for by: R.POTRUFF*	ARVADA, CO US

3 Piece shipment

Travel History

Date/Time	Activity	Location
1/10/2018 - Wednesday		
9:18 am	Delivered	ARVADA, CO
7:29 am	At local FedEx facility	ARVADA, CO
3:17 am	Departed FedEx location	MEMPHIS, TN
3:17 am	At destination sort facility	DENVER, CO
12:22 am	Arrived at FedEx location	MEMPHIS, TN
1/09/2018 - Tuesday		
4:47 pm	Left FedEx origin facility	PASCO, WA
12:22 pm	Shipment information sent to FedEx	
11:37 am	Picked up	PASCO, WA

Shipment Facts

Tracking Number	771173605638	**Service**	FedEx Priority Overnight
Master tracking number	771173605719	**Weight**	82 lbs / 37.19 kgs
Signature services	Direct signature required	**Delivered To**	Shipping/Receiving
Total pieces	3	**Total shipment weight**	82 lbs / 37.19 kgs
Terms	Third Party	**Shipper reference**	ptr# 8927
Packaging	Your Packaging	**Special handling section**	Deliver Weekday, Direct Signature Required
Standard transit	1/10/2018 by 10:30 am		

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FedEx® Tracking

771163086038

Ship date:		Actual delivery:
Mon 1/08/2018		**Wed 1/10/2018 9:22 am**
Richland, WA US	**Delivered** *Signed for by: R.POTRUFF*	ARVADA, CO US

Travel History

Date/Time	Activity	Location
- 1/10/2018 - Wednesday		
9.22 am	Delivered	ARVADA, CO
8.12 am	On FedEx vehicle for delivery	ARVADA, CO
3 17 am	Departed FedEx location	MEMPHIS, TN
3.17 am	At destination sort facility	DENVER CO
12.22 am	Arrived at FedEx location	MEMPHIS, TN
- 1/09/2018 - Tuesday		
6 50 am	Left FedEx origin facility	PASCO, WA
- 1/08/2018 - Monday		
7.00 pm	At FedEx origin facility	PASCO, WA
6.40 pm	Shipment exception Delay beyond our control	PASCO, WA
1:04 pm	Shipment information sent to FedEx	
10.59 am	Picked up	PASCO, WA

Shipment Facts

Tracking Number	771163086038	**Service**	FedEx Priority Overnight
Weight	89 lbs / 40.37 kgs	**Signature services**	Direct signature required
Delivered To	Shipping/Receiving	**Total pieces**	1
Total shipment weight	89 lbs / 40.37 kgs	**Terms**	Third Party
Shipper reference	ptr# 8921/cooler# gws-571	**Packaging**	Your Packaging
Special handling section	Deliver Weekday, Direct Signature Required	**Standard transit**	1/09/2018 by 10:30 am

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Analyzed for but not detected.
T	MS, MSD: Recovery exceeds upper or lower control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
y	Duplicate analysis not within control limits.

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	Presumptive evidence of material.

GC Semi VOA

Qualifier	Qualifier Description
U	Analyzed for but not detected.
N	MS, MSD: Spike recovery is outside acceptance limits.
o	LCS, LCSD: Recovery exceeds upper or lower control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
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

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

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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: W18-001 / X18-005 / S18-001

TestAmerica Job ID: 280-105343-1
SDG: DN0303

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL DEN
8081B	Organochlorine Pesticides (GC)	SW846	TAL DEN
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL DEN
8151A	Herbicides (GC)	SW846	TAL DEN
6010D	Metals (ICP)	SW846	TAL DEN
6020B	Metals (ICP/MS)	SW846	TAL DEN
7470A	Mercury (CVAA)	SW846	TAL DEN
SM 2320B	Alkalinity	SM	TAL DEN

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Sample Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-001 / X18-005 / S18-001

TestAmerica Job ID: 280-105343-1
SDG: DN0303

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-105343-1	B3FXD7	Water	01/08/18 12:06	01/10/18 09:30
280-105343-2	B3FTM0	Water	01/08/18 13:38	01/10/18 09:30
280-105343-3	B3FTL2	Water	01/08/18 13:38	01/10/18 09:30
280-105343-4	B3H037	Water	01/08/18 10:12	01/10/18 09:30
280-105343-5	B3FY58	Water	01/08/18 10:12	01/10/18 09:30
280-105343-6	B3FTL9	Water	01/08/18 13:38	01/10/18 09:30
280-105343-7	B3FTL1	Water	01/08/18 13:38	01/10/18 09:30
280-105343-8	B3FYD4	Water	01/08/18 13:25	01/10/18 09:30
280-105343-9	B3FYC6	Water	01/08/18 13:38	01/10/18 09:30
280-105343-10	B3FTK5	Water	01/08/18 12:06	01/10/18 09:30
280-105343-11	B3FTK9	Water	01/08/18 12:06	01/10/18 09:30
280-105343-12	B3FTK3	Water	01/08/18 10:19	01/10/18 09:30
280-105343-13	B3FY72	Water	01/08/18 10:19	01/10/18 09:30
280-105343-14	B3FYC5	Water	01/08/18 13:38	01/10/18 09:30
280-105343-15	B3FR85	Water	01/08/18 11:09	01/10/18 09:30
280-105343-16	B3FR89	Water	01/08/18 11:09	01/10/18 09:30
280-105343-17	B3FR72	Water	01/08/18 12:11	01/10/18 09:30
280-105343-18	B3FYD1	Water	01/08/18 12:11	01/10/18 09:30
280-105343-19	B3FY71	Water	01/08/18 10:50	01/10/18 09:30
280-105343-20	B3FVD2	Water	01/08/18 10:50	01/10/18 09:30
280-105343-21	B3FYD7	Water	01/08/18 11:09	01/10/18 09:30
280-105343-22	B3FYH8	Water	01/04/18 09:46	01/10/18 09:30

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-001 / X18-005 / S18-001

TestAmerica Job ID: 280-105343-1
SDG: DN0303

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: B3H037
Date Collected: 01/08/18 10:12
Date Received: 01/10/18 09:30

Lab Sample ID: 280-105343-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			01/15/18 21:50	1
1,1,2-Trichloroethane	0.27	U	1.0	0.27	ug/L			01/15/18 21:50	1
1,1-Dichloroethane	0.22	U	1.0	0.22	ug/L			01/15/18 21:50	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			01/15/18 21:50	1
1,2-Dichloroethane	0.13	U	1.0	0.13	ug/L			01/15/18 21:50	1
2-Butanone (MEK)	2.0	U	6.0	2.0	ug/L			01/15/18 21:50	1
4-Methyl-2-pentanone (MIBK)	0.98	U T	5.0	0.98	ug/L			01/15/18 21:50	1
Acetone	1.9	U	10	1.9	ug/L			01/15/18 21:50	1
Benzene	0.16	U	1.0	0.16	ug/L			01/15/18 21:50	1
Carbon disulfide	0.45	U	2.0	0.45	ug/L			01/15/18 21:50	1
Carbon tetrachloride	0.19	U	1.0	0.19	ug/L			01/15/18 21:50	1
Chlorobenzene	0.17	U	1.0	0.17	ug/L			01/15/18 21:50	1
Chloroform	0.16	U	1.0	0.16	ug/L			01/15/18 21:50	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			01/15/18 21:50	1
Methylene Chloride	**12**	**T**	2.0	0.32	ug/L			01/15/18 21:50	1
Tetrachloroethene	0.20	U	1.0	0.20	ug/L			01/15/18 21:50	1
Toluene	0.17	U	1.0	0.17	ug/L			01/15/18 21:50	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			01/15/18 21:50	1
Vinyl chloride	0.10	U T	1.0	0.10	ug/L			01/15/18 21:50	1
Xylenes, Total	0.19	U	2.0	0.19	ug/L			01/15/18 21:50	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*01/15/18 21:50*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*		*01/15/18 21:50*	*1*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*		*01/15/18 21:50*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*01/15/18 21:50*	*1*
Toluene-d8 (Surr)	*107*		*70 - 130*		*01/15/18 21:50*	*1*

Client Sample ID: B3FY58
Date Collected: 01/08/18 10:12
Date Received: 01/10/18 09:30

Lab Sample ID: 280-105343-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.23**	**J**	1.0	0.16	ug/L			01/15/18 23:26	1
1,1,2-Trichloroethane	0.27	U	1.0	0.27	ug/L			01/15/18 23:26	1
1,1-Dichloroethane	0.22	U	1.0	0.22	ug/L			01/15/18 23:26	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			01/15/18 23:26	1
1,2-Dichloroethane	0.13	U	1.0	0.13	ug/L			01/15/18 23:26	1
2-Butanone (MEK)	2.0	U	6.0	2.0	ug/L			01/15/18 23:26	1
4-Methyl-2-pentanone (MIBK)	0.98	U T	5.0	0.98	ug/L			01/15/18 23:26	1
Acetone	**4.4**	**J**	10	1.9	ug/L			01/15/18 23:26	1
Benzene	0.16	U	1.0	0.16	ug/L			01/15/18 23:26	1
Carbon disulfide	0.45	U	2.0	0.45	ug/L			01/15/18 23:26	1
Carbon tetrachloride	0.19	U	1.0	0.19	ug/L			01/15/18 23:26	1
Chlorobenzene	0.17	U	1.0	0.17	ug/L			01/15/18 23:26	1
Chloroform	0.16	U	1.0	0.16	ug/L			01/15/18 23:26	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			01/15/18 23:26	1
Methylene Chloride	0.32	U T	2.0	0.32	ug/L			01/15/18 23:26	1
Tetrachloroethene	**0.49**	**J**	1.0	0.20	ug/L			01/15/18 23:26	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: B3FY58 — **Lab Sample ID: 280-105343-5**
Date Collected: 01/08/18 10:12 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	0.17	U	1.0	0.17	ug/L			01/15/18 23:26	1
Trichloroethene	**0.26**	**J**	1.0	0.16	ug/L			01/15/18 23:26	1
Vinyl chloride	0.10	U T	1.0	0.10	ug/L			01/15/18 23:26	1
Xylenes, Total	0.19	U	2.0	0.19	ug/L			01/15/18 23:26	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*01/15/18 23:26*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*		*01/15/18 23:26*	*1*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*		*01/15/18 23:26*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*01/15/18 23:26*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*01/15/18 23:26*	*1*

Client Sample ID: B3FY72 — **Lab Sample ID: 280-105343-13**
Date Collected: 01/08/18 10:19 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			01/15/18 23:45	1
1,1,2-Trichloroethane	0.27	U	1.0	0.27	ug/L			01/15/18 23:45	1
1,1-Dichloroethane	0.22	U	1.0	0.22	ug/L			01/15/18 23:45	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			01/15/18 23:45	1
1,2-Dichloroethane	0.13	U	1.0	0.13	ug/L			01/15/18 23:45	1
2-Butanone (MEK)	2.0	U	6.0	2.0	ug/L			01/15/18 23:45	1
4-Methyl-2-pentanone (MIBK)	0.98	U T	5.0	0.98	ug/L			01/15/18 23:45	1
Acetone	**3.4**	**J**	10	1.9	ug/L			01/15/18 23:45	1
Benzene	0.16	U	1.0	0.16	ug/L			01/15/18 23:45	1
Carbon disulfide	0.45	U	2.0	0.45	ug/L			01/15/18 23:45	1
Carbon tetrachloride	0.19	U	1.0	0.19	ug/L			01/15/18 23:45	1
Chlorobenzene	0.17	U	1.0	0.17	ug/L			01/15/18 23:45	1
Chloroform	0.16	U	1.0	0.16	ug/L			01/15/18 23:45	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			01/15/18 23:45	1
Methylene Chloride	0.32	U T	2.0	0.32	ug/L			01/15/18 23:45	1
Tetrachloroethene	0.20	U	1.0	0.20	ug/L			01/15/18 23:45	1
Toluene	0.17	U	1.0	0.17	ug/L			01/15/18 23:45	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			01/15/18 23:45	1
Vinyl chloride	0.10	U T	1.0	0.10	ug/L			01/15/18 23:45	1
Xylenes, Total	0.19	U	2.0	0.19	ug/L			01/15/18 23:45	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*01/15/18 23:45*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*		*01/15/18 23:45*	*1*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*		*01/15/18 23:45*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*01/15/18 23:45*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*01/15/18 23:45*	*1*

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-001 / X18-005 / S18-001

TestAmerica Job ID: 280-105343-1
SDG: DN0303

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: B3FY71
Date Collected: 01/08/18 10:50
Date Received: 01/10/18 09:30

Lab Sample ID: 280-105343-19
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.25**	**J**	1.0	0.16	ug/L			01/16/18 00:05	1
1,1,2-Trichloroethane	0.27	U	1.0	0.27	ug/L			01/16/18 00:05	1
1,1-Dichloroethane	0.22	U	1.0	0.22	ug/L			01/16/18 00:05	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			01/16/18 00:05	1
1,2-Dichloroethane	0.13	U	1.0	0.13	ug/L			01/16/18 00:05	1
2-Butanone (MEK)	2.0	U	6.0	2.0	ug/L			01/16/18 00:05	1
4-Methyl-2-pentanone (MIBK)	0.98	U T	5.0	0.98	ug/L			01/16/18 00:05	1
Acetone	**3.0**	**J**	10	1.9	ug/L			01/16/18 00:05	1
Benzene	0.16	U	1.0	0.16	ug/L			01/16/18 00:05	1
Carbon disulfide	0.45	U	2.0	0.45	ug/L			01/16/18 00:05	1
Carbon tetrachloride	0.19	U	1.0	0.19	ug/L			01/16/18 00:05	1
Chlorobenzene	0.17	U	1.0	0.17	ug/L			01/16/18 00:05	1
Chloroform	0.16	U	1.0	0.16	ug/L			01/16/18 00:05	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			01/16/18 00:05	1
Methylene Chloride	0.32	U T	2.0	0.32	ug/L			01/16/18 00:05	1
Tetrachloroethene	**0.63**	**J**	1.0	0.20	ug/L			01/16/18 00:05	1
Toluene	0.17	U	1.0	0.17	ug/L			01/16/18 00:05	1
Trichloroethene	**0.31**	**J**	1.0	0.16	ug/L			01/16/18 00:05	1
Vinyl chloride	0.10	U T	1.0	0.10	ug/L			01/16/18 00:05	1
Xylenes, Total	0.19	U	2.0	0.19	ug/L			01/16/18 00:05	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*01/16/18 00:05*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*01/16/18 00:05*	*1*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*		*01/16/18 00:05*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*01/16/18 00:05*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*01/16/18 00:05*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Client Sample ID: B3FXD7
Date Collected: 01/08/18 12:06
Date Received: 01/10/18 09:30

Lab Sample ID: 280-105343-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0074	U	0.048	0.0074	ug/L		01/11/18 17:04	01/24/18 18:08	1
4,4'-DDE	0.0072	U	0.048	0.0072	ug/L		01/11/18 17:04	01/24/18 18:08	1
4,4'-DDT	0.014	U	0.048	0.014	ug/L		01/11/18 17:04	01/24/18 18:08	1
Aldrin	0.0056	U	0.048	0.0056	ug/L		01/11/18 17:04	01/24/18 18:08	1
alpha-BHC	0.0051	U	0.048	0.0051	ug/L		01/11/18 17:04	01/24/18 18:08	1
beta-BHC	0.0083	U	0.048	0.0083	ug/L		01/11/18 17:04	01/24/18 18:08	1
delta-BHC	0.0055	U	0.048	0.0055	ug/L		01/11/18 17:04	01/24/18 18:08	1
Dieldrin	0.0060	U	0.048	0.0060	ug/L		01/11/18 17:04	01/24/18 18:08	1
Endosulfan I	0.0055	U	0.048	0.0055	ug/L		01/11/18 17:04	01/24/18 18:08	1
Endosulfan II	0.0067	U	0.048	0.0067	ug/L		01/11/18 17:04	01/24/18 18:08	1
Endrin ketone	0.0067	U	0.048	0.0067	ug/L		01/11/18 17:04	01/24/18 18:08	1
Endosulfan sulfate	0.0054	U	0.048	0.0054	ug/L		01/11/18 17:04	01/24/18 18:08	1
Endrin	0.0076	U	0.048	0.0076	ug/L		01/11/18 17:04	01/24/18 18:08	1
Endrin aldehyde	0.0084	U	0.048	0.0084	ug/L		01/11/18 17:04	01/24/18 18:08	1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Client Sample ID: B3FXD7 **Lab Sample ID: 280-105343-1**
Date Collected: 01/08/18 12:06 **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
gamma-BHC (Lindane)	0.0066	U	0.048	0.0066	ug/L		01/11/18 17:04	01/24/18 18:08	1
Heptachlor epoxide	0.0072	U	0.048	0.0072	ug/L		01/11/18 17:04	01/24/18 18:08	1
Methoxychlor	0.012	U	0.096	0.012	ug/L		01/11/18 17:04	01/24/18 18:08	1
Toxaphene	0.35	U	1.9	0.35	ug/L		01/11/18 17:04	01/24/18 18:08	1
gamma-Chlordane	0.0087	U	0.048	0.0087	ug/L		01/11/18 17:04	01/24/18 18:08	1
Heptachlor	0.0074	U	0.048	0.0074	ug/L		01/11/18 17:04	01/24/18 18:08	1
alpha-Chlordane	0.0051	U	0.048	0.0051	ug/L		01/11/18 17:04	01/24/18 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Decachlorobiphenyl	*95*		*34 - 122*	*01/11/18 17:04*	*01/24/18 18:08*	*1*
Tetrachloro-m-xylene	*81*		*28 - 115*	*01/11/18 17:04*	*01/24/18 18:08*	*1*

Client Sample ID: B3FYD4 **Lab Sample ID: 280-105343-8**
Date Collected: 01/08/18 13:25 **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0074	U	0.048	0.0074	ug/L		01/11/18 17:04	01/24/18 19:01	1
4,4'-DDE	0.0072	U	0.048	0.0072	ug/L		01/11/18 17:04	01/24/18 19:01	1
4,4'-DDT	0.014	U	0.048	0.014	ug/L		01/11/18 17:04	01/24/18 19:01	1
Aldrin	0.0057	U	0.048	0.0057	ug/L		01/11/18 17:04	01/24/18 19:01	1
alpha-BHC	0.0051	U	0.048	0.0051	ug/L		01/11/18 17:04	01/24/18 19:01	1
beta-BHC	0.0084	U	0.048	0.0084	ug/L		01/11/18 17:04	01/24/18 19:01	1
delta-BHC	0.0056	U	0.048	0.0056	ug/L		01/11/18 17:04	01/24/18 19:01	1
Dieldrin	0.0061	U	0.048	0.0061	ug/L		01/11/18 17:04	01/24/18 19:01	1
Endosulfan I	0.0056	U	0.048	0.0056	ug/L		01/11/18 17:04	01/24/18 19:01	1
Endosulfan II	0.0068	U	0.048	0.0068	ug/L		01/11/18 17:04	01/24/18 19:01	1
Endrin ketone	0.0068	U	0.048	0.0068	ug/L		01/11/18 17:04	01/24/18 19:01	1
Endosulfan sulfate	0.0055	U	0.048	0.0055	ug/L		01/11/18 17:04	01/24/18 19:01	1
Endrin	0.0076	U	0.048	0.0076	ug/L		01/11/18 17:04	01/24/18 19:01	1
Endrin aldehyde	0.0085	U	0.048	0.0085	ug/L		01/11/18 17:04	01/24/18 19:01	1
gamma-BHC (Lindane)	0.0067	U	0.048	0.0067	ug/L		01/11/18 17:04	01/24/18 19:01	1
Heptachlor epoxide	0.0072	U	0.048	0.0072	ug/L		01/11/18 17:04	01/24/18 19:01	1
Methoxychlor	0.013	U	0.096	0.013	ug/L		01/11/18 17:04	01/24/18 19:01	1
Toxaphene	0.35	U	1.9	0.35	ug/L		01/11/18 17:04	01/24/18 19:01	1
gamma-Chlordane	0.0088	U	0.048	0.0088	ug/L		01/11/18 17:04	01/24/18 19:01	1
Heptachlor	0.0074	U	0.048	0.0074	ug/L		01/11/18 17:04	01/24/18 19:01	1
alpha-Chlordane	0.0051	U	0.048	0.0051	ug/L		01/11/18 17:04	01/24/18 19:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Decachlorobiphenyl	*87*		*34 - 122*	*01/11/18 17:04*	*01/24/18 19:01*	*1*
Tetrachloro-m-xylene	*65*		*28 - 115*	*01/11/18 17:04*	*01/24/18 19:01*	*1*

Client Sample ID: B3FYD7 **Lab Sample ID: 280-105343-21**
Date Collected: 01/08/18 11:09 **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0073	U	0.047	0.0073	ug/L		01/11/18 17:04	01/24/18 19:18	1
4,4'-DDE	0.0071	U	0.047	0.0071	ug/L		01/11/18 17:04	01/24/18 19:18	1
4,4'-DDT	0.014	U	0.047	0.014	ug/L		01/11/18 17:04	01/24/18 19:18	1
Aldrin	0.0056	U	0.047	0.0056	ug/L		01/11/18 17:04	01/24/18 19:18	1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Client Sample ID: B3FYD7 — **Lab Sample ID: 280-105343-21**
Date Collected: 01/08/18 11:09 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	0.0050	U	0.047	0.0050	ug/L		01/11/18 17:04	01/24/18 19:18	1
beta-BHC	0.0082	U	0.047	0.0082	ug/L		01/11/18 17:04	01/24/18 19:18	1
delta-BHC	0.0055	U	0.047	0.0055	ug/L		01/11/18 17:04	01/24/18 19:18	1
Dieldrin	0.0060	U	0.047	0.0060	ug/L		01/11/18 17:04	01/24/18 19:18	1
Endosulfan I	0.0055	U	0.047	0.0055	ug/L		01/11/18 17:04	01/24/18 19:18	1
Endosulfan II	0.0066	U	0.047	0.0066	ug/L		01/11/18 17:04	01/24/18 19:18	1
Endrin ketone	0.0066	U	0.047	0.0066	ug/L		01/11/18 17:04	01/24/18 19:18	1
Endosulfan sulfate	0.0054	U	0.047	0.0054	ug/L		01/11/18 17:04	01/24/18 19:18	1
Endrin	0.0075	U	0.047	0.0075	ug/L		01/11/18 17:04	01/24/18 19:18	1
Endrin aldehyde	0.0083	U	0.047	0.0083	ug/L		01/11/18 17:04	01/24/18 19:18	1
gamma-BHC (Lindane)	0.0065	U	0.047	0.0065	ug/L		01/11/18 17:04	01/24/18 19:18	1
Heptachlor epoxide	0.0071	U	0.047	0.0071	ug/L		01/11/18 17:04	01/24/18 19:18	1
Methoxychlor	0.012	U	0.095	0.012	ug/L		01/11/18 17:04	01/24/18 19:18	1
Toxaphene	0.35	U	1.9	0.35	ug/L		01/11/18 17:04	01/24/18 19:18	1
gamma-Chlordane	0.0086	U	0.047	0.0086	ug/L		01/11/18 17:04	01/24/18 19:18	1
Heptachlor	0.0073	U	0.047	0.0073	ug/L		01/11/18 17:04	01/24/18 19:18	1
alpha-Chlordane	0.0050	U	0.047	0.0050	ug/L		01/11/18 17:04	01/24/18 19:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Decachlorobiphenyl	*98*		*34 - 122*	*01/11/18 17:04*	*01/24/18 19:18*	*1*
Tetrachloro-m-xylene	*70*		*28 - 115*	*01/11/18 17:04*	*01/24/18 19:18*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: B3FXD7 — **Lab Sample ID: 280-105343-1**
Date Collected: 01/08/18 12:06 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.12	U	0.96	0.12	ug/L		01/11/18 17:04	01/18/18 13:14	1
Aroclor 1221	0.20	U	0.96	0.20	ug/L		01/11/18 17:04	01/18/18 13:14	1
Aroclor 1232	0.16	U	0.96	0.16	ug/L		01/11/18 17:04	01/18/18 13:14	1
Aroclor 1242	0.099	U	0.96	0.099	ug/L		01/11/18 17:04	01/18/18 13:14	1
Aroclor 1248	0.087	U	0.96	0.087	ug/L		01/11/18 17:04	01/18/18 13:14	1
Aroclor 1254	0.11	U	0.96	0.11	ug/L		01/11/18 17:04	01/18/18 13:14	1
Aroclor 1260	0.15	U	0.96	0.15	ug/L		01/11/18 17:04	01/18/18 13:14	1
Aroclor 1262	0.081	U	0.96	0.081	ug/L		01/11/18 17:04	01/18/18 13:14	1
Aroclor 1268	0.35	U	0.96	0.35	ug/L		01/11/18 17:04	01/18/18 13:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Decachlorobiphenyl	*98*		*30 - 136*	*01/11/18 17:04*	*01/18/18 13:14*	*1*
Tetrachloro-m-xylene	*87*		*25 - 120*	*01/11/18 17:04*	*01/18/18 13:14*	*1*

Method: 8151A - Herbicides (GC)

Client Sample ID: B3FXD7 — **Lab Sample ID: 280-105343-1**
Date Collected: 01/08/18 12:06 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	0.18	U N	0.95	0.18	ug/L		01/12/18 13:30	01/19/18 03:20	1
2,4-D	0.20	U N	3.8	0.20	ug/L		01/12/18 13:30	01/19/18 03:20	1

Method: 8151A - Herbicides (GC) (Continued)

Client Sample ID: B3FXD7 — **Lab Sample ID: 280-105343-1**
Date Collected: 01/08/18 12:06 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-DB	0.34	U N	3.8	0.34	ug/L		01/12/18 13:30	01/19/18 03:20	1
Dalapon	0.87	U N	1.9	0.87	ug/L		01/12/18 13:30	01/19/18 03:20	1
Dicamba	0.14	U N	1.9	0.14	ug/L		01/12/18 13:30	01/19/18 03:20	1
Dichlorprop	0.62	U N	3.8	0.62	ug/L		01/12/18 13:30	01/19/18 03:20	1
Dinoseb	0.43	U N o	0.95	0.43	ug/L		01/12/18 13:30	01/19/18 03:20	1
MCPA	16	U N	380	16	ug/L		01/12/18 13:30	01/19/18 03:20	1
MCPP	31	U N	380	31	ug/L		01/12/18 13:30	01/19/18 03:20	1
Silvex (2,4,5-TP)	0.16	U N	0.95	0.16	ug/L		01/12/18 13:30	01/19/18 03:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*89*		*39 - 135*	*01/12/18 13:30*	*01/19/18 03:20*	*1*

Client Sample ID: B3FYD4 — **Lab Sample ID: 280-105343-8**
Date Collected: 01/08/18 13:25 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	0.18	U N	0.95	0.18	ug/L		01/12/18 13:30	01/19/18 04:44	1
2,4-D	0.20	U N	3.8	0.20	ug/L		01/12/18 13:30	01/19/18 04:44	1
2,4-DB	0.34	U N	3.8	0.34	ug/L		01/12/18 13:30	01/19/18 04:44	1
Dalapon	0.86	U N	1.9	0.86	ug/L		01/12/18 13:30	01/19/18 04:44	1
Dicamba	0.14	U N	1.9	0.14	ug/L		01/12/18 13:30	01/19/18 04:44	1
Dichlorprop	0.61	U N	3.8	0.61	ug/L		01/12/18 13:30	01/19/18 04:44	1
Dinoseb	0.43	U N o	0.95	0.43	ug/L		01/12/18 13:30	01/19/18 04:44	1
MCPA	16	U N	380	16	ug/L		01/12/18 13:30	01/19/18 04:44	1
MCPP	31	U N	380	31	ug/L		01/12/18 13:30	01/19/18 04:44	1
Silvex (2,4,5-TP)	0.16	U N	0.95	0.16	ug/L		01/12/18 13:30	01/19/18 04:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*87*		*39 - 135*	*01/12/18 13:30*	*01/19/18 04:44*	*1*

Client Sample ID: B3FYC6 — **Lab Sample ID: 280-105343-9**
Date Collected: 01/08/18 13:38 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	0.18	U N	0.95	0.18	ug/L		01/12/18 13:30	01/19/18 05:13	1
2,4-D	0.20	U N	3.8	0.20	ug/L		01/12/18 13:30	01/19/18 05:13	1
2,4-DB	0.34	U N	3.8	0.34	ug/L		01/12/18 13:30	01/19/18 05:13	1
Dalapon	0.86	U N	1.9	0.86	ug/L		01/12/18 13:30	01/19/18 05:13	1
Dicamba	0.14	U N	1.9	0.14	ug/L		01/12/18 13:30	01/19/18 05:13	1
Dichlorprop	0.62	U N	3.8	0.62	ug/L		01/12/18 13:30	01/19/18 05:13	1
Dinoseb	0.43	U N o	0.95	0.43	ug/L		01/12/18 13:30	01/19/18 05:13	1
MCPA	16	U N	380	16	ug/L		01/12/18 13:30	01/19/18 05:13	1
MCPP	31	U N	380	31	ug/L		01/12/18 13:30	01/19/18 05:13	1
Silvex (2,4,5-TP)	0.16	U N	0.95	0.16	ug/L		01/12/18 13:30	01/19/18 05:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*82*		*39 - 135*	*01/12/18 13:30*	*01/19/18 05:13*	*1*

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-001 / X18-005 / S18-001

TestAmerica Job ID: 280-105343-1
SDG: DN0303

Method: 8151A - Herbicides (GC)

Client Sample ID: B3FYC5 — **Lab Sample ID: 280-105343-14**
Date Collected: 01/08/18 13:38 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	0.18	U N	0.95	0.18	ug/L		01/12/18 13:30	01/19/18 05:42	1
2,4-D	0.20	U N	3.8	0.20	ug/L		01/12/18 13:30	01/19/18 05:42	1
2,4-DB	0.34	U N	3.8	0.34	ug/L		01/12/18 13:30	01/19/18 05:42	1
Dalapon	0.87	U N	1.9	0.87	ug/L		01/12/18 13:30	01/19/18 05:42	1
Dicamba	0.14	U N	1.9	0.14	ug/L		01/12/18 13:30	01/19/18 05:42	1
Dichlorprop	0.62	U N	3.8	0.62	ug/L		01/12/18 13:30	01/19/18 05:42	1
Dinoseb	0.43	U N o	0.95	0.43	ug/L		01/12/18 13:30	01/19/18 05:42	1
MCPA	16	U N	380	16	ug/L		01/12/18 13:30	01/19/18 05:42	1
MCPP	31	U N	380	31	ug/L		01/12/18 13:30	01/19/18 05:42	1
Silvex (2,4,5-TP)	0.16	U N	0.95	0.16	ug/L		01/12/18 13:30	01/19/18 05:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*80*		*39 - 135*	*01/12/18 13:30*	*01/19/18 05:42*	*1*

Method: 6010D - Metals (ICP)

Client Sample ID: B3FTL2 — **Lab Sample ID: 280-105343-3**
Date Collected: 01/08/18 13:38 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	28.2	B	100	4.4	ug/L		01/16/18 07:26	01/17/18 23:27	1
Calcium	75300		200	34.5	ug/L		01/16/18 07:26	01/17/18 23:27	1
Iron	23.9	B C	100	22.0	ug/L		01/16/18 07:26	01/17/18 23:27	1
Magnesium	18200		200	10.7	ug/L		01/16/18 07:26	01/17/18 23:27	1
Potassium	7770		3000	237	ug/L		01/16/18 07:26	01/18/18 19:45	1
Sodium	24200		1000	117	ug/L		01/16/18 07:26	01/17/18 23:27	1
Vanadium	12.7		10.0	1.1	ug/L		01/16/18 07:26	01/17/18 23:27	1

Client Sample ID: B3FTL1 — **Lab Sample ID: 280-105343-7**
Date Collected: 01/08/18 13:38 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	27.5	B	100	4.4	ug/L		01/16/18 07:26	01/17/18 23:30	1
Calcium	76100		200	34.5	ug/L		01/16/18 07:26	01/17/18 23:30	1
Iron	86.1	B C	100	22.0	ug/L		01/16/18 07:26	01/17/18 23:30	1
Magnesium	18200		200	10.7	ug/L		01/16/18 07:26	01/17/18 23:30	1
Potassium	7330		3000	237	ug/L		01/16/18 07:26	01/18/18 19:48	1
Sodium	23100		1000	117	ug/L		01/16/18 07:26	01/17/18 23:30	1
Vanadium	12.3		10.0	1.1	ug/L		01/16/18 07:26	01/17/18 23:30	1

Client Sample ID: B3FTK5 — **Lab Sample ID: 280-105343-10**
Date Collected: 01/08/18 12:06 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	17.5	B	100	4.4	ug/L		01/16/18 07:26	01/17/18 23:32	1
Calcium	36700		200	34.5	ug/L		01/16/18 07:26	01/17/18 23:32	1
Iron	122	C	100	22.0	ug/L		01/16/18 07:26	01/17/18 23:32	1
Magnesium	9940		200	10.7	ug/L		01/16/18 07:26	01/17/18 23:32	1
Potassium	5110		3000	237	ug/L		01/16/18 07:26	01/18/18 20:02	1
Sodium	16900		1000	117	ug/L		01/16/18 07:26	01/17/18 23:32	1

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-001 / X18-005 / S18-001

TestAmerica Job ID: 280-105343-1
SDG: DN0303

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

Client Sample ID: B3FTK5 — **Lab Sample ID: 280-105343-10**
Date Collected: 01/08/18 12:06 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	7.4	B	10.0	1.1	ug/L		01/16/18 07:26	01/17/18 23:32	1

Client Sample ID: B3FY72 — **Lab Sample ID: 280-105343-13**
Date Collected: 01/08/18 10:19 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	5.2	U	20.0	5.2	ug/L		01/19/18 15:02	01/19/18 22:19	1
Arsenic	8.1	B	15.0	4.4	ug/L		01/19/18 15:02	01/22/18 08:10	1
Barium	54.9		10.0	0.82	ug/L		01/16/18 07:26	01/17/18 23:47	1
Cadmium	0.63	B	5.0	0.45	ug/L		01/19/18 15:02	01/19/18 22:19	1
Calcium	55500		200	34.5	ug/L		01/16/18 07:26	01/17/18 23:47	1
Chromium	2.8	B	10.0	0.66	ug/L		01/16/18 07:26	01/18/18 20:05	1
Cobalt	1.2	U	10.0	1.2	ug/L		01/16/18 07:26	01/17/18 23:47	1
Copper	4.2	U	15.0	4.2	ug/L		01/16/18 07:26	01/17/18 23:47	1
Iron	22.0	U	100	22.0	ug/L		01/16/18 07:26	01/17/18 23:47	1
Magnesium	14300		200	10.7	ug/L		01/16/18 07:26	01/17/18 23:47	1
Manganese	0.26	U	10.0	0.26	ug/L		01/19/18 15:02	01/19/18 22:19	1
Nickel	2.6	U	40.0	2.6	ug/L		01/16/18 07:26	01/17/18 23:47	1
Potassium	7000		3000	237	ug/L		01/16/18 07:26	01/18/18 20:05	1
Silver	0.93	U	10.0	0.93	ug/L		01/16/18 07:26	01/17/18 23:47	1
Sodium	22200		1000	117	ug/L		01/16/18 07:26	01/17/18 23:47	1
Vanadium	15.0		10.0	1.1	ug/L		01/16/18 07:26	01/17/18 23:47	1
Zinc	4.5	U	20.0	4.5	ug/L		01/16/18 07:26	01/18/18 20:05	1

Client Sample ID: B3FR85 — **Lab Sample ID: 280-105343-15**
Date Collected: 01/08/18 11:09 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	20.3	B	100	4.4	ug/L		01/16/18 07:26	01/17/18 23:56	1
Calcium	45100		200	34.5	ug/L		01/16/18 07:26	01/17/18 23:56	1
Iron	22.0	U	100	22.0	ug/L		01/16/18 07:26	01/17/18 23:56	1
Magnesium	11300		200	10.7	ug/L		01/16/18 07:26	01/17/18 23:56	1
Potassium	5710		3000	237	ug/L		01/16/18 07:26	01/18/18 20:20	1
Sodium	17500		1000	117	ug/L		01/16/18 07:26	01/17/18 23:56	1
Vanadium	10.3		10.0	1.1	ug/L		01/16/18 07:26	01/17/18 23:56	1

Client Sample ID: B3FYD1 — **Lab Sample ID: 280-105343-18**
Date Collected: 01/08/18 12:11 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	27.2	B	100	4.4	ug/L		01/16/18 07:26	01/17/18 23:59	1
Calcium	61600		200	34.5	ug/L		01/16/18 07:26	01/17/18 23:59	1
Iron	22.0	U	100	22.0	ug/L		01/16/18 07:26	01/17/18 23:59	1
Magnesium	16900		200	10.7	ug/L		01/16/18 07:26	01/17/18 23:59	1
Potassium	6990		3000	237	ug/L		01/16/18 07:26	01/18/18 20:24	1
Sodium	22900		1000	117	ug/L		01/16/18 07:26	01/17/18 23:59	1
Vanadium	15.9		10.0	1.1	ug/L		01/16/18 07:26	01/17/18 23:59	1

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-001 / X18-005 / S18-001

TestAmerica Job ID: 280-105343-1
SDG: DN0303

Method: 6010D - Metals (ICP)

Client Sample ID: B3FY71 — **Lab Sample ID: 280-105343-19**
Date Collected: 01/08/18 10:50 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	5.2	U	20.0	5.2	ug/L		01/19/18 15:02	01/19/18 22:32	1
Arsenic	4.4	U	15.0	4.4	ug/L		01/19/18 15:02	01/22/18 08:23	1
Barium	88.1		10.0	0.82	ug/L		01/16/18 07:26	01/18/18 00:02	1
Cadmium	0.72	B	5.0	0.45	ug/L		01/19/18 15:02	01/19/18 22:32	1
Calcium	87700		200	34.5	ug/L		01/16/18 07:26	01/18/18 00:02	1
Chromium	2.8	B	10.0	0.66	ug/L		01/16/18 07:26	01/18/18 20:27	1
Cobalt	1.2	U	10.0	1.2	ug/L		01/16/18 07:26	01/18/18 00:02	1
Copper	4.2	U	15.0	4.2	ug/L		01/16/18 07:26	01/18/18 00:02	1
Iron	40.1	B C	100	22.0	ug/L		01/16/18 07:26	01/18/18 00:02	1
Magnesium	18000		200	10.7	ug/L		01/16/18 07:26	01/18/18 00:02	1
Manganese	0.72	B	10.0	0.26	ug/L		01/19/18 15:02	01/19/18 22:32	1
Nickel	2.6	U	40.0	2.6	ug/L		01/16/18 07:26	01/18/18 00:02	1
Potassium	8350		3000	237	ug/L		01/16/18 07:26	01/18/18 20:27	1
Silver	0.93	U	10.0	0.93	ug/L		01/16/18 07:26	01/18/18 00:02	1
Sodium	22000		1000	117	ug/L		01/16/18 07:26	01/18/18 00:02	1
Vanadium	9.8	B	10.0	1.1	ug/L		01/16/18 07:26	01/18/18 00:02	1
Zinc	4.5	U	20.0	4.5	ug/L		01/16/18 07:26	01/18/18 20:27	1

Method: 6010D - Metals (ICP) - Dissolved

Client Sample ID: B3FTM0 — **Lab Sample ID: 280-105343-2**
Date Collected: 01/08/18 13:38 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	27.2	B	100	4.4	ug/L		01/16/18 07:26	01/16/18 20:27	1
Calcium	68700		200	34.5	ug/L		01/16/18 07:26	01/16/18 20:27	1
Iron	22.0	U	100	22.0	ug/L		01/16/18 07:26	01/16/18 20:27	1
Magnesium	16900		200	10.7	ug/L		01/16/18 07:26	01/16/18 20:27	1
Potassium	7660		3000	237	ug/L		01/18/18 15:07	01/18/18 23:26	1
Sodium	24100		1000	117	ug/L		01/18/18 15:07	01/18/18 23:26	1
Vanadium	11.6		10.0	1.1	ug/L		01/16/18 07:26	01/16/18 20:27	1

Client Sample ID: B3FTL9 — **Lab Sample ID: 280-105343-6**
Date Collected: 01/08/18 13:38 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	27.5	B	100	4.4	ug/L		01/16/18 07:26	01/16/18 20:42	1
Calcium	71200		200	34.5	ug/L		01/16/18 07:26	01/16/18 20:42	1
Iron	22.0	U	100	22.0	ug/L		01/16/18 07:26	01/16/18 20:42	1
Magnesium	17400		200	10.7	ug/L		01/16/18 07:26	01/16/18 20:42	1
Potassium	7610		3000	237	ug/L		01/18/18 15:07	01/18/18 23:29	1
Sodium	24200		1000	117	ug/L		01/18/18 15:07	01/18/18 23:29	1
Vanadium	11.9		10.0	1.1	ug/L		01/16/18 07:26	01/16/18 20:42	1

Client Sample ID: B3FTK9 — **Lab Sample ID: 280-105343-11**
Date Collected: 01/08/18 12:06 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	16.9	B	100	4.4	ug/L		01/16/18 07:26	01/16/18 20:44	1
Calcium	33200		200	34.5	ug/L		01/16/18 07:26	01/16/18 20:44	1

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-001 / X18-005 / S18-001

TestAmerica Job ID: 280-105343-1
SDG: DN0303

Method: 6010D - Metals (ICP) - Dissolved (Continued)

Client Sample ID: B3FTK9 — **Lab Sample ID: 280-105343-11**
Date Collected: 01/08/18 12:06 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	22.0	U	100	22.0	ug/L		01/16/18 07:26	01/16/18 20:44	1
Magnesium	9200		200	10.7	ug/L		01/16/18 07:26	01/16/18 20:44	1
Potassium	5380		3000	237	ug/L		01/18/18 15:07	01/18/18 23:42	1
Sodium	17300		1000	117	ug/L		01/18/18 15:07	01/18/18 23:42	1
Vanadium	7.2	B	10.0	1.1	ug/L		01/16/18 07:26	01/16/18 20:44	1

Client Sample ID: B3FTK3 — **Lab Sample ID: 280-105343-12**
Date Collected: 01/08/18 10:19 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	5.2	U	20.0	5.2	ug/L		01/16/18 07:26	01/16/18 20:47	1
Arsenic	4.4	U	15.0	4.4	ug/L		01/16/18 07:26	01/16/18 20:47	1
Barium	49.2		10.0	0.82	ug/L		01/16/18 07:26	01/16/18 20:47	1
Cadmium	0.45	U	5.0	0.45	ug/L		01/16/18 07:26	01/16/18 20:47	1
Calcium	48800		200	34.5	ug/L		01/16/18 07:26	01/16/18 20:47	1
Chromium	2.8	B	10.0	0.66	ug/L		01/16/18 07:26	01/16/18 20:47	1
Cobalt	1.2	U	10.0	1.2	ug/L		01/16/18 07:26	01/16/18 20:47	1
Copper	4.2	U	15.0	4.2	ug/L		01/16/18 07:26	01/16/18 20:47	1
Iron	22.0	U	100	22.0	ug/L		01/16/18 07:26	01/16/18 20:47	1
Magnesium	12500		200	10.7	ug/L		01/16/18 07:26	01/16/18 20:47	1
Manganese	0.39	B C	10.0	0.26	ug/L		01/16/18 07:26	01/16/18 20:47	1
Nickel	2.6	U	40.0	2.6	ug/L		01/16/18 07:26	01/16/18 20:47	1
Potassium	6740		3000	237	ug/L		01/18/18 15:07	01/19/18 00:00	1
Silver	0.93	U	10.0	0.93	ug/L		01/16/18 07:26	01/16/18 20:47	1
Sodium	20300		1000	117	ug/L		01/18/18 15:07	01/19/18 00:00	1
Vanadium	13.3		10.0	1.1	ug/L		01/16/18 07:26	01/16/18 20:47	1
Zinc	4.5	U	20.0	4.5	ug/L		01/16/18 07:26	01/16/18 20:47	1

Client Sample ID: B3FR89 — **Lab Sample ID: 280-105343-16**
Date Collected: 01/08/18 11:09 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	19.4	B	100	4.4	ug/L		01/16/18 07:26	01/16/18 20:56	1
Calcium	42000		200	34.5	ug/L		01/16/18 07:26	01/16/18 20:56	1
Iron	22.0	U	100	22.0	ug/L		01/16/18 07:26	01/16/18 20:56	1
Magnesium	11000		200	10.7	ug/L		01/16/18 07:26	01/16/18 20:56	1
Potassium	5580		3000	237	ug/L		01/18/18 15:07	01/18/18 23:45	1
Sodium	18400		1000	117	ug/L		01/18/18 15:07	01/18/18 23:45	1
Vanadium	9.8	B	10.0	1.1	ug/L		01/16/18 07:26	01/16/18 20:56	1

Client Sample ID: B3FR72 — **Lab Sample ID: 280-105343-17**
Date Collected: 01/08/18 12:11 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	26.0	B	100	4.4	ug/L		01/16/18 07:26	01/16/18 20:59	1
Calcium	56100		200	34.5	ug/L		01/16/18 07:26	01/16/18 20:59	1
Iron	22.0	U	100	22.0	ug/L		01/16/18 07:26	01/16/18 20:59	1
Magnesium	15800		200	10.7	ug/L		01/16/18 07:26	01/16/18 20:59	1
Potassium	7290		3000	237	ug/L		01/18/18 15:07	01/18/18 23:47	1
Sodium	22900		1000	117	ug/L		01/18/18 15:07	01/18/18 23:47	1

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-001 / X18-005 / S18-001

TestAmerica Job ID: 280-105343-1
SDG: DN0303

Method: 6010D - Metals (ICP) - Dissolved (Continued)

Client Sample ID: B3FR72 — **Lab Sample ID: 280-105343-17**
Date Collected: 01/08/18 12:11 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	**15.0**		10.0	1.1	ug/L		01/16/18 07:26	01/16/18 20:59	1

Client Sample ID: B3FVD2 — **Lab Sample ID: 280-105343-20**
Date Collected: 01/08/18 10:50 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	5.2	U	20.0	5.2	ug/L		01/16/18 07:26	01/16/18 21:02	1
Arsenic	4.4	U	15.0	4.4	ug/L		01/16/18 07:26	01/16/18 21:02	1
Barium	**83.2**		10.0	0.82	ug/L		01/16/18 07:26	01/16/18 21:02	1
Cadmium	0.45	U	5.0	0.45	ug/L		01/16/18 07:26	01/16/18 21:02	1
Calcium	**81600**		200	34.5	ug/L		01/16/18 07:26	01/16/18 21:02	1
Chromium	**2.6**	**B**	10.0	0.66	ug/L		01/16/18 07:26	01/16/18 21:02	1
Cobalt	1.2	U	10.0	1.2	ug/L		01/16/18 07:26	01/16/18 21:02	1
Copper	4.2	U	15.0	4.2	ug/L		01/16/18 07:26	01/16/18 21:02	1
Iron	22.0	U	100	22.0	ug/L		01/16/18 07:26	01/16/18 21:02	1
Magnesium	**17200**		200	10.7	ug/L		01/16/18 07:26	01/16/18 21:02	1
Manganese	**0.77**	**B C**	10.0	0.26	ug/L		01/16/18 07:26	01/16/18 21:02	1
Nickel	2.6	U	40.0	2.6	ug/L		01/16/18 07:26	01/16/18 21:02	1
Potassium	**7740**		3000	237	ug/L		01/18/18 15:07	01/18/18 23:50	1
Silver	0.93	U	10.0	0.93	ug/L		01/16/18 07:26	01/16/18 21:02	1
Sodium	**21100**		1000	117	ug/L		01/18/18 15:07	01/18/18 23:50	1
Vanadium	**9.7**	**B**	10.0	1.1	ug/L		01/16/18 07:26	01/16/18 21:02	1
Zinc	4.5	U	20.0	4.5	ug/L		01/16/18 07:26	01/16/18 21:02	1

Method: 6020B - Metals (ICP/MS)

Client Sample ID: B3FTL2 — **Lab Sample ID: 280-105343-3**
Date Collected: 01/08/18 13:38 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9.2	U	50.0	9.2	ug/L		01/16/18 07:26	01/16/18 18:27	1
Antimony	**0.56**	**B**	2.0	0.40	ug/L		01/16/18 07:26	01/16/18 18:27	1
Arsenic	**2.5**	**B**	5.0	0.33	ug/L		01/16/18 07:26	01/16/18 18:27	1
Barium	**59.6**		1.0	0.29	ug/L		01/16/18 07:26	01/16/18 18:27	1
Beryllium	0.080	U	1.0	0.080	ug/L		01/16/18 07:26	01/16/18 18:27	1
Cadmium	0.27	U	1.0	0.27	ug/L		01/16/18 07:26	01/16/18 18:27	1
Chromium	**9.3**		2.0	0.50	ug/L		01/16/18 07:26	01/16/18 18:27	1
Cobalt	**0.16**	**B**	1.0	0.054	ug/L		01/16/18 07:26	01/16/18 18:27	1
Copper	0.56	U	2.0	0.56	ug/L		01/16/18 07:26	01/16/18 18:27	1
Lead	0.18	U	1.0	0.18	ug/L		01/16/18 07:26	01/16/18 18:27	1
Manganese	**1.2**		1.0	0.31	ug/L		01/16/18 07:26	01/16/18 18:27	1
Molybdenum	**6.2**		2.0	0.14	ug/L		01/16/18 07:26	01/16/18 18:27	1
Nickel	**0.51**	**B**	2.0	0.30	ug/L		01/16/18 07:26	01/16/18 18:27	1
Selenium	**3.3**	**B**	5.0	0.70	ug/L		01/16/18 07:26	01/16/18 18:27	1
Silver	0.033	U	5.0	0.033	ug/L		01/16/18 07:26	01/16/18 18:27	1
Strontium	**325**		10.0	0.30	ug/L		01/16/18 07:26	01/16/18 18:27	1
Thallium	0.050	U	1.0	0.050	ug/L		01/16/18 07:26	01/16/18 18:27	1
Thorium	1.2	U	5.0	1.2	ug/L		01/16/18 07:26	01/17/18 20:18	1
Tin	0.77	U	10.0	0.77	ug/L		01/16/18 07:26	01/16/18 18:27	1
Uranium	**6.8**		1.0	0.050	ug/L		01/16/18 07:26	01/16/18 18:27	1

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-001 / X18-005 / S18-001

TestAmerica Job ID: 280-105343-1
SDG: DN0303

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

Client Sample ID: B3FTL2 — **Lab Sample ID: 280-105343-3**
Date Collected: 01/08/18 13:38 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	8.3	B C	10.0	2.0	ug/L		01/16/18 07:26	01/16/18 18:27	1

Client Sample ID: B3FTL1 — **Lab Sample ID: 280-105343-7**
Date Collected: 01/08/18 13:38 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	10.3	B	50.0	9.2	ug/L		01/16/18 07:26	01/16/18 18:30	1
Antimony	0.40	U	2.0	0.40	ug/L		01/16/18 07:26	01/16/18 18:30	1
Arsenic	2.6	B	5.0	0.33	ug/L		01/16/18 07:26	01/16/18 18:30	1
Barium	57.9		1.0	0.29	ug/L		01/16/18 07:26	01/16/18 18:30	1
Beryllium	0.080	U	1.0	0.080	ug/L		01/16/18 07:26	01/16/18 18:30	1
Cadmium	0.27	U	1.0	0.27	ug/L		01/16/18 07:26	01/16/18 18:30	1
Chromium	8.7		2.0	0.50	ug/L		01/16/18 07:26	01/16/18 18:30	1
Cobalt	0.20	B	1.0	0.054	ug/L		01/16/18 07:26	01/16/18 18:30	1
Copper	0.56	U	2.0	0.56	ug/L		01/16/18 07:26	01/16/18 18:30	1
Lead	0.18	U	1.0	0.18	ug/L		01/16/18 07:26	01/16/18 18:30	1
Manganese	1.9		1.0	0.31	ug/L		01/16/18 07:26	01/16/18 18:30	1
Molybdenum	6.2		2.0	0.14	ug/L		01/16/18 07:26	01/16/18 18:30	1
Nickel	0.40	B	2.0	0.30	ug/L		01/16/18 07:26	01/16/18 18:30	1
Selenium	3.4	B	5.0	0.70	ug/L		01/16/18 07:26	01/16/18 18:30	1
Silver	0.033	U	5.0	0.033	ug/L		01/16/18 07:26	01/16/18 18:30	1
Strontium	317		10.0	0.30	ug/L		01/16/18 07:26	01/16/18 18:30	1
Thallium	0.050	U	1.0	0.050	ug/L		01/16/18 07:26	01/16/18 18:30	1
Thorium	1.2	U	5.0	1.2	ug/L		01/16/18 07:26	01/17/18 20:21	1
Tin	0.77	U	10.0	0.77	ug/L		01/16/18 07:26	01/16/18 18:30	1
Uranium	6.6		1.0	0.050	ug/L		01/16/18 07:26	01/16/18 18:30	1
Zinc	7.5	B C	10.0	2.0	ug/L		01/16/18 07:26	01/16/18 18:30	1

Client Sample ID: B3FTK5 — **Lab Sample ID: 280-105343-10**
Date Collected: 01/08/18 12:06 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9.2	B	50.0	9.2	ug/L		01/16/18 07:26	01/16/18 18:34	1
Antimony	0.40	U	2.0	0.40	ug/L		01/16/18 07:26	01/16/18 18:34	1
Arsenic	2.1	B	5.0	0.33	ug/L		01/16/18 07:26	01/16/18 18:34	1
Barium	34.9		1.0	0.29	ug/L		01/16/18 07:26	01/16/18 18:34	1
Beryllium	0.080	U	1.0	0.080	ug/L		01/16/18 07:26	01/16/18 18:34	1
Cadmium	0.27	U	1.0	0.27	ug/L		01/16/18 07:26	01/16/18 18:34	1
Chromium	3.5		2.0	0.50	ug/L		01/16/18 07:26	01/16/18 18:34	1
Cobalt	0.054	U	1.0	0.054	ug/L		01/16/18 07:26	01/16/18 18:34	1
Copper	0.56	U	2.0	0.56	ug/L		01/16/18 07:26	01/16/18 18:34	1
Lead	0.18	U	1.0	0.18	ug/L		01/16/18 07:26	01/16/18 18:34	1
Manganese	0.91	B	1.0	0.31	ug/L		01/16/18 07:26	01/16/18 18:34	1
Molybdenum	8.7		2.0	0.14	ug/L		01/16/18 07:26	01/16/18 18:34	1
Nickel	0.49	B	2.0	0.30	ug/L		01/16/18 07:26	01/16/18 18:34	1
Selenium	1.2	B	5.0	0.70	ug/L		01/16/18 07:26	01/16/18 18:34	1
Silver	0.042	B	5.0	0.033	ug/L		01/16/18 07:26	01/16/18 18:34	1
Strontium	198		10.0	0.30	ug/L		01/16/18 07:26	01/16/18 18:34	1
Thallium	0.050	U	1.0	0.050	ug/L		01/16/18 07:26	01/16/18 18:34	1
Thorium	1.2	U	5.0	1.2	ug/L		01/16/18 07:26	01/17/18 20:25	1

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-001 / X18-005 / S18-001

TestAmerica Job ID: 280-105343-1
SDG: DN0303

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

Client Sample ID: B3FTK5 — **Lab Sample ID: 280-105343-10**
Date Collected: 01/08/18 12:06 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tin	0.77	U	10.0	0.77	ug/L		01/16/18 07:26	01/16/18 18:34	1
Uranium	**3.4**		1.0	0.050	ug/L		01/16/18 07:26	01/16/18 18:34	1
Zinc	**7.7**	**B C**	10.0	2.0	ug/L		01/16/18 07:26	01/16/18 18:34	1

Client Sample ID: B3FR85 — **Lab Sample ID: 280-105343-15**
Date Collected: 01/08/18 11:09 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9.2	U	50.0	9.2	ug/L		01/16/18 07:26	01/16/18 18:46	1
Antimony	**0.70**	**B**	2.0	0.40	ug/L		01/16/18 07:26	01/16/18 18:46	1
Arsenic	**2.5**	**B**	5.0	0.33	ug/L		01/16/18 07:26	01/16/18 18:46	1
Barium	**46.8**		1.0	0.29	ug/L		01/16/18 07:26	01/16/18 18:46	1
Beryllium	0.080	U	1.0	0.080	ug/L		01/16/18 07:26	01/16/18 18:46	1
Cadmium	0.27	U	1.0	0.27	ug/L		01/16/18 07:26	01/16/18 18:46	1
Chromium	**4.5**		2.0	0.50	ug/L		01/16/18 07:26	01/16/18 18:46	1
Cobalt	0.054	U	1.0	0.054	ug/L		01/16/18 07:26	01/16/18 18:46	1
Copper	0.56	U	2.0	0.56	ug/L		01/16/18 07:26	01/16/18 18:46	1
Lead	0.18	U	1.0	0.18	ug/L		01/16/18 07:26	01/16/18 18:46	1
Manganese	**1.5**		1.0	0.31	ug/L		01/16/18 07:26	01/16/18 18:46	1
Molybdenum	**6.4**		2.0	0.14	ug/L		01/16/18 07:26	01/16/18 18:46	1
Nickel	0.30	U	2.0	0.30	ug/L		01/16/18 07:26	01/16/18 18:46	1
Selenium	**2.8**	**B**	5.0	0.70	ug/L		01/16/18 07:26	01/16/18 18:46	1
Silver	0.033	U	5.0	0.033	ug/L		01/16/18 07:26	01/16/18 18:46	1
Strontium	**224**		10.0	0.30	ug/L		01/16/18 07:26	01/16/18 18:46	1
Thallium	0.050	U	1.0	0.050	ug/L		01/16/18 07:26	01/16/18 18:46	1
Thorium	1.2	U	5.0	1.2	ug/L		01/16/18 07:26	01/17/18 20:35	1
Tin	0.77	U	10.0	0.77	ug/L		01/16/18 07:26	01/16/18 18:46	1
Uranium	**3.0**		1.0	0.050	ug/L		01/16/18 07:26	01/16/18 18:46	1
Zinc	2.0	U	10.0	2.0	ug/L		01/16/18 07:26	01/16/18 18:46	1

Client Sample ID: B3FYD1 — **Lab Sample ID: 280-105343-18**
Date Collected: 01/08/18 12:11 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9.2	U	50.0	9.2	ug/L		01/16/18 07:26	01/16/18 18:50	1
Antimony	0.40	U	2.0	0.40	ug/L		01/16/18 07:26	01/16/18 18:50	1
Arsenic	**2.8**	**B**	5.0	0.33	ug/L		01/16/18 07:26	01/16/18 18:50	1
Barium	**44.6**		1.0	0.29	ug/L		01/16/18 07:26	01/16/18 18:50	1
Beryllium	0.080	U	1.0	0.080	ug/L		01/16/18 07:26	01/16/18 18:50	1
Cadmium	0.27	U	1.0	0.27	ug/L		01/16/18 07:26	01/16/18 18:50	1
Chromium	**8.1**		2.0	0.50	ug/L		01/16/18 07:26	01/16/18 18:50	1
Cobalt	0.054	U	1.0	0.054	ug/L		01/16/18 07:26	01/16/18 18:50	1
Copper	0.56	U	2.0	0.56	ug/L		01/16/18 07:26	01/16/18 18:50	1
Lead	0.18	U	1.0	0.18	ug/L		01/16/18 07:26	01/16/18 18:50	1
Manganese	**0.32**	**B**	1.0	0.31	ug/L		01/16/18 07:26	01/16/18 18:50	1
Molybdenum	**5.8**		2.0	0.14	ug/L		01/16/18 07:26	01/16/18 18:50	1
Nickel	**0.36**	**B**	2.0	0.30	ug/L		01/16/18 07:26	01/16/18 18:50	1
Selenium	**2.9**	**B**	5.0	0.70	ug/L		01/16/18 07:26	01/16/18 18:50	1
Silver	0.033	U	5.0	0.033	ug/L		01/16/18 07:26	01/16/18 18:50	1
Strontium	**268**		10.0	0.30	ug/L		01/16/18 07:26	01/16/18 18:50	1

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-001 / X18-005 / S18-001

TestAmerica Job ID: 280-105343-1
SDG: DN0303

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

Client Sample ID: B3FYD1 — **Lab Sample ID: 280-105343-18**
Date Collected: 01/08/18 12:11 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.050	U	1.0	0.050	ug/L		01/16/18 07:26	01/16/18 18:50	1
Thorium	1.2	U	5.0	1.2	ug/L		01/16/18 07:26	01/17/18 20:39	1
Tin	0.77	U	10.0	0.77	ug/L		01/16/18 07:26	01/16/18 18:50	1
Uranium	**5.5**		1.0	0.050	ug/L		01/16/18 07:26	01/16/18 18:50	1
Zinc	**2.7**	**B C**	10.0	2.0	ug/L		01/16/18 07:26	01/16/18 18:50	1

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

Client Sample ID: B3FTM0 — **Lab Sample ID: 280-105343-2**
Date Collected: 01/08/18 13:38 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9.2	U	50.0	9.2	ug/L		01/16/18 07:26	01/16/18 17:02	1
Antimony	**0.65**	**B**	2.0	0.40	ug/L		01/16/18 07:26	01/16/18 17:02	1
Arsenic	**2.3**	**B**	5.0	0.33	ug/L		01/16/18 07:26	01/16/18 17:02	1
Barium	**57.4**		1.0	0.29	ug/L		01/16/18 07:26	01/16/18 17:02	1
Beryllium	0.080	U	1.0	0.080	ug/L		01/16/18 07:26	01/16/18 17:02	1
Cadmium	0.27	U	1.0	0.27	ug/L		01/16/18 07:26	01/16/18 17:02	1
Chromium	**9.5**		2.0	0.50	ug/L		01/16/18 07:26	01/16/18 17:02	1
Cobalt	**0.22**	**B**	1.0	0.054	ug/L		01/16/18 07:26	01/16/18 17:02	1
Copper	0.56	U	2.0	0.56	ug/L		01/16/18 07:26	01/16/18 17:02	1
Lead	0.18	U	1.0	0.18	ug/L		01/16/18 07:26	01/16/18 17:02	1
Manganese	**0.63**	**B**	1.0	0.31	ug/L		01/16/18 07:26	01/16/18 17:02	1
Molybdenum	**6.2**		2.0	0.14	ug/L		01/16/18 07:26	01/16/18 17:02	1
Nickel	**0.44**	**B**	2.0	0.30	ug/L		01/16/18 07:26	01/16/18 17:02	1
Selenium	**3.1**	**B**	5.0	0.70	ug/L		01/16/18 07:26	01/16/18 17:02	1
Silver	0.033	U	5.0	0.033	ug/L		01/16/18 07:26	01/16/18 17:02	1
Strontium	**321**		10.0	0.30	ug/L		01/16/18 07:26	01/16/18 17:02	1
Thallium	0.050	U	1.0	0.050	ug/L		01/16/18 07:26	01/16/18 17:02	1
Thorium	1.2	U	5.0	1.2	ug/L		01/16/18 07:26	01/17/18 19:00	1
Tin	0.77	U	10.0	0.77	ug/L		01/16/18 07:26	01/16/18 17:02	1
Uranium	**6.7**		1.0	0.050	ug/L		01/16/18 07:26	01/16/18 17:02	1
Zinc	**6.9**	**B**	10.0	2.0	ug/L		01/16/18 07:26	01/16/18 17:02	1

Client Sample ID: B3FTL9 — **Lab Sample ID: 280-105343-6**
Date Collected: 01/08/18 13:38 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9.2	U	50.0	9.2	ug/L		01/16/18 07:26	01/16/18 17:06	1
Antimony	**0.48**	**B**	2.0	0.40	ug/L		01/16/18 07:26	01/16/18 17:06	1
Arsenic	**2.3**	**B**	5.0	0.33	ug/L		01/16/18 07:26	01/16/18 17:06	1
Barium	**57.5**		1.0	0.29	ug/L		01/16/18 07:26	01/16/18 17:06	1
Beryllium	0.080	U	1.0	0.080	ug/L		01/16/18 07:26	01/16/18 17:06	1
Cadmium	0.27	U	1.0	0.27	ug/L		01/16/18 07:26	01/16/18 17:06	1
Chromium	**9.0**		2.0	0.50	ug/L		01/16/18 07:26	01/16/18 17:06	1
Cobalt	**0.24**	**B**	1.0	0.054	ug/L		01/16/18 07:26	01/16/18 17:06	1
Copper	0.56	U	2.0	0.56	ug/L		01/16/18 07:26	01/16/18 17:06	1
Lead	0.18	U	1.0	0.18	ug/L		01/16/18 07:26	01/16/18 17:06	1
Manganese	**1.1**		1.0	0.31	ug/L		01/16/18 07:26	01/16/18 17:06	1
Molybdenum	**6.0**		2.0	0.14	ug/L		01/16/18 07:26	01/16/18 17:06	1

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-001 / X18-005 / S18-001

TestAmerica Job ID: 280-105343-1
SDG: DN0303

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

Client Sample ID: B3FTL9 — **Lab Sample ID: 280-105343-6**
Date Collected: 01/08/18 13:38 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**0.37**	**B**	2.0	0.30	ug/L		01/16/18 07:26	01/16/18 17:06	1
Selenium	**3.3**	**B**	5.0	0.70	ug/L		01/16/18 07:26	01/16/18 17:06	1
Silver	0.033	U	5.0	0.033	ug/L		01/16/18 07:26	01/16/18 17:06	1
Strontium	**311**		10.0	0.30	ug/L		01/16/18 07:26	01/16/18 17:06	1
Thallium	0.050	U	1.0	0.050	ug/L		01/16/18 07:26	01/16/18 17:06	1
Thorium	1.2	U	5.0	1.2	ug/L		01/16/18 07:26	01/17/18 19:03	1
Tin	0.77	U	10.0	0.77	ug/L		01/16/18 07:26	01/16/18 17:06	1
Uranium	**6.6**		1.0	0.050	ug/L		01/16/18 07:26	01/16/18 17:06	1
Zinc	**7.0**	**B**	10.0	2.0	ug/L		01/16/18 07:26	01/16/18 17:06	1

Client Sample ID: B3FTK9 — **Lab Sample ID: 280-105343-11**
Date Collected: 01/08/18 12:06 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9.2	U	50.0	9.2	ug/L		01/16/18 07:26	01/16/18 17:10	1
Antimony	0.40	U	2.0	0.40	ug/L		01/16/18 07:26	01/16/18 17:10	1
Arsenic	**2.3**	**B**	5.0	0.33	ug/L		01/16/18 07:26	01/16/18 17:10	1
Barium	**37.8**		1.0	0.29	ug/L		01/16/18 07:26	01/16/18 17:10	1
Beryllium	0.080	U	1.0	0.080	ug/L		01/16/18 07:26	01/16/18 17:10	1
Cadmium	0.27	U	1.0	0.27	ug/L		01/16/18 07:26	01/16/18 17:10	1
Chromium	**3.3**		2.0	0.50	ug/L		01/16/18 07:26	01/16/18 17:10	1
Cobalt	**0.080**	**B**	1.0	0.054	ug/L		01/16/18 07:26	01/16/18 17:10	1
Copper	0.56	U	2.0	0.56	ug/L		01/16/18 07:26	01/16/18 17:10	1
Lead	0.18	U	1.0	0.18	ug/L		01/16/18 07:26	01/16/18 17:10	1
Manganese	**0.31**	**B**	1.0	0.31	ug/L		01/16/18 07:26	01/16/18 17:10	1
Molybdenum	**9.1**		2.0	0.14	ug/L		01/16/18 07:26	01/16/18 17:10	1
Nickel	**0.42**	**B**	2.0	0.30	ug/L		01/16/18 07:26	01/16/18 17:10	1
Selenium	**1.3**	**B**	5.0	0.70	ug/L		01/16/18 07:26	01/16/18 17:10	1
Silver	**0.043**	**B**	5.0	0.033	ug/L		01/16/18 07:26	01/16/18 17:10	1
Strontium	**211**		10.0	0.30	ug/L		01/16/18 07:26	01/16/18 17:10	1
Thallium	0.050	U	1.0	0.050	ug/L		01/16/18 07:26	01/16/18 17:10	1
Thorium	1.2	U	5.0	1.2	ug/L		01/16/18 07:26	01/17/18 19:07	1
Tin	0.77	U	10.0	0.77	ug/L		01/16/18 07:26	01/16/18 17:10	1
Uranium	**3.6**		1.0	0.050	ug/L		01/16/18 07:26	01/16/18 17:10	1
Zinc	2.0	U	10.0	2.0	ug/L		01/16/18 07:26	01/16/18 17:10	1

Client Sample ID: B3FR89 — **Lab Sample ID: 280-105343-16**
Date Collected: 01/08/18 11:09 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9.2	U	50.0	9.2	ug/L		01/16/18 07:26	01/16/18 17:21	1
Antimony	**0.84**	**B**	2.0	0.40	ug/L		01/16/18 07:26	01/16/18 17:21	1
Arsenic	**2.5**	**B**	5.0	0.33	ug/L		01/16/18 07:26	01/16/18 17:21	1
Barium	**47.8**		1.0	0.29	ug/L		01/16/18 07:26	01/16/18 17:21	1
Beryllium	0.080	U	1.0	0.080	ug/L		01/16/18 07:26	01/16/18 17:21	1
Cadmium	0.27	U	1.0	0.27	ug/L		01/16/18 07:26	01/16/18 17:21	1
Chromium	**4.7**		2.0	0.50	ug/L		01/16/18 07:26	01/16/18 17:21	1
Cobalt	**0.097**	**B**	1.0	0.054	ug/L		01/16/18 07:26	01/16/18 17:21	1
Copper	0.56	U	2.0	0.56	ug/L		01/16/18 07:26	01/16/18 17:21	1
Lead	0.18	U	1.0	0.18	ug/L		01/16/18 07:26	01/16/18 17:21	1

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-001 / X18-005 / S18-001

TestAmerica Job ID: 280-105343-1
SDG: DN0303

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

Client Sample ID: B3FR89 — **Lab Sample ID: 280-105343-16**
Date Collected: 01/08/18 11:09 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	1.9		1.0	0.31	ug/L		01/16/18 07:26	01/16/18 17:21	1
Molybdenum	6.7		2.0	0.14	ug/L		01/16/18 07:26	01/16/18 17:21	1
Nickel	0.40	B	2.0	0.30	ug/L		01/16/18 07:26	01/16/18 17:21	1
Selenium	3.1	B	5.0	0.70	ug/L		01/16/18 07:26	01/16/18 17:21	1
Silver	0.033	U	5.0	0.033	ug/L		01/16/18 07:26	01/16/18 17:21	1
Strontium	222		10.0	0.30	ug/L		01/16/18 07:26	01/16/18 17:21	1
Thallium	0.050	U	1.0	0.050	ug/L		01/16/18 07:26	01/16/18 17:21	1
Thorium	1.2	U	5.0	1.2	ug/L		01/16/18 07:26	01/17/18 19:17	1
Tin	0.77	U	10.0	0.77	ug/L		01/16/18 07:26	01/16/18 17:21	1
Uranium	3.1		1.0	0.050	ug/L		01/16/18 07:26	01/16/18 17:21	1
Zinc	2.0	U	10.0	2.0	ug/L		01/16/18 07:26	01/16/18 17:21	1

Client Sample ID: B3FR72 — **Lab Sample ID: 280-105343-17**
Date Collected: 01/08/18 12:11 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9.2	U	50.0	9.2	ug/L		01/16/18 07:26	01/16/18 17:25	1
Antimony	0.59	B	2.0	0.40	ug/L		01/16/18 07:26	01/16/18 17:25	1
Arsenic	3.1	B	5.0	0.33	ug/L		01/16/18 07:26	01/16/18 17:25	1
Barium	43.8		1.0	0.29	ug/L		01/16/18 07:26	01/16/18 17:25	1
Beryllium	0.080	U	1.0	0.080	ug/L		01/16/18 07:26	01/16/18 17:25	1
Cadmium	0.27	U	1.0	0.27	ug/L		01/16/18 07:26	01/16/18 17:25	1
Chromium	8.1		2.0	0.50	ug/L		01/16/18 07:26	01/16/18 17:25	1
Cobalt	0.054	U	1.0	0.054	ug/L		01/16/18 07:26	01/16/18 17:25	1
Copper	0.56	U	2.0	0.56	ug/L		01/16/18 07:26	01/16/18 17:25	1
Lead	0.18	U	1.0	0.18	ug/L		01/16/18 07:26	01/16/18 17:25	1
Manganese	0.31	U	1.0	0.31	ug/L		01/16/18 07:26	01/16/18 17:25	1
Molybdenum	6.3		2.0	0.14	ug/L		01/16/18 07:26	01/16/18 17:25	1
Nickel	0.34	B	2.0	0.30	ug/L		01/16/18 07:26	01/16/18 17:25	1
Selenium	2.7	B	5.0	0.70	ug/L		01/16/18 07:26	01/16/18 17:25	1
Silver	0.033	U	5.0	0.033	ug/L		01/16/18 07:26	01/16/18 17:25	1
Strontium	262		10.0	0.30	ug/L		01/16/18 07:26	01/16/18 17:25	1
Thallium	0.050	U	1.0	0.050	ug/L		01/16/18 07:26	01/16/18 17:25	1
Thorium	1.2	U	5.0	1.2	ug/L		01/16/18 07:26	01/17/18 19:21	1
Tin	0.77	U	10.0	0.77	ug/L		01/16/18 07:26	01/16/18 17:25	1
Uranium	5.4		1.0	0.050	ug/L		01/16/18 07:26	01/16/18 17:25	1
Zinc	2.5	B	10.0	2.0	ug/L		01/16/18 07:26	01/16/18 17:25	1

Method: 7470A - Mercury (CVAA)

Client Sample ID: B3FTL2 — **Lab Sample ID: 280-105343-3**
Date Collected: 01/08/18 13:38 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027	U	0.20	0.027	ug/L		01/16/18 12:06	01/16/18 17:20	1

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-001 / X18-005 / S18-001

TestAmerica Job ID: 280-105343-1
SDG: DN0303

Method: 7470A - Mercury (CVAA)

Client Sample ID: B3FTL1 — **Lab Sample ID: 280-105343-7**
Date Collected: 01/08/18 13:38 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027	U	0.20	0.027	ug/L		01/16/18 12:06	01/16/18 17:27	1

Client Sample ID: B3FTK5 — **Lab Sample ID: 280-105343-10**
Date Collected: 01/08/18 12:06 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027	U	0.20	0.027	ug/L		01/16/18 12:06	01/16/18 17:29	1

Client Sample ID: B3FR85 — **Lab Sample ID: 280-105343-15**
Date Collected: 01/08/18 11:09 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027	U	0.20	0.027	ug/L		01/16/18 12:06	01/16/18 17:36	1

Client Sample ID: B3FYD1 — **Lab Sample ID: 280-105343-18**
Date Collected: 01/08/18 12:11 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027	U	0.20	0.027	ug/L		01/16/18 12:06	01/16/18 17:38	1

Method: 7470A - Mercury (CVAA) - Dissolved

Client Sample ID: B3FTM0 — **Lab Sample ID: 280-105343-2**
Date Collected: 01/08/18 13:38 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027	U	0.20	0.027	ug/L		01/16/18 12:06	01/16/18 17:00	1

Client Sample ID: B3FTL9 — **Lab Sample ID: 280-105343-6**
Date Collected: 01/08/18 13:38 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027	U	0.20	0.027	ug/L		01/16/18 12:06	01/16/18 17:02	1

Client Sample ID: B3FTK9 — **Lab Sample ID: 280-105343-11**
Date Collected: 01/08/18 12:06 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027	U	0.20	0.027	ug/L		01/16/18 12:06	01/16/18 17:04	1

Client Sample ID: B3FR89 — **Lab Sample ID: 280-105343-16**
Date Collected: 01/08/18 11:09 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027	U	0.20	0.027	ug/L		01/16/18 12:06	01/16/18 17:11	1

Client Sample ID: B3FR72 — **Lab Sample ID: 280-105343-17**
Date Collected: 01/08/18 12:11 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027	U	0.20	0.027	ug/L		01/16/18 12:06	01/16/18 17:13	1

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-001 / X18-005 / S18-001

TestAmerica Job ID: 280-105343-1
SDG: DN0303

General Chemistry

Client Sample ID: B3FY58 — **Lab Sample ID: 280-105343-5**
Date Collected: 01/08/18 10:12 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	**242000**		5000	1070	ug/L			01/11/18 20:09	1
Bicarbonate Alkalinity as CaCO3	**242000**		5000	1070	ug/L			01/11/18 20:09	1
Carbonate Alkalinity as CaCO3	1070	U	5000	1070	ug/L			01/11/18 20:09	1
Hydroxide Alkalinity as CaCO3	1070	U	5000	1070	ug/L			01/11/18 20:09	1

Client Sample ID: B3FY72 — **Lab Sample ID: 280-105343-13**
Date Collected: 01/08/18 10:19 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	**155000**		5000	1070	ug/L			01/11/18 20:02	1
Bicarbonate Alkalinity as CaCO3	**155000**		5000	1070	ug/L			01/11/18 20:02	1
Carbonate Alkalinity as CaCO3	1070	U	5000	1070	ug/L			01/11/18 20:02	1
Hydroxide Alkalinity as CaCO3	1070	U	5000	1070	ug/L			01/11/18 20:02	1

Client Sample ID: B3FYH8 — **Lab Sample ID: 280-105343-22**
Date Collected: 01/04/18 09:46 — **Matrix: Water**
Date Received: 01/10/18 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	**110000**		5000	1070	ug/L			01/11/18 19:49	1
Bicarbonate Alkalinity as CaCO3	**110000**		5000	1070	ug/L			01/11/18 19:49	1
Carbonate Alkalinity as CaCO3	1070	U	5000	1070	ug/L			01/11/18 19:49	1
Hydroxide Alkalinity as CaCO3	1070	U	5000	1070	ug/L			01/11/18 19:49	1

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-001 / X18-005 / S18-001

TestAmerica Job ID: 280-105343-1
SDG: DN0303

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 280-401712/6
Matrix: Water
Analysis Batch: 401712

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			01/15/18 21:26	1
1,1,2-Trichloroethane	0.27	U	1.0	0.27	ug/L			01/15/18 21:26	1
1,1-Dichloroethane	0.22	U	1.0	0.22	ug/L			01/15/18 21:26	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			01/15/18 21:26	1
1,2-Dichloroethane	0.13	U	1.0	0.13	ug/L			01/15/18 21:26	1
2-Butanone (MEK)	2.0	U	6.0	2.0	ug/L			01/15/18 21:26	1
4-Methyl-2-pentanone (MIBK)	0.98	U	5.0	0.98	ug/L			01/15/18 21:26	1
Acetone	1.9	U	10	1.9	ug/L			01/15/18 21:26	1
Benzene	0.16	U	1.0	0.16	ug/L			01/15/18 21:26	1
Carbon disulfide	0.45	U	2.0	0.45	ug/L			01/15/18 21:26	1
Carbon tetrachloride	0.19	U	1.0	0.19	ug/L			01/15/18 21:26	1
Chlorobenzene	0.17	U	1.0	0.17	ug/L			01/15/18 21:26	1
Chloroform	0.16	U	1.0	0.16	ug/L			01/15/18 21:26	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			01/15/18 21:26	1
Methylene Chloride	0.32	U	2.0	0.32	ug/L			01/15/18 21:26	1
Tetrachloroethene	0.20	U	1.0	0.20	ug/L			01/15/18 21:26	1
Toluene	0.17	U	1.0	0.17	ug/L			01/15/18 21:26	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			01/15/18 21:26	1
Vinyl chloride	0.10	U	1.0	0.10	ug/L			01/15/18 21:26	1
Xylenes, Total	0.19	U	2.0	0.19	ug/L			01/15/18 21:26	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*22.7*	*N*	*ug/L*		*10.22*			*01/15/18 21:26*	*1*
Unknown	*5.38*	*N*	*ug/L*		*11.69*			*01/15/18 21:26*	*1*
Acetic acid, 2-ethylhexyl ester	*19.9*	*N J*	*ug/L*		*12.21*	*103-09-3*		*01/15/18 21:26*	*1*
Unknown	*12.3*	*N*	*ug/L*		*13.11*			*01/15/18 21:26*	*1*
Unknown	*5.46*	*N*	*ug/L*		*13.16*			*01/15/18 21:26*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*		*01/15/18 21:26*	*1*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*		*01/15/18 21:26*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*01/15/18 21:26*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*01/15/18 21:26*	*1*

Lab Sample ID: LCS 280-401712/4
Matrix: Water
Analysis Batch: 401712

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	5.00	5.48		ug/L		110	70 - 130
1,1,2-Trichloroethane	5.00	5.36		ug/L		107	70 - 130
1,1-Dichloroethane	5.00	5.55		ug/L		111	70 - 130
1,1-Dichloroethene	5.00	5.41		ug/L		108	70 - 130
1,2-Dichloroethane	5.00	5.38		ug/L		108	70 - 130
2-Butanone (MEK)	20.0	18.3		ug/L		91	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	16.7		ug/L		83	70 - 130
Acetone	20.0	22.3		ug/L		111	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-401712/4
Matrix: Water
Analysis Batch: 401712

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	5.00	5.53		ug/L		111	70 - 130
Carbon disulfide	5.00	5.69		ug/L		114	70 - 130
Carbon tetrachloride	5.00	5.72		ug/L		114	70 - 130
Chlorobenzene	5.00	5.07		ug/L		101	70 - 130
Chloroform	5.00	5.51		ug/L		110	70 - 130
Ethylbenzene	5.00	5.07		ug/L		101	70 - 130
Methylene Chloride	5.00	5.33		ug/L		107	70 - 130
Tetrachloroethene	5.00	5.09		ug/L		102	70 - 130
Toluene	5.00	5.45		ug/L		109	70 - 130
Trichloroethene	5.00	5.18		ug/L		104	70 - 130
Vinyl chloride	5.00	5.26		ug/L		105	70 - 130
Xylenes, Total	10.0	10.1		ug/L		101	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*

Lab Sample ID: 280-105343-4 MS
Matrix: Water
Analysis Batch: 401712

Client Sample ID: B3H037
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.16	U	5.00	5.86		ug/L		117	70 - 130
1,1,2-Trichloroethane	0.27	U	5.00	4.68		ug/L		94	70 - 130
1,1-Dichloroethane	0.22	U	5.00	5.64		ug/L		113	70 - 130
1,1-Dichloroethene	0.23	U	5.00	5.17		ug/L		103	70 - 130
1,2-Dichloroethane	0.13	U	5.00	5.05		ug/L		101	70 - 130
2-Butanone (MEK)	2.0	U	20.0	14.6		ug/L		73	70 - 130
4-Methyl-2-pentanone (MIBK)	0.98	U T	20.0	13.7	T	ug/L		69	70 - 130
Acetone	1.9	U	20.0	17.0		ug/L		85	70 - 130
Benzene	0.16	U	5.00	5.70		ug/L		114	70 - 130
Carbon disulfide	0.45	U	5.00	5.22		ug/L		104	70 - 130
Carbon tetrachloride	0.19	U	5.00	6.14		ug/L		123	70 - 130
Chlorobenzene	0.17	U	5.00	5.32		ug/L		106	70 - 130
Chloroform	0.16	U	5.00	5.58		ug/L		112	70 - 130
Ethylbenzene	0.16	U	5.00	5.47		ug/L		109	70 - 130
Methylene Chloride	12	T	5.00	16.0		ug/L		86	70 - 130
Tetrachloroethene	0.20	U	5.00	5.58		ug/L		112	70 - 130
Toluene	0.17	U	5.00	5.64		ug/L		113	70 - 130
Trichloroethene	0.16	U	5.00	5.45		ug/L		109	70 - 130
Vinyl chloride	0.10	U T	5.00	6.58	T	ug/L		132	70 - 130
Xylenes, Total	0.19	U	10.0	10.7		ug/L		107	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 280-105343-4 MS **Client Sample ID: B3H037**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 401712

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
Dibromofluoromethane (Surr)	98		70 - 130
Toluene-d8 (Surr)	101		70 - 130

Lab Sample ID: 280-105343-4 MSD **Client Sample ID: B3H037**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 401712

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.16	U	5.00	5.67		ug/L		113	70 - 130	3	20
1,1,2-Trichloroethane	0.27	U	5.00	5.21		ug/L		104	70 - 130	11	20
1,1-Dichloroethane	0.22	U	5.00	5.68		ug/L		114	70 - 130	1	20
1,1-Dichloroethene	0.23	U	5.00	5.53		ug/L		111	70 - 130	7	20
1,2-Dichloroethane	0.13	U	5.00	5.26		ug/L		105	70 - 130	4	20
2-Butanone (MEK)	2.0	U	20.0	17.4		ug/L		87	70 - 130	18	20
4-Methyl-2-pentanone (MIBK)	0.98	U T	20.0	16.4		ug/L		82	70 - 130	18	20
Acetone	1.9	U	20.0	23.0	y	ug/L		115	70 - 130	30	20
Benzene	0.16	U	5.00	5.66		ug/L		113	70 - 130	1	20
Carbon disulfide	0.45	U	5.00	5.82		ug/L		116	70 - 130	11	20
Carbon tetrachloride	0.19	U	5.00	5.89		ug/L		118	70 - 130	4	20
Chlorobenzene	0.17	U	5.00	5.25		ug/L		105	70 - 130	1	20
Chloroform	0.16	U	5.00	5.68		ug/L		114	70 - 130	2	20
Ethylbenzene	0.16	U	5.00	5.29		ug/L		106	70 - 130	3	20
Methylene Chloride	12	T	5.00	19.0	T	ug/L		146	70 - 130	17	20
Tetrachloroethene	0.20	U	5.00	5.31		ug/L		106	70 - 130	5	20
Toluene	0.17	U	5.00	5.60		ug/L		112	70 - 130	1	20
Trichloroethene	0.16	U	5.00	5.33		ug/L		107	70 - 130	2	20
Vinyl chloride	0.10	U T	5.00	6.60	T	ug/L		132	70 - 130	0	20
Xylenes, Total	0.19	U	10.0	10.5		ug/L		105	70 - 130	2	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	104		70 - 130
4-Bromofluorobenzene (Surr)	102		70 - 130
Dibromofluoromethane (Surr)	101		70 - 130
Toluene-d8 (Surr)	101		70 - 130

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 280-401404/1-A **Client Sample ID: Method Blank**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 402644 **Prep Batch: 401404**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0077	U	0.050	0.0077	ug/L		01/11/18 17:04	01/24/18 17:15	1
4,4'-DDE	0.0075	U	0.050	0.0075	ug/L		01/11/18 17:04	01/24/18 17:15	1
4,4'-DDT	0.015	U	0.050	0.015	ug/L		01/11/18 17:04	01/24/18 17:15	1
Aldrin	0.0059	U	0.050	0.0059	ug/L		01/11/18 17:04	01/24/18 17:15	1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 280-401404/1-A
Matrix: Water
Analysis Batch: 402644

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 401404

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	0.0053	U	0.050	0.0053	ug/L		01/11/18 17:04	01/24/18 17:15	1
beta-BHC	0.0087	U	0.050	0.0087	ug/L		01/11/18 17:04	01/24/18 17:15	1
delta-BHC	0.0058	U	0.050	0.0058	ug/L		01/11/18 17:04	01/24/18 17:15	1
Dieldrin	0.0063	U	0.050	0.0063	ug/L		01/11/18 17:04	01/24/18 17:15	1
Endosulfan I	0.0058	U	0.050	0.0058	ug/L		01/11/18 17:04	01/24/18 17:15	1
Endosulfan II	0.0070	U	0.050	0.0070	ug/L		01/11/18 17:04	01/24/18 17:15	1
Endrin ketone	0.0070	U	0.050	0.0070	ug/L		01/11/18 17:04	01/24/18 17:15	1
Endosulfan sulfate	0.0057	U	0.050	0.0057	ug/L		01/11/18 17:04	01/24/18 17:15	1
Endrin	0.0079	U	0.050	0.0079	ug/L		01/11/18 17:04	01/24/18 17:15	1
Endrin aldehyde	0.0088	U	0.050	0.0088	ug/L		01/11/18 17:04	01/24/18 17:15	1
gamma-BHC (Lindane)	0.0069	U	0.050	0.0069	ug/L		01/11/18 17:04	01/24/18 17:15	1
Heptachlor epoxide	0.0075	U	0.050	0.0075	ug/L		01/11/18 17:04	01/24/18 17:15	1
Methoxychlor	0.013	U	0.10	0.013	ug/L		01/11/18 17:04	01/24/18 17:15	1
Toxaphene	0.37	U	2.0	0.37	ug/L		01/11/18 17:04	01/24/18 17:15	1
gamma-Chlordane	0.0091	U	0.050	0.0091	ug/L		01/11/18 17:04	01/24/18 17:15	1
Heptachlor	0.0077	U	0.050	0.0077	ug/L		01/11/18 17:04	01/24/18 17:15	1
alpha-Chlordane	0.0053	U	0.050	0.0053	ug/L		01/11/18 17:04	01/24/18 17:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Decachlorobiphenyl	*103*		*34 - 122*	*01/11/18 17:04*	*01/24/18 17:15*	*1*
Tetrachloro-m-xylene	*85*		*28 - 115*	*01/11/18 17:04*	*01/24/18 17:15*	*1*

Lab Sample ID: LCS 280-401404/2-A
Matrix: Water
Analysis Batch: 402644

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 401404

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	0.500	0.489		ug/L		98	70 - 130
4,4'-DDE	0.500	0.476		ug/L		95	70 - 130
4,4'-DDT	0.500	0.509		ug/L		102	70 - 130
Aldrin	0.500	0.426		ug/L		85	70 - 130
alpha-BHC	0.500	0.457		ug/L		91	70 - 130
beta-BHC	0.500	0.411		ug/L		82	70 - 130
delta-BHC	0.500	0.470		ug/L		94	70 - 130
Dieldrin	0.500	0.501		ug/L		100	70 - 130
Endosulfan I	0.500	0.504		ug/L		101	70 - 130
Endosulfan II	0.500	0.476		ug/L		95	70 - 130
Endrin ketone	0.500	0.479		ug/L		96	70 - 130
Endosulfan sulfate	0.500	0.486		ug/L		97	70 - 130
Endrin	0.500	0.517		ug/L		103	70 - 130
Endrin aldehyde	0.500	0.451		ug/L		90	70 - 130
gamma-BHC (Lindane)	0.500	0.456		ug/L		91	70 - 130
Heptachlor epoxide	0.500	0.484		ug/L		97	70 - 130
Methoxychlor	0.500	0.518		ug/L		104	70 - 130
gamma-Chlordane	0.500	0.460		ug/L		92	70 - 130
Heptachlor	0.500	0.471		ug/L		94	70 - 130
alpha-Chlordane	0.500	0.477		ug/L		95	70 - 130

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 280-401404/2-A
Matrix: Water
Analysis Batch: 402644

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 401404

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Decachlorobiphenyl	95		34 - 122
Tetrachloro-m-xylene	77		28 - 115

Lab Sample ID: LCSD 280-401404/3-A
Matrix: Water
Analysis Batch: 402644

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 401404

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	0.500	0.496		ug/L		99	70 - 130	1	20
4,4'-DDE	0.500	0.484		ug/L		97	70 - 130	2	20
4,4'-DDT	0.500	0.518		ug/L		104	70 - 130	2	20
Aldrin	0.500	0.437		ug/L		87	70 - 130	2	20
alpha-BHC	0.500	0.468		ug/L		94	70 - 130	2	20
beta-BHC	0.500	0.420		ug/L		84	70 - 130	2	20
delta-BHC	0.500	0.477		ug/L		95	70 - 130	2	20
Dieldrin	0.500	0.509		ug/L		102	70 - 130	2	20
Endosulfan I	0.500	0.518		ug/L		104	70 - 130	3	20
Endosulfan II	0.500	0.486		ug/L		97	70 - 130	2	20
Endrin ketone	0.500	0.488		ug/L		98	70 - 130	2	20
Endosulfan sulfate	0.500	0.490		ug/L		98	70 - 130	1	20
Endrin	0.500	0.527		ug/L		105	70 - 130	2	20
Endrin aldehyde	0.500	0.471		ug/L		94	70 - 130	4	20
gamma-BHC (Lindane)	0.500	0.463		ug/L		93	70 - 130	2	20
Heptachlor epoxide	0.500	0.493		ug/L		99	70 - 130	2	20
Methoxychlor	0.500	0.528		ug/L		106	70 - 130	2	20
gamma-Chlordane	0.500	0.460		ug/L		92	70 - 130	0	20
Heptachlor	0.500	0.484		ug/L		97	70 - 130	3	20
alpha-Chlordane	0.500	0.485		ug/L		97	70 - 130	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Decachlorobiphenyl	97		34 - 122
Tetrachloro-m-xylene	78		28 - 115

Lab Sample ID: 280-105343-1 MS
Matrix: Water
Analysis Batch: 402644

Client Sample ID: B3FXD7
Prep Type: Total/NA
Prep Batch: 401404

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	0.0074	U	0.472	0.474		ug/L		101	78 - 138
4,4'-DDE	0.0072	U	0.472	0.455		ug/L		96	74 - 124
4,4'-DDT	0.014	U	0.472	0.491		ug/L		104	72 - 139
Aldrin	0.0056	U	0.472	0.401		ug/L		85	44 - 127
alpha-BHC	0.0051	U	0.472	0.440		ug/L		93	73 - 133
beta-BHC	0.0083	U	0.472	0.392		ug/L		83	67 - 133
delta-BHC	0.0055	U	0.472	0.451		ug/L		96	72 - 135
Dieldrin	0.0060	U	0.472	0.480		ug/L		102	78 - 132
Endosulfan I	0.0055	U	0.472	0.484		ug/L		103	73 - 128
Endosulfan II	0.0067	U	0.472	0.460		ug/L		98	75 - 132

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 280-105343-1 MS — **Client Sample ID: B3FXD7**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 402644 — **Prep Batch: 401404**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Endrin ketone	0.0067	U	0.472	0.464		ug/L		98	75 - 137
Endosulfan sulfate	0.0054	U	0.472	0.465		ug/L		99	77 - 135
Endrin	0.0076	U	0.472	0.498		ug/L		106	74 - 171
Endrin aldehyde	0.0084	U	0.472	0.441		ug/L		93	59 - 136
gamma-BHC (Lindane)	0.0066	U	0.472	0.438		ug/L		93	71 - 132
Heptachlor epoxide	0.0072	U	0.472	0.467		ug/L		99	77 - 132
Methoxychlor	0.012	U	0.472	0.502		ug/L		106	67 - 150
gamma-Chlordane	0.0087	U	0.472	0.436		ug/L		93	73 - 131
Heptachlor	0.0074	U	0.472	0.433		ug/L		92	52 - 129
alpha-Chlordane	0.0051	U	0.472	0.457		ug/L		97	75 - 128

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Decachlorobiphenyl	*96*		*34 - 122*
Tetrachloro-m-xylene	*80*		*28 - 115*

Lab Sample ID: 280-105343-1 MSD — **Client Sample ID: B3FXD7**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 402644 — **Prep Batch: 401404**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	0.0074	U	0.479	0.457		ug/L		95	78 - 138	4	20
4,4'-DDE	0.0072	U	0.479	0.442		ug/L		92	74 - 124	3	20
4,4'-DDT	0.014	U	0.479	0.474		ug/L		99	72 - 139	3	20
Aldrin	0.0056	U	0.479	0.386		ug/L		81	44 - 127	4	33
alpha-BHC	0.0051	U	0.479	0.423		ug/L		88	73 - 133	4	20
beta-BHC	0.0083	U	0.479	0.382		ug/L		80	67 - 133	3	20
delta-BHC	0.0055	U	0.479	0.435		ug/L		91	72 - 135	4	20
Dieldrin	0.0060	U	0.479	0.465		ug/L		97	78 - 132	3	20
Endosulfan I	0.0055	U	0.479	0.468		ug/L		98	73 - 128	3	50
Endosulfan II	0.0067	U	0.479	0.442		ug/L		92	75 - 132	4	50
Endrin ketone	0.0067	U	0.479	0.449		ug/L		94	75 - 137	3	20
Endosulfan sulfate	0.0054	U	0.479	0.447		ug/L		93	77 - 135	4	20
Endrin	0.0076	U	0.479	0.475		ug/L		99	74 - 171	5	20
Endrin aldehyde	0.0084	U	0.479	0.418		ug/L		87	59 - 136	5	20
gamma-BHC (Lindane)	0.0066	U	0.479	0.421		ug/L		88	71 - 132	4	26
Heptachlor epoxide	0.0072	U	0.479	0.450		ug/L		94	77 - 132	4	20
Methoxychlor	0.012	U	0.479	0.487		ug/L		102	67 - 150	3	20
gamma-Chlordane	0.0087	U	0.479	0.418		ug/L		87	73 - 131	4	20
Heptachlor	0.0074	U	0.479	0.423		ug/L		88	52 - 129	2	20
alpha-Chlordane	0.0051	U	0.479	0.442		ug/L		92	75 - 128	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Decachlorobiphenyl	*93*		*34 - 122*
Tetrachloro-m-xylene	*76*		*28 - 115*

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-001 / X18-005 / S18-001

TestAmerica Job ID: 280-105343-1
SDG: DN0303

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 280-401404/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 402014 — **Prep Batch: 401404**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.12	U	1.0	0.12	ug/L		01/11/18 17:04	01/18/18 12:08	1
Aroclor 1221	0.21	U	1.0	0.21	ug/L		01/11/18 17:04	01/18/18 12:08	1
Aroclor 1232	0.17	U	1.0	0.17	ug/L		01/11/18 17:04	01/18/18 12:08	1
Aroclor 1242	0.10	U	1.0	0.10	ug/L		01/11/18 17:04	01/18/18 12:08	1
Aroclor 1248	0.092	U	1.0	0.092	ug/L		01/11/18 17:04	01/18/18 12:08	1
Aroclor 1254	0.11	U	1.0	0.11	ug/L		01/11/18 17:04	01/18/18 12:08	1
Aroclor 1260	0.16	U	1.0	0.16	ug/L		01/11/18 17:04	01/18/18 12:08	1
Aroclor 1262	0.085	U	1.0	0.085	ug/L		01/11/18 17:04	01/18/18 12:08	1
Aroclor 1268	0.36	U	1.0	0.36	ug/L		01/11/18 17:04	01/18/18 12:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Decachlorobiphenyl	*99*		*30 - 136*	*01/11/18 17:04*	*01/18/18 12:08*	*1*
Tetrachloro-m-xylene	*89*		*25 - 120*	*01/11/18 17:04*	*01/18/18 12:08*	*1*

Lab Sample ID: LCS 280-401404/4-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 402014 — **Prep Batch: 401404**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor 1016	2.00	2.30		ug/L		115	70 - 130
Aroclor 1260	2.00	2.28		ug/L		114	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Decachlorobiphenyl	*107*		*30 - 136*
Tetrachloro-m-xylene	*92*		*25 - 120*

Lab Sample ID: LCSD 280-401404/5-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 402014 — **Prep Batch: 401404**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor 1016	2.00	2.20		ug/L		110	70 - 130	4	20
Aroclor 1260	2.00	2.16		ug/L		108	70 - 130	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Decachlorobiphenyl	*101*		*30 - 136*
Tetrachloro-m-xylene	*88*		*25 - 120*

Lab Sample ID: 280-105343-1 MS — **Client Sample ID: B3FXD7**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 402014 — **Prep Batch: 401404**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor 1016	0.12	U	1.90	2.03		ug/L		107	58 - 128
Aroclor 1260	0.15	U	1.90	2.02		ug/L		106	69 - 140

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 280-105343-1 MS — **Client Sample ID: B3FXD7**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 402014 — **Prep Batch: 401404**

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Decachlorobiphenyl	*102*		*30 - 136*
Tetrachloro-m-xylene	*90*		*25 - 120*

Lab Sample ID: 280-105343-1 MSD — **Client Sample ID: B3FXD7**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 402014 — **Prep Batch: 401404**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor 1016	0.12	U	1.92	2.04		ug/L		107	58 - 128	1	20
Aroclor 1260	0.15	U	1.92	2.01		ug/L		105	69 - 140	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Decachlorobiphenyl	*99*		*30 - 136*
Tetrachloro-m-xylene	*88*		*25 - 120*

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 280-401509/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 402056 — **Prep Batch: 401509**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	0.19	U	1.0	0.19	ug/L		01/12/18 13:30	01/19/18 01:57	1
2,4-D	0.21	U	4.0	0.21	ug/L		01/12/18 13:30	01/19/18 01:57	1
2,4-DB	0.36	U	4.0	0.36	ug/L		01/12/18 13:30	01/19/18 01:57	1
Dalapon	0.91	U	2.0	0.91	ug/L		01/12/18 13:30	01/19/18 01:57	1
Dicamba	0.15	U	2.0	0.15	ug/L		01/12/18 13:30	01/19/18 01:57	1
Dichlorprop	0.65	U	4.0	0.65	ug/L		01/12/18 13:30	01/19/18 01:57	1
Dinoseb	0.45	U	1.0	0.45	ug/L		01/12/18 13:30	01/19/18 01:57	1
MCPA	17	U	400	17	ug/L		01/12/18 13:30	01/19/18 01:57	1
MCPP	33	U	400	33	ug/L		01/12/18 13:30	01/19/18 01:57	1
Silvex (2,4,5-TP)	0.17	U	1.0	0.17	ug/L		01/12/18 13:30	01/19/18 01:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*85*		*39 - 135*	*01/12/18 13:30*	*01/19/18 01:57*	*1*

Lab Sample ID: LCS 280-401509/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 402056 — **Prep Batch: 401509**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,5-T	5.00	4.18		ug/L		84	70 - 130
2,4-D	5.00	4.58		ug/L		92	70 - 130
2,4-DB	5.00	4.07		ug/L		81	70 - 130
Dalapon	5.00	4.06		ug/L		81	70 - 130
Dicamba	5.00	3.80		ug/L		76	70 - 130
Dichlorprop	5.00	4.16		ug/L		83	70 - 130

Method: 8151A - Herbicides (GC) (Continued)

Lab Sample ID: LCS 280-401509/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 402056 — **Prep Batch: 401509**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dinoseb	5.00	2.45	o	ug/L		49	70 - 130
MCPA	500	389	J	ug/L		78	70 - 130
MCPP	500	462		ug/L		92	70 - 130
Silvex (2,4,5-TP)	5.00	4.14		ug/L		83	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCAA	*86*		*39 - 135*

Lab Sample ID: LCSD 280-401509/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 402056 — **Prep Batch: 401509**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4,5-T	5.00	3.90		ug/L		78	70 - 130	7	20
2,4-D	5.00	4.48		ug/L		90	70 - 130	2	20
2,4-DB	5.00	4.07		ug/L		81	70 - 130	0	20
Dalapon	5.00	3.96		ug/L		79	70 - 130	2	20
Dicamba	5.00	3.60		ug/L		72	70 - 130	5	20
Dichlorprop	5.00	4.03		ug/L		81	70 - 130	3	20
Dinoseb	5.00	2.18	o	ug/L		44	70 - 130	11	20
MCPA	500	401		ug/L		80	70 - 130	3	20
MCPP	500	481		ug/L		96	70 - 130	4	20
Silvex (2,4,5-TP)	5.00	3.84		ug/L		77	70 - 130	8	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCAA	*85*		*39 - 135*

Lab Sample ID: 280-105343-1 MS — **Client Sample ID: B3FXD7**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 402056 — **Prep Batch: 401509**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,5-T	0.18	U N	4.78	0.18	U N	ug/L		0	45 - 135
2,4-D	0.20	U N	4.78	0.20	U N	ug/L		0	46 - 126
2,4-DB	0.34	U N	4.78	0.34	U N	ug/L		0	18 - 135
Dalapon	0.87	U N	4.78	0.87	U N	ug/L		0	52 - 119
Dicamba	0.14	U N	4.78	0.14	U N	ug/L		0	50 - 128
Dichlorprop	0.62	U N	4.78	0.62	U N	ug/L		0	44 - 121
Dinoseb	0.43	U N o	4.78	0.43	U N	ug/L		0	25 - 132
MCPA	16	U N	478	16	U N	ug/L		0	43 - 118
MCPP	31	U N	478	32	U N	ug/L		0	45 - 121
Silvex (2,4,5-TP)	0.16	U N	4.78	0.16	U N	ug/L		0	48 - 127

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCAA	*80*		*39 - 135*

Method: 8151A - Herbicides (GC) (Continued)

Lab Sample ID: 280-105343-1 MSD — **Client Sample ID: B3FXD7**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 402056 — **Prep Batch: 401509**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4,5-T	0.18	U N	4.80	0.18	U N	ug/L		0	45 - 135	NC	20
2,4-D	0.20	U N	4.80	0.20	U N	ug/L		0	46 - 126	NC	20
2,4-DB	0.34	U N	4.80	0.35	U N	ug/L		0	18 - 135	NC	20
Dalapon	0.87	U N	4.80	0.87	U N	ug/L		0	52 - 119	NC	20
Dicamba	0.14	U N	4.80	0.14	U N	ug/L		0	50 - 128	NC	20
Dichlorprop	0.62	U N	4.80	0.62	U N	ug/L		0	44 - 121	NC	20
Dinoseb	0.43	U N o	4.80	0.43	U N	ug/L		0	25 - 132	NC	20
MCPA	16	U N	480	16	U N	ug/L		0	43 - 118	NC	20
MCPP	31	U N	480	32	U N	ug/L		0	45 - 121	NC	20
Silvex (2,4,5-TP)	0.16	U N	4.80	0.16	U N	ug/L		0	48 - 127	NC	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCAA	*93*		*39 - 135*

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 280-401442/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 402000 — **Prep Batch: 401442**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.82	U	10.0	0.82	ug/L		01/16/18 07:26	01/17/18 23:06	1
Boron	4.4	U	100	4.4	ug/L		01/16/18 07:26	01/17/18 23:06	1
Calcium	34.5	U	200	34.5	ug/L		01/16/18 07:26	01/17/18 23:06	1
Cobalt	1.2	U	10.0	1.2	ug/L		01/16/18 07:26	01/17/18 23:06	1
Copper	4.2	U	15.0	4.2	ug/L		01/16/18 07:26	01/17/18 23:06	1
Iron	25.74	B	100	22.0	ug/L		01/16/18 07:26	01/17/18 23:06	1
Magnesium	10.7	U	200	10.7	ug/L		01/16/18 07:26	01/17/18 23:06	1
Nickel	2.6	U	40.0	2.6	ug/L		01/16/18 07:26	01/17/18 23:06	1
Silver	0.93	U	10.0	0.93	ug/L		01/16/18 07:26	01/17/18 23:06	1
Sodium	117	U	1000	117	ug/L		01/16/18 07:26	01/17/18 23:06	1
Vanadium	1.1	U	10.0	1.1	ug/L		01/16/18 07:26	01/17/18 23:06	1

Lab Sample ID: MB 280-401442/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 402104 — **Prep Batch: 401442**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.66	U	10.0	0.66	ug/L		01/16/18 07:26	01/18/18 19:30	1
Potassium	237	U	3000	237	ug/L		01/16/18 07:26	01/18/18 19:30	1
Zinc	4.5	U	20.0	4.5	ug/L		01/16/18 07:26	01/18/18 19:30	1

Lab Sample ID: LCS 280-401442/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 402000 — **Prep Batch: 401442**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	2000	2186		ug/L		109	90 - 112

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-001 / X18-005 / S18-001

TestAmerica Job ID: 280-105343-1
SDG: DN0303

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

Lab Sample ID: LCS 280-401442/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 402000 — **Prep Batch: 401442**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1000	1074		ug/L		107	80 - 120
Calcium	50000	54180		ug/L		108	80 - 120
Cobalt	500	541.6		ug/L		108	89 - 111
Copper	250	279.3		ug/L		112	86 - 112
Iron	1000	1148		ug/L		115	80 - 120
Magnesium	50000	55730		ug/L		111	80 - 120
Nickel	500	546.7		ug/L		109	89 - 111
Silver	50.0	56.91		ug/L		114	86 - 115
Sodium	50000	53270		ug/L		107	80 - 120
Vanadium	500	566.1		ug/L		113	80 - 120

Lab Sample ID: LCS 280-401442/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 402104 — **Prep Batch: 401442**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	200	225.1		ug/L		113	90 - 113
Potassium	50000	56590		ug/L		113	80 - 120
Zinc	500	552.6		ug/L		111	85 - 111

Lab Sample ID: 280-105343-13 MS — **Client Sample ID: B3FY72**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 402000 — **Prep Batch: 401442**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	54.9		2000	2273		ug/L		111	75 - 125
Boron	20.6	B	1000	1093		ug/L		107	75 - 125
Calcium	55500		50000	107800		ug/L		105	75 - 125
Cobalt	1.2	U	500	524.0		ug/L		105	75 - 125
Copper	4.2	U	250	276.1		ug/L		110	75 - 125
Iron	22.0	U	1000	1136		ug/L		114	75 - 125
Magnesium	14300		50000	68150		ug/L		108	75 - 125
Nickel	2.6	U	500	535.0		ug/L		107	75 - 125
Silver	0.93	U	50.0	56.54		ug/L		113	75 - 125
Sodium	22200		50000	75050		ug/L		106	75 - 125
Vanadium	15.0		500	569.9		ug/L		111	75 - 125

Lab Sample ID: 280-105343-13 MS — **Client Sample ID: B3FY72**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 402104 — **Prep Batch: 401442**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	2.8	B	200	214.4		ug/L		106	75 - 125
Potassium	7000		50000	58630		ug/L		103	75 - 125
Zinc	4.5	U	500	515.7		ug/L		103	75 - 125

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-001 / X18-005 / S18-001

TestAmerica Job ID: 280-105343-1
SDG: DN0303

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

Lab Sample ID: 280-105343-13 MSD — **Client Sample ID: B3FY72**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 402000 — **Prep Batch: 401442**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Barium	54.9		2000	2145		ug/L		105	75 - 125	6	20
Boron	20.6	B	1000	1091		ug/L		107	75 - 125	0	20
Calcium	55500		50000	101600		ug/L		92	75 - 125	6	20
Cobalt	1.2	U	500	519.4		ug/L		104	75 - 125	1	20
Copper	4.2	U	250	273.4		ug/L		109	75 - 125	1	20
Iron	22.0	U	1000	1070		ug/L		107	75 - 125	6	20
Magnesium	14300		50000	67520		ug/L		106	75 - 125	1	20
Nickel	2.6	U	500	531.2		ug/L		106	75 - 125	1	20
Silver	0.93	U	50.0	56.45		ug/L		113	75 - 125	0	20
Sodium	22200		50000	71150		ug/L		98	75 - 125	5	20
Vanadium	15.0		500	566.1		ug/L		110	75 - 125	1	20

Lab Sample ID: 280-105343-13 MSD — **Client Sample ID: B3FY72**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 402104 — **Prep Batch: 401442**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	2.8	B	200	220.5		ug/L		109	75 - 125	3	20
Potassium	7000		50000	58560		ug/L		103	75 - 125	0	20
Zinc	4.5	U	500	531.4		ug/L		106	75 - 125	3	20

Lab Sample ID: MB 280-402125/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 402255 — **Prep Batch: 402125**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	5.2	U	20.0	5.2	ug/L		01/19/18 15:02	01/19/18 22:14	1
Cadmium	0.45	U	5.0	0.45	ug/L		01/19/18 15:02	01/19/18 22:14	1
Manganese	0.26	U	10.0	0.26	ug/L		01/19/18 15:02	01/19/18 22:14	1

Lab Sample ID: MB 280-402125/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 402320 — **Prep Batch: 402125**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.4	U	15.0	4.4	ug/L		01/19/18 15:02	01/22/18 08:05	1

Lab Sample ID: LCS 280-402125/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 402255 — **Prep Batch: 402125**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	500	542.8		ug/L		109	80 - 120
Cadmium	100	109.3		ug/L		109	80 - 120
Manganese	500	512.8		ug/L		103	80 - 120

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-001 / X18-005 / S18-001

TestAmerica Job ID: 280-105343-1
SDG: DN0303

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

Lab Sample ID: LCS 280-402125/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 402320 — **Prep Batch: 402125**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1000	1041		ug/L		104	80 - 120

Lab Sample ID: 280-105343-13 MS — **Client Sample ID: B3FY72**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 402255 — **Prep Batch: 402125**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	5.2	U	500	533.5		ug/L		107	75 - 125
Cadmium	0.63	B	100	107.5		ug/L		107	75 - 125
Manganese	0.26	U	500	501.1		ug/L		100	75 - 125

Lab Sample ID: 280-105343-13 MS — **Client Sample ID: B3FY72**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 402320 — **Prep Batch: 402125**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	8.1	B	1000	1045		ug/L		104	75 - 125

Lab Sample ID: 280-105343-13 MSD — **Client Sample ID: B3FY72**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 402255 — **Prep Batch: 402125**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	5.2	U	500	536.6		ug/L		107	75 - 125	1	20
Cadmium	0.63	B	100	108.4		ug/L		108	75 - 125	1	20
Manganese	0.26	U	500	508.8		ug/L		102	75 - 125	2	20

Lab Sample ID: 280-105343-13 MSD — **Client Sample ID: B3FY72**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 402320 — **Prep Batch: 402125**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	8.1	B	1000	1060		ug/L		105	75 - 125	1	20

Lab Sample ID: MB 280-401429/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 401861 — **Prep Batch: 401429**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	5.2	U	20.0	5.2	ug/L		01/16/18 07:26	01/16/18 19:39	1
Arsenic	4.4	U	15.0	4.4	ug/L		01/16/18 07:26	01/16/18 19:39	1
Barium	0.82	U	10.0	0.82	ug/L		01/16/18 07:26	01/16/18 19:39	1
Boron	4.4	U	100	4.4	ug/L		01/16/18 07:26	01/16/18 19:39	1
Cadmium	0.45	U	5.0	0.45	ug/L		01/16/18 07:26	01/16/18 19:39	1
Calcium	145.9	B	200	34.5	ug/L		01/16/18 07:26	01/16/18 19:39	1
Chromium	0.66	U	10.0	0.66	ug/L		01/16/18 07:26	01/16/18 19:39	1
Cobalt	1.2	U	10.0	1.2	ug/L		01/16/18 07:26	01/16/18 19:39	1
Copper	4.2	U	15.0	4.2	ug/L		01/16/18 07:26	01/16/18 19:39	1
Iron	26.43	B	100	22.0	ug/L		01/16/18 07:26	01/16/18 19:39	1

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-001 / X18-005 / S18-001

TestAmerica Job ID: 280-105343-1
SDG: DN0303

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

Lab Sample ID: MB 280-401429/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 401861 — **Prep Batch: 401429**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	10.7	U	200	10.7	ug/L		01/16/18 07:26	01/16/18 19:39	1
Manganese	0.517	B	10.0	0.26	ug/L		01/16/18 07:26	01/16/18 19:39	1
Nickel	2.6	U	40.0	2.6	ug/L		01/16/18 07:26	01/16/18 19:39	1
Silver	0.93	U	10.0	0.93	ug/L		01/16/18 07:26	01/16/18 19:39	1
Vanadium	1.1	U	10.0	1.1	ug/L		01/16/18 07:26	01/16/18 19:39	1
Zinc	4.5	U	20.0	4.5	ug/L		01/16/18 07:26	01/16/18 19:39	1

Lab Sample ID: LCS 280-401429/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 401861 — **Prep Batch: 401429**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	500	534.9		ug/L		107	88 - 110
Arsenic	1000	1025		ug/L		102	88 - 110
Barium	2000	1975		ug/L		99	90 - 112
Boron	1000	1022		ug/L		102	80 - 120
Cadmium	100	104.3		ug/L		104	88 - 111
Calcium	50000	49030		ug/L		98	80 - 120
Chromium	200	212.3		ug/L		106	90 - 113
Cobalt	500	498.8		ug/L		100	89 - 111
Copper	250	254.8		ug/L		102	86 - 112
Iron	1000	1003		ug/L		100	80 - 120
Magnesium	50000	51070		ug/L		102	80 - 120
Manganese	500	520.7		ug/L		104	90 - 110
Nickel	500	503.8		ug/L		101	89 - 111
Silver	50.0	52.36		ug/L		105	86 - 115
Vanadium	500	524.0		ug/L		105	80 - 120
Zinc	500	518.6		ug/L		104	85 - 111

Lab Sample ID: MB 280-402029/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 402129 — **Prep Batch: 402029**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	237	U	3000	237	ug/L		01/18/18 15:07	01/18/18 23:06	1
Sodium	117	U	1000	117	ug/L		01/18/18 15:07	01/18/18 23:06	1

Lab Sample ID: LCS 280-402029/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 402129 — **Prep Batch: 402029**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Potassium	50000	52190		ug/L		104	80 - 120
Sodium	50000	52410		ug/L		105	80 - 120

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-001 / X18-005 / S18-001

TestAmerica Job ID: 280-105343-1
SDG: DN0303

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

Lab Sample ID: 280-105343-12 MS — **Client Sample ID: B3FTK3**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 401861 — **Prep Batch: 401429**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	5.2	U	500	541.7		ug/L		108	75 - 125
Arsenic	4.4	U	1000	1060		ug/L		106	75 - 125
Barium	49.2		2000	2132		ug/L		104	75 - 125
Boron	19.5	B	1000	1063		ug/L		104	87 - 113
Cadmium	0.45	U	100	105.2		ug/L		105	75 - 125
Calcium	48800		50000	101200		ug/L		105	75 - 125
Chromium	2.8	B	200	217.1		ug/L		107	75 - 125
Cobalt	1.2	U	500	500.2		ug/L		100	75 - 125
Copper	4.2	U	250	261.7		ug/L		105	75 - 125
Iron	22.0	U	1000	1055		ug/L		106	75 - 125
Magnesium	12500		50000	64630		ug/L		104	75 - 125
Manganese	0.39	B C	500	523.2		ug/L		105	75 - 125
Nickel	2.6	U	500	508.0		ug/L		102	75 - 125
Silver	0.93	U	50.0	53.53		ug/L		107	75 - 125
Vanadium	13.3		500	543.0		ug/L		106	75 - 125
Zinc	4.5	U	500	519.6		ug/L		104	75 - 125

Lab Sample ID: 280-105343-12 MSD — **Client Sample ID: B3FTK3**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 401861 — **Prep Batch: 401429**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	5.2	U	500	549.2		ug/L		110	75 - 125	1	20
Arsenic	4.4	U	1000	1071		ug/L		107	75 - 125	1	20
Barium	49.2		2000	2110		ug/L		103	75 - 125	1	20
Boron	19.5	B	1000	1075		ug/L		106	87 - 113	1	20
Cadmium	0.45	U	100	106.1		ug/L		106	75 - 125	1	20
Calcium	48800		50000	99370		ug/L		101	75 - 125	2	20
Chromium	2.8	B	200	218.5		ug/L		108	75 - 125	1	20
Cobalt	1.2	U	500	506.2		ug/L		101	75 - 125	1	20
Copper	4.2	U	250	263.1		ug/L		105	75 - 125	1	20
Iron	22.0	U	1000	1035		ug/L		104	75 - 125	2	20
Magnesium	12500		50000	65080		ug/L		105	75 - 125	1	20
Manganese	0.39	B C	500	526.4		ug/L		105	75 - 125	1	20
Nickel	2.6	U	500	513.4		ug/L		103	75 - 125	1	20
Silver	0.93	U	50.0	54.17		ug/L		108	75 - 125	1	20
Vanadium	13.3		500	547.9		ug/L		107	75 - 125	1	20
Zinc	4.5	U	500	534.8		ug/L		107	75 - 125	3	20

Lab Sample ID: 280-105343-12 MS — **Client Sample ID: B3FTK3**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 402129 — **Prep Batch: 402029**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Potassium	6740		50000	59020		ug/L		105	75 - 125
Sodium	20300		50000	72650		ug/L		105	75 - 125

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

Lab Sample ID: 280-105343-12 MSD — **Client Sample ID: B3FTK3**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 402129 — **Prep Batch: 402029**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Potassium	6740		50000	57960		ug/L		102	75 - 125	2	20
Sodium	20300		50000	71250		ug/L		102	75 - 125	2	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 280-401443/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 401889 — **Prep Batch: 401443**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9.2	U	50.0	9.2	ug/L		01/16/18 07:26	01/16/18 17:37	1
Antimony	0.40	U	2.0	0.40	ug/L		01/16/18 07:26	01/16/18 17:37	1
Arsenic	0.33	U	5.0	0.33	ug/L		01/16/18 07:26	01/16/18 17:37	1
Barium	0.29	U	1.0	0.29	ug/L		01/16/18 07:26	01/16/18 17:37	1
Beryllium	0.080	U	1.0	0.080	ug/L		01/16/18 07:26	01/16/18 17:37	1
Cadmium	0.27	U	1.0	0.27	ug/L		01/16/18 07:26	01/16/18 17:37	1
Chromium	0.50	U	2.0	0.50	ug/L		01/16/18 07:26	01/16/18 17:37	1
Cobalt	0.054	U	1.0	0.054	ug/L		01/16/18 07:26	01/16/18 17:37	1
Copper	0.56	U	2.0	0.56	ug/L		01/16/18 07:26	01/16/18 17:37	1
Lead	0.18	U	1.0	0.18	ug/L		01/16/18 07:26	01/16/18 17:37	1
Manganese	0.31	U	1.0	0.31	ug/L		01/16/18 07:26	01/16/18 17:37	1
Molybdenum	0.14	U	2.0	0.14	ug/L		01/16/18 07:26	01/16/18 17:37	1
Nickel	0.30	U	2.0	0.30	ug/L		01/16/18 07:26	01/16/18 17:37	1
Selenium	0.70	U	5.0	0.70	ug/L		01/16/18 07:26	01/16/18 17:37	1
Silver	0.033	U	5.0	0.033	ug/L		01/16/18 07:26	01/16/18 17:37	1
Strontium	0.30	U	10.0	0.30	ug/L		01/16/18 07:26	01/16/18 17:37	1
Thallium	0.050	U	1.0	0.050	ug/L		01/16/18 07:26	01/16/18 17:37	1
Tin	0.77	U	10.0	0.77	ug/L		01/16/18 07:26	01/16/18 17:37	1
Uranium	0.050	U	1.0	0.050	ug/L		01/16/18 07:26	01/16/18 17:37	1
Zinc	3.16	B	10.0	2.0	ug/L		01/16/18 07:26	01/16/18 17:37	1

Lab Sample ID: MB 280-401443/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 401995 — **Prep Batch: 401443**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	1.2	U	5.0	1.2	ug/L		01/16/18 07:26	01/17/18 19:32	1

Lab Sample ID: LCS 280-401443/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 401889 — **Prep Batch: 401443**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	400	432.2		ug/L		108	80 - 120
Antimony	40.0	40.93		ug/L		102	80 - 120
Arsenic	40.0	38.21		ug/L		96	80 - 120
Barium	40.0	37.61		ug/L		94	80 - 120
Beryllium	40.0	39.57		ug/L		99	80 - 120

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

Lab Sample ID: LCS 280-401443/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 401889 — **Prep Batch: 401443**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	40.0	41.80		ug/L		105	80 - 120
Chromium	40.0	39.69		ug/L		99	80 - 120
Cobalt	40.0	40.44		ug/L		101	80 - 120
Copper	40.0	39.49		ug/L		99	80 - 120
Lead	40.0	40.22		ug/L		101	80 - 120
Manganese	40.0	40.68		ug/L		102	80 - 120
Molybdenum	40.0	41.71		ug/L		104	80 - 120
Nickel	40.0	40.22		ug/L		101	80 - 120
Selenium	40.0	37.84		ug/L		95	80 - 120
Silver	40.0	39.98		ug/L		100	80 - 120
Strontium	40.0	40.37		ug/L		101	80 - 120
Thallium	40.0	40.31		ug/L		101	80 - 120
Tin	40.0	40.94		ug/L		102	80 - 120
Uranium	40.0	38.89		ug/L		97	80 - 120
Zinc	40.0	42.44		ug/L		106	80 - 120

Lab Sample ID: LCS 280-401443/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 401995 — **Prep Batch: 401443**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Thorium	40.0	41.36		ug/L		103	80 - 120

Lab Sample ID: 280-105343-10 MS — **Client Sample ID: B3FTK5**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 401889 — **Prep Batch: 401443**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	9.2	B	400	395.7		ug/L		99	75 - 125
Antimony	0.40	U	40.0	40.22		ug/L		101	75 - 125
Arsenic	2.1	B	40.0	40.08		ug/L		95	75 - 125
Barium	34.9		40.0	73.40		ug/L		96	75 - 125
Beryllium	0.080	U	40.0	40.63		ug/L		102	75 - 125
Cadmium	0.27	U	40.0	41.17		ug/L		103	75 - 125
Chromium	3.5		40.0	43.02		ug/L		99	75 - 125
Cobalt	0.054	U	40.0	39.74		ug/L		99	75 - 125
Copper	0.56	U	40.0	39.45		ug/L		99	75 - 125
Lead	0.18	U	40.0	39.72		ug/L		99	75 - 125
Manganese	0.91	B	40.0	41.81		ug/L		102	75 - 125
Molybdenum	8.7		40.0	49.59		ug/L		102	75 - 125
Nickel	0.49	B	40.0	39.39		ug/L		97	75 - 125
Selenium	1.2	B	40.0	39.88		ug/L		97	75 - 125
Silver	0.042	B	40.0	38.77		ug/L		97	75 - 125
Strontium	198		40.0	240.6	X	ug/L		107	75 - 125
Thallium	0.050	U	40.0	39.85		ug/L		100	75 - 125
Tin	0.77	U	40.0	39.41		ug/L		99	75 - 125
Uranium	3.4		40.0	43.02		ug/L		99	75 - 125
Zinc	7.7	B C	40.0	46.58		ug/L		97	75 - 125

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-001 / X18-005 / S18-001

TestAmerica Job ID: 280-105343-1
SDG: DN0303

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

Lab Sample ID: 280-105343-10 MS — **Client Sample ID: B3FTK5**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 401995 — **Prep Batch: 401443**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Thorium	1.2	U	40.0	41.16		ug/L		103	75 - 125

Lab Sample ID: 280-105343-10 MSD — **Client Sample ID: B3FTK5**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 401889 — **Prep Batch: 401443**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	9.2	B	400	398.2		ug/L		100	75 - 125	1	20
Antimony	0.40	U	40.0	41.35		ug/L		103	75 - 125	3	20
Arsenic	2.1	B	40.0	40.92		ug/L		97	75 - 125	2	20
Barium	34.9		40.0	75.81		ug/L		102	75 - 125	3	20
Beryllium	0.080	U	40.0	40.93		ug/L		102	75 - 125	1	20
Cadmium	0.27	U	40.0	41.44		ug/L		104	75 - 125	1	20
Chromium	3.5		40.0	43.26		ug/L		99	75 - 125	1	20
Cobalt	0.054	U	40.0	40.26		ug/L		101	75 - 125	1	20
Copper	0.56	U	40.0	40.22		ug/L		101	75 - 125	2	20
Lead	0.18	U	40.0	40.01		ug/L		100	75 - 125	1	20
Manganese	0.91	B	40.0	42.75		ug/L		105	75 - 125	2	20
Molybdenum	8.7		40.0	50.25		ug/L		104	75 - 125	1	20
Nickel	0.49	B	40.0	39.79		ug/L		98	75 - 125	1	20
Selenium	1.2	B	40.0	41.70		ug/L		101	75 - 125	4	20
Silver	0.042	B	40.0	40.44		ug/L		101	75 - 125	4	20
Strontium	198		40.0	248.2	X	ug/L		126	75 - 125	3	20
Thallium	0.050	U	40.0	40.24		ug/L		101	75 - 125	1	20
Tin	0.77	U	40.0	41.29		ug/L		103	75 - 125	5	20
Uranium	3.4		40.0	43.37		ug/L		100	75 - 125	1	20
Zinc	7.7	B C	40.0	49.40		ug/L		104	75 - 125	6	20

Lab Sample ID: 280-105343-10 MSD — **Client Sample ID: B3FTK5**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 401995 — **Prep Batch: 401443**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Thorium	1.2	U	40.0	42.14		ug/L		105	75 - 125	2	20

Lab Sample ID: MB 280-401430/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 401889 — **Prep Batch: 401430**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9.2	U	50.0	9.2	ug/L		01/16/18 07:26	01/16/18 16:12	1
Antimony	0.40	U	2.0	0.40	ug/L		01/16/18 07:26	01/16/18 16:12	1
Arsenic	0.33	U	5.0	0.33	ug/L		01/16/18 07:26	01/16/18 16:12	1
Barium	0.29	U	1.0	0.29	ug/L		01/16/18 07:26	01/16/18 16:12	1
Beryllium	0.080	U	1.0	0.080	ug/L		01/16/18 07:26	01/16/18 16:12	1
Cadmium	0.27	U	1.0	0.27	ug/L		01/16/18 07:26	01/16/18 16:12	1
Chromium	0.50	U	2.0	0.50	ug/L		01/16/18 07:26	01/16/18 16:12	1
Cobalt	0.054	U	1.0	0.054	ug/L		01/16/18 07:26	01/16/18 16:12	1
Copper	0.56	U	2.0	0.56	ug/L		01/16/18 07:26	01/16/18 16:12	1

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-001 / X18-005 / S18-001

TestAmerica Job ID: 280-105343-1
SDG: DN0303

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

Lab Sample ID: MB 280-401430/1-A
Matrix: Water
Analysis Batch: 401889

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 401430

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.18	U	1.0	0.18	ug/L		01/16/18 07:26	01/16/18 16:12	1
Manganese	0.31	U	1.0	0.31	ug/L		01/16/18 07:26	01/16/18 16:12	1
Molybdenum	0.14	U	2.0	0.14	ug/L		01/16/18 07:26	01/16/18 16:12	1
Nickel	0.30	U	2.0	0.30	ug/L		01/16/18 07:26	01/16/18 16:12	1
Selenium	0.70	U	5.0	0.70	ug/L		01/16/18 07:26	01/16/18 16:12	1
Silver	0.033	U	5.0	0.033	ug/L		01/16/18 07:26	01/16/18 16:12	1
Strontium	0.30	U	10.0	0.30	ug/L		01/16/18 07:26	01/16/18 16:12	1
Thallium	0.050	U	1.0	0.050	ug/L		01/16/18 07:26	01/16/18 16:12	1
Tin	0.77	U	10.0	0.77	ug/L		01/16/18 07:26	01/16/18 16:12	1
Uranium	0.050	U	1.0	0.050	ug/L		01/16/18 07:26	01/16/18 16:12	1
Zinc	2.0	U	10.0	2.0	ug/L		01/16/18 07:26	01/16/18 16:12	1

Lab Sample ID: MB 280-401430/1-A
Matrix: Water
Analysis Batch: 401995

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 401430

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	1.2	U	5.0	1.2	ug/L		01/16/18 07:26	01/17/18 18:14	1

Lab Sample ID: LCS 280-401430/2-A
Matrix: Water
Analysis Batch: 401889

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 401430

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	400	401.3		ug/L		100	80 - 120
Antimony	40.0	38.23		ug/L		96	80 - 120
Arsenic	40.0	38.63		ug/L		97	80 - 120
Barium	40.0	35.97		ug/L		90	80 - 120
Beryllium	40.0	38.44		ug/L		96	80 - 120
Cadmium	40.0	42.50		ug/L		106	80 - 120
Chromium	40.0	41.16		ug/L		103	80 - 120
Cobalt	40.0	42.53		ug/L		106	80 - 120
Copper	40.0	41.86		ug/L		105	80 - 120
Lead	40.0	41.44		ug/L		104	80 - 120
Manganese	40.0	41.22		ug/L		103	80 - 120
Molybdenum	40.0	41.04		ug/L		103	80 - 120
Nickel	40.0	41.79		ug/L		104	80 - 120
Selenium	40.0	39.38		ug/L		98	80 - 120
Silver	40.0	40.51		ug/L		101	80 - 120
Strontium	40.0	42.58		ug/L		106	80 - 120
Thallium	40.0	41.21		ug/L		103	80 - 120
Tin	40.0	40.42		ug/L		101	80 - 120
Uranium	40.0	40.42		ug/L		101	80 - 120
Zinc	40.0	43.48		ug/L		109	80 - 120

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

Lab Sample ID: LCS 280-401430/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 401995 — **Prep Batch: 401430**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Thorium	40.0	39.95		ug/L		100	80 - 120

Lab Sample ID: 280-105343-11 MS — **Client Sample ID: B3FTK9**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 401889 — **Prep Batch: 401430**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	9.2	U	400	404.6		ug/L		101	75 - 125
Antimony	0.40	U	40.0	40.68		ug/L		102	75 - 125
Arsenic	2.3	B	40.0	40.11		ug/L		95	75 - 125
Barium	37.8		40.0	74.68		ug/L		92	75 - 125
Beryllium	0.080	U	40.0	41.05		ug/L		103	75 - 125
Cadmium	0.27	U	40.0	43.96		ug/L		110	75 - 125
Chromium	3.3		40.0	43.95		ug/L		102	75 - 125
Cobalt	0.080	B	40.0	40.38		ug/L		101	75 - 125
Copper	0.56	U	40.0	40.47		ug/L		101	75 - 125
Lead	0.18	U	40.0	39.90		ug/L		100	75 - 125
Manganese	0.31	B	40.0	40.52		ug/L		101	75 - 125
Molybdenum	9.1		40.0	50.26		ug/L		103	75 - 125
Nickel	0.42	B	40.0	41.02		ug/L		101	75 - 125
Selenium	1.3	B	40.0	41.45		ug/L		100	75 - 125
Silver	0.043	B	40.0	40.29		ug/L		101	75 - 125
Strontium	211		40.0	255.8	X	ug/L		112	75 - 125
Thallium	0.050	U	40.0	39.94		ug/L		100	75 - 125
Tin	0.77	U	40.0	39.87		ug/L		100	75 - 125
Uranium	3.6		40.0	43.68		ug/L		100	75 - 125
Zinc	2.0	U	40.0	41.40		ug/L		103	75 - 125

Lab Sample ID: 280-105343-11 MS — **Client Sample ID: B3FTK9**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 401995 — **Prep Batch: 401430**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Thorium	1.2	U	40.0	41.69		ug/L		104	75 - 125

Lab Sample ID: 280-105343-11 MSD — **Client Sample ID: B3FTK9**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 401889 — **Prep Batch: 401430**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	9.2	U	400	411.4		ug/L		103	75 - 125	2	20
Antimony	0.40	U	40.0	42.71		ug/L		107	75 - 125	5	20
Arsenic	2.3	B	40.0	41.22		ug/L		97	75 - 125	3	20
Barium	37.8		40.0	74.07		ug/L		91	75 - 125	1	20
Beryllium	0.080	U	40.0	42.01		ug/L		105	75 - 125	2	20
Cadmium	0.27	U	40.0	44.48		ug/L		111	75 - 125	1	20
Chromium	3.3		40.0	44.54		ug/L		103	75 - 125	1	20
Cobalt	0.080	B	40.0	41.01		ug/L		102	75 - 125	2	20
Copper	0.56	U	40.0	40.77		ug/L		102	75 - 125	1	20

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

Lab Sample ID: 280-105343-11 MSD — **Client Sample ID: B3FTK9**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 401889 — **Prep Batch: 401430**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	0.18	U	40.0	40.67		ug/L		102	75 - 125	2	20
Manganese	0.31	B	40.0	41.88		ug/L		104	75 - 125	3	20
Molybdenum	9.1		40.0	51.33		ug/L		106	75 - 125	2	20
Nickel	0.42	B	40.0	41.72		ug/L		103	75 - 125	2	20
Selenium	1.3	B	40.0	41.09		ug/L		99	75 - 125	1	20
Silver	0.043	B	40.0	41.06		ug/L		103	75 - 125	2	20
Strontium	211		40.0	250.4	X	ug/L		98	75 - 125	2	20
Thallium	0.050	U	40.0	40.55		ug/L		101	75 - 125	1	20
Tin	0.77	U	40.0	41.69		ug/L		104	75 - 125	4	20
Uranium	3.6		40.0	43.91		ug/L		101	75 - 125	1	20
Zinc	2.0	U	40.0	45.42		ug/L		114	75 - 125	9	20

Lab Sample ID: 280-105343-11 MSD — **Client Sample ID: B3FTK9**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 401995 — **Prep Batch: 401430**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Thorium	1.2	U	40.0	41.42		ug/L		104	75 - 125	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 280-401760/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 401864 — **Prep Batch: 401760**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027	U	0.20	0.027	ug/L		01/16/18 12:06	01/16/18 16:15	1

Lab Sample ID: LCS 280-401760/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 401864 — **Prep Batch: 401760**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	4.80		ug/L		96	80 - 120

Lab Sample ID: MB 280-401761/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 401864 — **Prep Batch: 401761**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027	U	0.20	0.027	ug/L		01/16/18 12:06	01/16/18 17:16	1

Lab Sample ID: LCS 280-401761/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 401864 — **Prep Batch: 401761**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	4.85		ug/L		97	80 - 120

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-001 / X18-005 / S18-001

TestAmerica Job ID: 280-105343-1
SDG: DN0303

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 280-105343-10 MS — **Client Sample ID: B3FTK5**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 401864 — **Prep Batch: 401761**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.027	U	5.00	4.90		ug/L		98	75 - 125

Lab Sample ID: 280-105343-10 MSD — **Client Sample ID: B3FTK5**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 401864 — **Prep Batch: 401761**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.027	U	5.00	4.87		ug/L		97	75 - 125	1	20

Lab Sample ID: 280-105343-11 MS — **Client Sample ID: B3FTK9**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 401864 — **Prep Batch: 401760**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.027	U	5.00	4.96		ug/L		99	75 - 125

Lab Sample ID: 280-105343-11 MSD — **Client Sample ID: B3FTK9**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 401864 — **Prep Batch: 401760**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.027	U	5.00	4.95		ug/L		99	75 - 125	0	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-401469/5 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 401469

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	3190	B	5000	1070	ug/L			01/11/18 19:42	1
Bicarbonate Alkalinity as CaCO3	1070	U	5000	1070	ug/L			01/11/18 19:42	1
Carbonate Alkalinity as CaCO3	2210	B	5000	1070	ug/L			01/11/18 19:42	1
Hydroxide Alkalinity as CaCO3	1070	U	5000	1070	ug/L			01/11/18 19:42	1

Lab Sample ID: LCS 280-401469/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 401469

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity as CaCO3	200000	188400		ug/L		94	80 - 120

Lab Sample ID: 280-105343-22 DU — **Client Sample ID: B3FYH8**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 401469

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity as CaCO3	110000		109300		ug/L		0.4	20

QC Association Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-001 / X18-005 / S18-001

TestAmerica Job ID: 280-105343-1
SDG: DN0303

GC/MS VOA

Analysis Batch: 401712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-105343-4	B3H037	Total/NA	Water	8260B	
280-105343-5	B3FY58	Total/NA	Water	8260B	
280-105343-13	B3FY72	Total/NA	Water	8260B	
280-105343-19	B3FY71	Total/NA	Water	8260B	
MB 280-401712/6	Method Blank	Total/NA	Water	8260B	
LCS 280-401712/4	Lab Control Sample	Total/NA	Water	8260B	
280-105343-4 MS	B3H037	Total/NA	Water	8260B	
280-105343-4 MSD	B3H037	Total/NA	Water	8260B	

GC Semi VOA

Prep Batch: 401404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-105343-1	B3FXD7	Total/NA	Water	3510C	
280-105343-8	B3FYD4	Total/NA	Water	3510C	
280-105343-21	B3FYD7	Total/NA	Water	3510C	
MB 280-401404/1-A	Method Blank	Total/NA	Water	3510C	
LCS 280-401404/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 280-401404/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 280-401404/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 280-401404/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	
280-105343-1 MS	B3FXD7	Total/NA	Water	3510C	
280-105343-1 MS	B3FXD7	Total/NA	Water	3510C	
280-105343-1 MSD	B3FXD7	Total/NA	Water	3510C	
280-105343-1 MSD	B3FXD7	Total/NA	Water	3510C	

Prep Batch: 401509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-105343-1	B3FXD7	Total/NA	Water	8151A	
280-105343-8	B3FYD4	Total/NA	Water	8151A	
280-105343-9	B3FYC6	Total/NA	Water	8151A	
280-105343-14	B3FYC5	Total/NA	Water	8151A	
MB 280-401509/1-A	Method Blank	Total/NA	Water	8151A	
LCS 280-401509/2-A	Lab Control Sample	Total/NA	Water	8151A	
LCSD 280-401509/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	
280-105343-1 MS	B3FXD7	Total/NA	Water	8151A	
280-105343-1 MSD	B3FXD7	Total/NA	Water	8151A	

Analysis Batch: 402014

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-105343-1	B3FXD7	Total/NA	Water	8082A	401404
MB 280-401404/1-A	Method Blank	Total/NA	Water	8082A	401404
LCS 280-401404/4-A	Lab Control Sample	Total/NA	Water	8082A	401404
LCSD 280-401404/5-A	Lab Control Sample Dup	Total/NA	Water	8082A	401404
280-105343-1 MS	B3FXD7	Total/NA	Water	8082A	401404
280-105343-1 MSD	B3FXD7	Total/NA	Water	8082A	401404

Analysis Batch: 402056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-105343-1	B3FXD7	Total/NA	Water	8151A	401509

GC Semi VOA (Continued)

Analysis Batch: 402056 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-105343-8	B3FYD4	Total/NA	Water	8151A	401509
280-105343-9	B3FYC6	Total/NA	Water	8151A	401509
280-105343-14	B3FYC5	Total/NA	Water	8151A	401509
MB 280-401509/1-A	Method Blank	Total/NA	Water	8151A	401509
LCS 280-401509/2-A	Lab Control Sample	Total/NA	Water	8151A	401509
LCSD 280-401509/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	401509
280-105343-1 MS	B3FXD7	Total/NA	Water	8151A	401509
280-105343-1 MSD	B3FXD7	Total/NA	Water	8151A	401509

Analysis Batch: 402644

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-105343-1	B3FXD7	Total/NA	Water	8081B	401404
280-105343-8	B3FYD4	Total/NA	Water	8081B	401404
280-105343-21	B3FYD7	Total/NA	Water	8081B	401404
MB 280-401404/1-A	Method Blank	Total/NA	Water	8081B	401404
LCS 280-401404/2-A	Lab Control Sample	Total/NA	Water	8081B	401404
LCSD 280-401404/3-A	Lab Control Sample Dup	Total/NA	Water	8081B	401404
280-105343-1 MS	B3FXD7	Total/NA	Water	8081B	401404
280-105343-1 MSD	B3FXD7	Total/NA	Water	8081B	401404

Metals

Prep Batch: 401429

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-105343-2	B3FTM0	Dissolved	Water	3005A	
280-105343-6	B3FTL9	Dissolved	Water	3005A	
280-105343-11	B3FTK9	Dissolved	Water	3005A	
280-105343-12	B3FTK3	Dissolved	Water	3005A	
280-105343-16	B3FR89	Dissolved	Water	3005A	
280-105343-17	B3FR72	Dissolved	Water	3005A	
280-105343-20	B3FVD2	Dissolved	Water	3005A	
MB 280-401429/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-401429/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-105343-12 MS	B3FTK3	Dissolved	Water	3005A	
280-105343-12 MSD	B3FTK3	Dissolved	Water	3005A	

Prep Batch: 401430

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-105343-2	B3FTM0	Dissolved	Water	3005A	
280-105343-6	B3FTL9	Dissolved	Water	3005A	
280-105343-11	B3FTK9	Dissolved	Water	3005A	
280-105343-16	B3FR89	Dissolved	Water	3005A	
280-105343-17	B3FR72	Dissolved	Water	3005A	
MB 280-401430/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-401430/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-105343-11 MS	B3FTK9	Dissolved	Water	3005A	
280-105343-11 MSD	B3FTK9	Dissolved	Water	3005A	

QC Association Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-001 / X18-005 / S18-001

TestAmerica Job ID: 280-105343-1
SDG: DN0303

Metals (Continued)

Prep Batch: 401442

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-105343-3	B3FTL2	Total/NA	Water	3010A	
280-105343-7	B3FTL1	Total/NA	Water	3010A	
280-105343-10	B3FTK5	Total/NA	Water	3010A	
280-105343-13	B3FY72	Total/NA	Water	3010A	
280-105343-15	B3FR85	Total/NA	Water	3010A	
280-105343-18	B3FYD1	Total/NA	Water	3010A	
280-105343-19	B3FY71	Total/NA	Water	3010A	
MB 280-401442/1-A	Method Blank	Total/NA	Water	3010A	
LCS 280-401442/2-A	Lab Control Sample	Total/NA	Water	3010A	
280-105343-13 MS	B3FY72	Total/NA	Water	3010A	
280-105343-13 MSD	B3FY72	Total/NA	Water	3010A	

Prep Batch: 401443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-105343-3	B3FTL2	Total/NA	Water	3020A	
280-105343-7	B3FTL1	Total/NA	Water	3020A	
280-105343-10	B3FTK5	Total/NA	Water	3020A	
280-105343-15	B3FR85	Total/NA	Water	3020A	
280-105343-18	B3FYD1	Total/NA	Water	3020A	
MB 280-401443/1-A	Method Blank	Total/NA	Water	3020A	
LCS 280-401443/2-A	Lab Control Sample	Total/NA	Water	3020A	
280-105343-10 MS	B3FTK5	Total/NA	Water	3020A	
280-105343-10 MSD	B3FTK5	Total/NA	Water	3020A	

Prep Batch: 401760

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-105343-2	B3FTM0	Dissolved	Water	7470A	
280-105343-6	B3FTL9	Dissolved	Water	7470A	
280-105343-11	B3FTK9	Dissolved	Water	7470A	
280-105343-16	B3FR89	Dissolved	Water	7470A	
280-105343-17	B3FR72	Dissolved	Water	7470A	
MB 280-401760/1-A	Method Blank	Total/NA	Water	7470A	
LCS 280-401760/2-A	Lab Control Sample	Total/NA	Water	7470A	
280-105343-11 MS	B3FTK9	Dissolved	Water	7470A	
280-105343-11 MSD	B3FTK9	Dissolved	Water	7470A	

Prep Batch: 401761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-105343-3	B3FTL2	Total/NA	Water	7470A	
280-105343-7	B3FTL1	Total/NA	Water	7470A	
280-105343-10	B3FTK5	Total/NA	Water	7470A	
280-105343-15	B3FR85	Total/NA	Water	7470A	
280-105343-18	B3FYD1	Total/NA	Water	7470A	
MB 280-401761/1-A	Method Blank	Total/NA	Water	7470A	
LCS 280-401761/2-A	Lab Control Sample	Total/NA	Water	7470A	
280-105343-10 MS	B3FTK5	Total/NA	Water	7470A	
280-105343-10 MSD	B3FTK5	Total/NA	Water	7470A	

Analysis Batch: 401861

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-105343-2	B3FTM0	Dissolved	Water	6010D	401429

QC Association Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-001 / X18-005 / S18-001

TestAmerica Job ID: 280-105343-1
SDG: DN0303

Metals (Continued)

Analysis Batch: 401861 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-105343-6	B3FTL9	Dissolved	Water	6010D	401429
280-105343-11	B3FTK9	Dissolved	Water	6010D	401429
280-105343-12	B3FTK3	Dissolved	Water	6010D	401429
280-105343-16	B3FR89	Dissolved	Water	6010D	401429
280-105343-17	B3FR72	Dissolved	Water	6010D	401429
280-105343-20	B3FVD2	Dissolved	Water	6010D	401429
MB 280-401429/1-A	Method Blank	Total Recoverable	Water	6010D	401429
LCS 280-401429/2-A	Lab Control Sample	Total Recoverable	Water	6010D	401429
280-105343-12 MS	B3FTK3	Dissolved	Water	6010D	401429
280-105343-12 MSD	B3FTK3	Dissolved	Water	6010D	401429

Analysis Batch: 401864

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-105343-2	B3FTM0	Dissolved	Water	7470A	401760
280-105343-3	B3FTL2	Total/NA	Water	7470A	401761
280-105343-6	B3FTL9	Dissolved	Water	7470A	401760
280-105343-7	B3FTL1	Total/NA	Water	7470A	401761
280-105343-10	B3FTK5	Total/NA	Water	7470A	401761
280-105343-11	B3FTK9	Dissolved	Water	7470A	401760
280-105343-15	B3FR85	Total/NA	Water	7470A	401761
280-105343-16	B3FR89	Dissolved	Water	7470A	401760
280-105343-17	B3FR72	Dissolved	Water	7470A	401760
280-105343-18	B3FYD1	Total/NA	Water	7470A	401761
MB 280-401760/1-A	Method Blank	Total/NA	Water	7470A	401760
MB 280-401761/1-A	Method Blank	Total/NA	Water	7470A	401761
LCS 280-401760/2-A	Lab Control Sample	Total/NA	Water	7470A	401760
LCS 280-401761/2-A	Lab Control Sample	Total/NA	Water	7470A	401761
280-105343-10 MS	B3FTK5	Total/NA	Water	7470A	401761
280-105343-10 MSD	B3FTK5	Total/NA	Water	7470A	401761
280-105343-11 MS	B3FTK9	Dissolved	Water	7470A	401760
280-105343-11 MSD	B3FTK9	Dissolved	Water	7470A	401760

Analysis Batch: 401889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-105343-2	B3FTM0	Dissolved	Water	6020B	401430
280-105343-3	B3FTL2	Total/NA	Water	6020B	401443
280-105343-6	B3FTL9	Dissolved	Water	6020B	401430
280-105343-7	B3FTL1	Total/NA	Water	6020B	401443
280-105343-10	B3FTK5	Total/NA	Water	6020B	401443
280-105343-11	B3FTK9	Dissolved	Water	6020B	401430
280-105343-15	B3FR85	Total/NA	Water	6020B	401443
280-105343-16	B3FR89	Dissolved	Water	6020B	401430
280-105343-17	B3FR72	Dissolved	Water	6020B	401430
280-105343-18	B3FYD1	Total/NA	Water	6020B	401443
MB 280-401430/1-A	Method Blank	Total Recoverable	Water	6020B	401430
MB 280-401443/1-A	Method Blank	Total/NA	Water	6020B	401443
LCS 280-401430/2-A	Lab Control Sample	Total Recoverable	Water	6020B	401430
LCS 280-401443/2-A	Lab Control Sample	Total/NA	Water	6020B	401443
280-105343-10 MS	B3FTK5	Total/NA	Water	6020B	401443
280-105343-10 MSD	B3FTK5	Total/NA	Water	6020B	401443
280-105343-11 MS	B3FTK9	Dissolved	Water	6020B	401430

QC Association Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-001 / X18-005 / S18-001

TestAmerica Job ID: 280-105343-1
SDG: DN0303

Metals (Continued)

Analysis Batch: 401889 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-105343-11 MSD	B3FTK9	Dissolved	Water	6020B	401430

Analysis Batch: 401995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-105343-2	B3FTM0	Dissolved	Water	6020B	401430
280-105343-3	B3FTL2	Total/NA	Water	6020B	401443
280-105343-6	B3FTL9	Dissolved	Water	6020B	401430
280-105343-7	B3FTL1	Total/NA	Water	6020B	401443
280-105343-10	B3FTK5	Total/NA	Water	6020B	401443
280-105343-11	B3FTK9	Dissolved	Water	6020B	401430
280-105343-15	B3FR85	Total/NA	Water	6020B	401443
280-105343-16	B3FR89	Dissolved	Water	6020B	401430
280-105343-17	B3FR72	Dissolved	Water	6020B	401430
280-105343-18	B3FYD1	Total/NA	Water	6020B	401443
MB 280-401430/1-A	Method Blank	Total Recoverable	Water	6020B	401430
MB 280-401443/1-A	Method Blank	Total/NA	Water	6020B	401443
LCS 280-401430/2-A	Lab Control Sample	Total Recoverable	Water	6020B	401430
LCS 280-401443/2-A	Lab Control Sample	Total/NA	Water	6020B	401443
280-105343-10 MS	B3FTK5	Total/NA	Water	6020B	401443
280-105343-10 MSD	B3FTK5	Total/NA	Water	6020B	401443
280-105343-11 MS	B3FTK9	Dissolved	Water	6020B	401430
280-105343-11 MSD	B3FTK9	Dissolved	Water	6020B	401430

Analysis Batch: 402000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-105343-3	B3FTL2	Total/NA	Water	6010D	401442
280-105343-7	B3FTL1	Total/NA	Water	6010D	401442
280-105343-10	B3FTK5	Total/NA	Water	6010D	401442
280-105343-13	B3FY72	Total/NA	Water	6010D	401442
280-105343-15	B3FR85	Total/NA	Water	6010D	401442
280-105343-18	B3FYD1	Total/NA	Water	6010D	401442
280-105343-19	B3FY71	Total/NA	Water	6010D	401442
MB 280-401442/1-A	Method Blank	Total/NA	Water	6010D	401442
LCS 280-401442/2-A	Lab Control Sample	Total/NA	Water	6010D	401442
280-105343-13 MS	B3FY72	Total/NA	Water	6010D	401442
280-105343-13 MSD	B3FY72	Total/NA	Water	6010D	401442

Prep Batch: 402029

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-105343-2	B3FTM0	Dissolved	Water	3005A	
280-105343-6	B3FTL9	Dissolved	Water	3005A	
280-105343-11	B3FTK9	Dissolved	Water	3005A	
280-105343-12	B3FTK3	Dissolved	Water	3005A	
280-105343-16	B3FR89	Dissolved	Water	3005A	
280-105343-17	B3FR72	Dissolved	Water	3005A	
280-105343-20	B3FVD2	Dissolved	Water	3005A	
MB 280-402029/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-402029/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-105343-12 MS	B3FTK3	Dissolved	Water	3005A	
280-105343-12 MSD	B3FTK3	Dissolved	Water	3005A	

QC Association Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-001 / X18-005 / S18-001

TestAmerica Job ID: 280-105343-1
SDG: DN0303

Metals (Continued)

Analysis Batch: 402104

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-105343-3	B3FTL2	Total/NA	Water	6010D	401442
280-105343-7	B3FTL1	Total/NA	Water	6010D	401442
280-105343-10	B3FTK5	Total/NA	Water	6010D	401442
280-105343-13	B3FY72	Total/NA	Water	6010D	401442
280-105343-15	B3FR85	Total/NA	Water	6010D	401442
280-105343-18	B3FYD1	Total/NA	Water	6010D	401442
280-105343-19	B3FY71	Total/NA	Water	6010D	401442
MB 280-401442/1-A	Method Blank	Total/NA	Water	6010D	401442
LCS 280-401442/2-A	Lab Control Sample	Total/NA	Water	6010D	401442
280-105343-13 MS	B3FY72	Total/NA	Water	6010D	401442
280-105343-13 MSD	B3FY72	Total/NA	Water	6010D	401442

Prep Batch: 402125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-105343-13	B3FY72	Total/NA	Water	3010A	
280-105343-19	B3FY71	Total/NA	Water	3010A	
MB 280-402125/1-A	Method Blank	Total/NA	Water	3010A	
LCS 280-402125/2-A	Lab Control Sample	Total/NA	Water	3010A	
280-105343-13 MS	B3FY72	Total/NA	Water	3010A	
280-105343-13 MSD	B3FY72	Total/NA	Water	3010A	

Analysis Batch: 402129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-105343-2	B3FTM0	Dissolved	Water	6010D	402029
280-105343-6	B3FTL9	Dissolved	Water	6010D	402029
280-105343-11	B3FTK9	Dissolved	Water	6010D	402029
280-105343-12	B3FTK3	Dissolved	Water	6010D	402029
280-105343-16	B3FR89	Dissolved	Water	6010D	402029
280-105343-17	B3FR72	Dissolved	Water	6010D	402029
280-105343-20	B3FVD2	Dissolved	Water	6010D	402029
MB 280-402029/1-A	Method Blank	Total Recoverable	Water	6010D	402029
LCS 280-402029/2-A	Lab Control Sample	Total Recoverable	Water	6010D	402029
280-105343-12 MS	B3FTK3	Dissolved	Water	6010D	402029
280-105343-12 MSD	B3FTK3	Dissolved	Water	6010D	402029

Analysis Batch: 402255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-105343-13	B3FY72	Total/NA	Water	6010D	402125
280-105343-19	B3FY71	Total/NA	Water	6010D	402125
MB 280-402125/1-A	Method Blank	Total/NA	Water	6010D	402125
LCS 280-402125/2-A	Lab Control Sample	Total/NA	Water	6010D	402125
280-105343-13 MS	B3FY72	Total/NA	Water	6010D	402125
280-105343-13 MSD	B3FY72	Total/NA	Water	6010D	402125

Analysis Batch: 402320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-105343-13	B3FY72	Total/NA	Water	6010D	402125
280-105343-19	B3FY71	Total/NA	Water	6010D	402125
MB 280-402125/1-A	Method Blank	Total/NA	Water	6010D	402125
LCS 280-402125/2-A	Lab Control Sample	Total/NA	Water	6010D	402125
280-105343-13 MS	B3FY72	Total/NA	Water	6010D	402125

QC Association Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-001 / X18-005 / S18-001

TestAmerica Job ID: 280-105343-1
SDG: DN0303

Metals (Continued)

Analysis Batch: 402320 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-105343-13 MSD	B3FY72	Total/NA	Water	6010D	402125

General Chemistry

Analysis Batch: 401469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-105343-5	B3FY58	Total/NA	Water	SM 2320B	
280-105343-13	B3FY72	Total/NA	Water	SM 2320B	
280-105343-22	B3FYH8	Total/NA	Water	SM 2320B	
MB 280-401469/5	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-401469/4	Lab Control Sample	Total/NA	Water	SM 2320B	
280-105343-22 DU	B3FYH8	Total/NA	Water	SM 2320B	

Surrogate Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-001 / X18-005 / S18-001

TestAmerica Job ID: 280-105343-1
SDG: DN0303

Method: 8260B - Volatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
280-105343-4	B3H037	91	108	94	107
280-105343-4 MS	B3H037	94	101	98	101
280-105343-4 MSD	B3H037	104	102	101	101
280-105343-5	B3FY58	108	107	105	103
280-105343-13	B3FY72	108	105	105	102
280-105343-19	B3FY71	107	106	103	100
LCS 280-401712/4	Lab Control Sample	108	100	101	97
MB 280-401712/6	Method Blank	108	106	104	96

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		DCBP1	TCX1
Lab Sample ID	Client Sample ID	(34-122)	(28-115)
280-105343-1	B3FXD7	95	81
280-105343-1 MS	B3FXD7	96	80
280-105343-1 MSD	B3FXD7	93	76
280-105343-8	B3FYD4	87	65
280-105343-21	B3FYD7	98	70
LCS 280-401404/2-A	Lab Control Sample	95	77
LCSD 280-401404/3-A	Lab Control Sample Dup	97	78
MB 280-401404/1-A	Method Blank	103	85

Surrogate Legend

DCBP = Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

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

		Percent Surrogate Recovery (Acceptance Limits)	
		DCBP2	TCX2
Lab Sample ID	Client Sample ID	(30-136)	(25-120)
280-105343-1	B3FXD7	98	87
280-105343-1 MS	B3FXD7	102	90
280-105343-1 MSD	B3FXD7	99	88
LCS 280-401404/4-A	Lab Control Sample	107	92
LCSD 280-401404/5-A	Lab Control Sample Dup	101	88
MB 280-401404/1-A	Method Blank	99	89

Surrogate Legend

DCBP = Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Surrogate Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-001 / X18-005 / S18-001

TestAmerica Job ID: 280-105343-1
SDG: DN0303

Method: 8151A - Herbicides (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	DCPAA1 (39-135)							
280-105343-1	B3FXD7	89							
280-105343-1 MS	B3FXD7	80							
280-105343-1 MSD	B3FXD7	93							
280-105343-8	B3FYD4	87							
280-105343-9	B3FYC6	82							
280-105343-14	B3FYC5	80							
LCS 280-401509/2-A	Lab Control Sample	86							
LCSD 280-401509/3-A	Lab Control Sample Dup	85							
MB 280-401509/1-A	Method Blank	85							

Surrogate Legend

DCPAA = DCAA