TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 160-27350-1
TestAmerica Sample Delivery Group: SL2824
Client Project/Site: F17-062

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

Attn: Mr. Scot Fitzgerald

Authorized for release by:
4/13/2018 5:32:31 PM

Jayna Awalt, Project Manager II
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LINKS

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

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

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Job ID: 160-27350-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

CH2MHill Plateau Remediation Company
P.O. Box 1600
Richland, Washington 99352
April 13, 2018
Attention: Scot Fitzgerald

SDG	: SL2824
Number of Samples	: 10 samples
Sample Matrix	: Soil
Data Deliverable	: Summary
Date SDG Closed	: March 15, 2018

II. Introduction

On March 15, 10 samples were received by TestAmerica - St. Louis for analysis. The samples were received within temperature criteria. See the COC and receipt checklists for documentation of any variations on receipt conditions and temperature. Upon receipt, samples were given laboratory Ids to correspond with specific client Ids. Please refer to the Sample Summary sheets attached to this case narrative. This report is incomplete without the narrative.

The following SAFs are associated with this SDG: F17-062

III. Analytical Results/ Methodology

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

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

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

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

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

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

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

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

Job ID: 160-27350-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

IV. Definitions

QCBLK- Quality Control Blank, Method Blank
QCLCS- Quality Control Laboratory Control Sample, Blank Spike
DUP- Laboratory Duplicate
MS- Matrix Spike
MSD- Matrix Spike Duplicate

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

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

- **B** - For inorganic analyses, the sample result is greater than the MDL but less than the RL.
- **B** - For organic analyses, Method Blank contamination. The Method Blank contains the target analyte above the MDL/RL and Method Blank is greater than 5% of the sample concentration.
- **B** - For inorganics and radiochemistry, Method Blank reported above the MDC/MDL.
- **J** - For organic analyses, the sample is estimated and less than the RL. If on Method Blank, indicates Method Blank contamination.
- **C** - For inorganic analyses, Method Blank contamination. The Method Blank contains the target analyte at a concentration above the MDL/RL and Method Blank concentration is greater than 5% of the sample concentration.
- **D** - For all analyses, the sample result was obtained from the analysis of a dilution. For ICPMS Metals analyses, per standard practice, all samples are initially prepared at a 2x dilution. This standard dilution does not affect reporting limits as MDL studies are also prepared in the same manner and will not be narrated below. Only dilutions above 2x will be narrated and considered a true dilution for these samples.
- **N** - For inorganics, rad and GC analyses, the spike/spike duplicate recoveries are outside QC limits.
- **T** - For GCMS analyses, the spike/spike duplicate recoveries are outside QC limits.
- **o** - For all analyses, the LCS (LCSD) recoveries are outside QC limits.
- **P -** For organic analyses (PCB/Pests only), the aroclor target analyte has greater than 25% difference for detected concentrations between the two GC columns.
- **X-** Organics and Anions IC - Sample concentration over calibration and/or surrogate recovery outside QC limits.
- **X-** Inorganics - The analyte present in the original sample is > 4x the spike concentration.
- **X-** Radiochemistry - Carrier or Tracer recovery is outside limits.
- **Z-** Sample was prepped or analyzed beyond the specified sample holding time.
- **y -** RPD is outside established limits.

ICPMS Metals

Batch: 358562

Due to the high concentration of Aluminum, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 160-356431 and analytical batch 160-358562 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria. (160-27350-A-1-E MS) and (160-27350-A-1-F MSD) This analyte has been qualified accordingly with an "X" flag in the MS/MSD.

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 160-356431 and analytical batch 160-358562 were outside control limits for Manganese. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits. (160-27350-A-1-E MS) and (160-27350-A-1-F MSD) This analyte has been qualified accordingly with an "N" flag in the associated samples.

The following samples were diluted due to the abundance of non-target analytes. Samples are high in salts which can cause instrument and QC failures when ran at a lesser dilution: B3H274 (160-27350-1), B3H277 (160-27350-2), B3H280 (160-27350-3), B3H283 (160-27350-4), B3H286 (160-27350-5), B3H2B3 (160-27350-6), B3H2B6 (160-27350-7), B3H2B9 (160-27350-8), B3H2C2 (160-27350-9), B3H2D4 (160-27350-10), (160-27350-A-1-E MS), (160-27350-A-1-F MSD) and (160-27350-A-1-D SD). Elevated reporting limits (RLs) are provided. These analytes have been qualified accordingly with a "D" flag in the associated samples.

Job ID: 160-27350-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

Batch: 358564

The following samples were diluted due to the abundance of non-target analytes. Samples are high in salts which can cause instrument and QC failures when ran at a lesser dilution: B3H274 (160-27350-1), B3H277 (160-27350-2), B3H280 (160-27350-3), B3H283 (160-27350-4), B3H286 (160-27350-5), B3H2B3 (160-27350-6), B3H2B6 (160-27350-7), B3H2B9 (160-27350-8), B3H2C2 (160-27350-9), B3H2D4 (160-27350-10), (160-27350-A-1-H MS), (160-27350-A-1-I MSD) and (160-27350-A-1-G SD). Elevated reporting limits (RLs) are provided. These analytes have been qualified accordingly with a "D" flag in the associated samples.

Ammonia as N

Batch: 360336

Ammonia was detected in method blank MB 160-360123/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged “B”. If the associated sample reported a result above the MDL and/or RL and MB is greater than 5% the sample concentration, the result has been flagged “C”.

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

Mercury
Total Cyanide

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

Reviewed and approved:

Jayna Awalt
St. Louis Project Manager

Login Sample Receipt Checklist

Client: CH2M Hill Plateau Remediation Company

Job Number: 160-27350-1
SDG Number: SL2824

Login Number: 27350
List Number: 1
Creator: Daniels, Brian J

List Source: TestAmerica St. Louis

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F17-062-621	PAGE 1 OF 1
COLLECTOR: Tim Callaway /CHPRC SL2824	COMPANY CONTACT: FITZGERALD, SL	TELEPHONE NO.: 373-7495	PROJECT COORDINATOR: FITZGERALD, SL	REQUIRED TAT: 30 Days	
SAMPLING LOCATION: C9865, Shallow Sample 1	PROJECT DESIGNATION: 200-DV-1 Operable Unit Characterization - Shallow Sampling - Soil 2017		SAF NO.: F17-062	ORIGINAL	
ICE CHEST NO.: GWS-~~244~~ 723 (723-4418)	FIELD LOGBOOK NO.: HNF-N-645 12 - 17	ACTUAL SAMPLE DEPTH: 2.0 to 4.3 ft	PURCHASE ORDER/CHARGE CODE: 303971	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: TestAmerica St. Louis	OFFSITE PROPERTY NO.: 9164		BILL OF LADING/AIR BILL NO.: 7800 5269 7952		

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

POSSIBLE SAMPLE HAZARDS/ REMARKS
*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 HANDLING AND/OR STORAGE
~~RADIOACTIVE TIE TO: B3H272~~
MAR 13 2018 DK

PRESERVATION	Cool <=6C	Cool <=6C	Cool <=6C
HOLDING TIME	28 Days	28 Days	14 Days
TYPE OF CONTAINER	G/P	G/P	aG
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	60mL	40mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	350.1_AMMONIA: COMMON;	9012_CYANIDE (TOTAL): COMMON;

SAMPLE NO.	FILTERED	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B3H274	N/A	SOIL	MAR 13 2018	0833	✓	✓	✓

CHAIN OF POSSESSION: RELINQUISHED BY/REMOVED FROM	DATE/TIME	SIGN/ PRINT NAMES: RECEIVED BY/STORED IN	DATE/TIME
Tim Callaway /CHPRC	MAR 13 2018 1430	SSU-1	MAR 13 2018 1430
SSU-1	MAR 14 2018 0715	Troy Bacon CHPRC	MAR 14 2018 0715
Troy Bacon CHPRC	MAR 14 2018 1400	FEDEX	
FED EX		Brian Harris	3/15/18 0920

SPECIAL INSTRUCTIONS
TRVL-18-028
(1) 7471_MERCURY_CV: COMMON (SOLIDS); 6020_METALS_ICPMS: COMMON {Aluminum, Barium, Cadmium, Chromium, Copper, Lead, Selenium}; 6020_METALS_ICPMS: COMMON (Add-on) {Antimony, Arsenic, Manganese, Nickel, Silver, Uranium};

FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

PRINTED ON 11/30/2017 FSR ID = FSR54226 TRVL NUM = TRVL-18-028 A-6003-618 (REV 3)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F17-062-624	PAGE 1 OF 1
COLLECTOR: Tim Callaway /CHPRC SL2824	COMPANY CONTACT: FITZGERALD, SL	TELEPHONE NO.: 373-7495	PROJECT COORDINATOR: FITZGERALD, SL	REQUIRED TAT 30 Days	
SAMPLING LOCATION: C9865, Shallow Sample 2	PROJECT DESIGNATION: 200-DV-1 Operable Unit Characterization - Shallow Sampling - Soil 2017		SAF NO.: F17-062	ORIGINAL	
ICE CHEST NO.: GWS-~~144~~ 723	FIELD LOGBOOK NO.: HNF-N-645 12 - 17	ACTUAL SAMPLE DEPTH: 4.3 to 6.3 FT	PURCHASE ORDER/CHARGE CODE: 303971	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: TestAmerica St. Louis	OFFSITE PROPERTY NO.: 91164		BILL OF LADING/AIR BILL NO.: 7800 5269 7952		

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

POSSIBLE SAMPLE HAZARDS/ REMARKS
*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 HANDLING AND/OR STORAGE
~~RADIOACTIVE TIE TO: B3H275~~
MAR 13 2018 Ed Kauer CHPRC

PRESERVATION	Cool <=6C	Cool <=6C	Cool <=6C
HOLDING TIME	28 Days	28 Days	14 Days
TYPE OF CONTAINER	G/P	G/P	aG
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	60mL	40mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	350.1_AMMONIA: COMMON;	9012_CYANIDE (TOTAL): COMMON;

SAMPLE NO.	FILTERED	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B3H277	N/A	SOIL	MAR 13 2018	0835	✓	✓	✓

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Tim Callaway /CHPRC	MAR 13 2018 1430	SSU-1	MAR 13 2018 1430
SSU-1	MAR 14 2018 0715	Troy Bacon CHPRC	MAR 14 2018 0715
Troy Bacon CHPRC	MAR 14 2018 1400	FEDEX	
FED EX			3/15/18 0920

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS
TRVL-18-028
(1) 7471_MERCURY_CV: COMMON (SOLIDS); 6020_METALS_ICPMS: COMMON {Aluminum, Barium, Cadmium, Chromium, Copper, Lead, Selenium}; 6020_METALS_ICPMS: COMMON (Add-on) {Antimony, Arsenic, Manganese, Nickel, Silver, Uranium};

FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

PRINTED ON 11/30/2017 FSR ID = FSR54218 TRVL NUM = TRVL-18-028 A-6003-618 (REV 3)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F17-062-626	PAGE 1 OF 1
COLLECTOR: Tim Calloway /CHPRC SL2824	COMPANY CONTACT: FITZGERALD, SL	TELEPHONE NO.: 373-7495	PROJECT COORDINATOR: FITZGERALD, SL	REQUIRED TAT: 30 Days	
SAMPLING LOCATION: C9865, Shallow Sample ~~/~~ DUP	PROJECT DESIGNATION: 200-DV-1 Operable Unit Characterization - Shallow Sampling - Soil 2017		SAF NO.: F17-062	ORIGINAL	
ICE CHEST NO.: ~~GWS-244~~ 723	FIELD LOGBOOK NO.: HNF-N-645 12-12	ACTUAL SAMPLE DEPTH: 2.0 to 4.3 FT	PURCHASE ORDER/CHARGE CODE: 303971	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: TestAmerica St. Louis	OFFSITE PROPERTY NO.: 9164		BILL OF LADING/AIR BILL NO.: 7800 5269 7952		

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

POSSIBLE SAMPLE HAZARDS/ REMARKS
*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 HANDLING AND/OR STORAGE
~~RADIOACTIVE TIE TO: B3H275~~
MAR 13 2018 Ed Kauer CHPRC

PRESERVATION	Cool <=6C	Cool <=6C	Cool <=6C
HOLDING TIME	28 Days	28 Days	14 Days
TYPE OF CONTAINER	G/P	G/P	aG
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	60mL	40mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	350.1_AMMONIA: COMMON;	9012_CYANIDE (TOTAL): COMMON;

SAMPLE NO.	FILTERED	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B3H280	N/A	SOIL	MAR 13 2018	0833	✓	✓	✓

CHAIN OF POSSESSION: RELINQUISHED BY/REMOVED FROM	DATE/TIME	SIGN/ PRINT NAMES: RECEIVED BY/STORED IN	DATE/TIME
Tim Calloway /CHPRC T. Calloway	MAR 13 2018 1430	SSU-1	MAR 13 2018 1430
SSU-1	MAR 14 2018 0715	Troy Bacon CHPRC Troy L. Bacon	MAR 14 2018 0715
Troy Bacon CHPRC Troy L. Bacon	MAR 14 2018 1400	FEDEX	
FED EX		Brian Davis	3/15/18 0920

SPECIAL INSTRUCTIONS
TRVL-18-028
(1) 7471_MERCURY_CV: COMMON (SOLIDS); 6020_METALS_ICPMS: COMMON {Aluminum, Barium, Cadmium, Chromium, Copper, Lead, Selenium}; 6020_METALS_ICPMS: COMMON (Add-on) {Antimony, Arsenic, Manganese, Nickel, Silver, Uranium};

FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

PRINTED ON 11/30/2017 FSR ID = FSR54219 TRVL NUM = TRVL-18-028 A-6003-618 (REV 3)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F17-062-629	PAGE 1 OF 1
COLLECTOR: Tim Callaway /CHPRC SL2824	COMPANY CONTACT: FITZGERALD, SL	TELEPHONE NO.: 373-7495	PROJECT COORDINATOR: FITZGERALD, SL	REQUIRED TAT: 30 Days	
SAMPLING LOCATION: C9865, Shallow Sample 3	PROJECT DESIGNATION: 200-DV-1 Operable Unit Characterization - Shallow Sampling - Soil 2017		SAF NO.: F17-062	ORIGINAL	
ICE CHEST NO.: ~~C3-1418~~ GWS-~~744~~ 723	FIELD LOGBOOK NO.: HNF-N-645 12 - 17	ACTUAL SAMPLE DEPTH: 6.3 to 9.2 FT	PURCHASE ORDER/CHARGE CODE: 303971	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: TestAmerica St. Louis	OFFSITE PROPERTY NO.: 9164		BILL OF LADING/AIR BILL NO.: 7800 5269 7952		

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

POSSIBLE SAMPLE HAZARDS/ REMARKS
*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 HANDLING AND/OR STORAGE
~~RADIOACTIVE TIE TO: B3H281~~
MAR 1 3 2018 Ed Kauer CHPRC

PRESERVATION	Cool <=6C	Cool <=6C	Cool <=6C
HOLDING TIME	28 Days	28 Days	14 Days
TYPE OF CONTAINER	G/P	G/P	aG
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	60mL	40mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	350.1_AMMONIA: COMMON;	9012_CYANIDE (TOTAL): COMMON;

SAMPLE NO.	FILTERED	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B3H283	N/A	SOIL	MAR 1 3 2018	0846	✓	✓	✓

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Tim Callaway /CHPRC T. Callaway	MAR 1 3 2018 1430	SSU-1	MAR 1 3 2018 1430
SSU-1	MAR 1 4 2018 0715	Troy Bacon CHPRC Troy L. Bacon	MAR 1 4 2018 0715
Troy Bacon CHPRC Troy L. Bacon	MAR 1 4 2018 1400	FEDEX	
FED EX		B. Brian Owens	3/15/18 0920

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS
TRVL-18-028
(1) 7471_MERCURY_CV: COMMON (SOLIDS); 6020_METALS_ICPMS: COMMON {Aluminum, Barium, Cadmium, Chromium, Copper, Lead, Selenium}; 6020_METALS_ICPMS: COMMON (Add-on) {Antimony, Arsenic, Manganese, Nickel, Silver, Uranium};

FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

PRINTED ON 11/30/2017 FSR ID = FSR54220 TRVL NUM = TRVL-18-028 A-6003-618 (REV 3)

CH2MHill Plateau Remediation Company	4771105 CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F17-062-632	PAGE 1 OF 1
COLLECTOR: Tim Calloway /CHPRC SL2824	COMPANY CONTACT: FITZGERALD, SL	TELEPHONE NO.: 373-7495	PROJECT COORDINATOR: FITZGERALD, SL	REQUIRED TAT: 30 Days	
SAMPLING LOCATION: C9865, Shallow Sample 4	PROJECT DESIGNATION: 200-DV-1 Operable Unit Characterization - Shallow Sampling - Soil 2017		SAF NO.: F17-062	ORIGINAL	
ICE CHEST NO.: 723-14-18 GWS-244-723	FIELD LOGBOOK NO.: HNF-N-645 12-17	ACTUAL SAMPLE DEPTH: 9.2 to 11.7 FT	PURCHASE ORDER/CHARGE CODE: 303971	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: TestAmerica St. Louis	OFFSITE PROPERTY NO.: 91164		BILL OF LADING/AIR BILL NO.: 7800 5269 7952		

MATRIX*
A=Air
Dl.=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
*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 HANDLING AND/OR STORAGE
~~RADIOACTIVE TIE TO: B3H284~~
MAR 13 2018 Ed Kauer CHPRC

PRESERVATION	Cool <=6C	Cool <=6C	Cool <=6C		
HOLDING TIME	28 Days	28 Days	14 Days		
TYPE OF CONTAINER	G/P	G/P	aG		
NO. OF CONTAINER(S)	1	1	1		
VOLUME	250mL	60mL	40mL		
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	350.1_AMMONIA: COMMON;	9012_CYANIDE (TOTAL): COMMON;		
SAMPLE NO.	FILTERED	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B3H286	N/A	SOIL	MAR 13 2018	0854	✓ ✓ ✓

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Tim Calloway /CHPRC	MAR 13 2018 1430	SSU-1	MAR 13 2018 1430
SSU-1	MAR 14 2018 0715	Troy Bacon CHPRC	MAR 14 2018 0715
Troy Bacon CHPRC	MAR 14 2018 1400	FEDEX	
FED EX		Brian Davis	3/15/18 0700

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS
TRVL-18-028
(1) 7471_MERCURY_CV: COMMON (SOLIDS); 6020_METALS_ICPMS: COMMON {Aluminum, Barium, Cadmium, Chromium, Copper, Lead, Selenium}; 6020_METALS_ICPMS: COMMON (Add-on) {Antimony, Arsenic, Manganese, Nickel, Silver, Uranium};

FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

PRINTED ON 11/30/2017 FSR ID = FSR54221 TRVL NUM = TRVL-18-028 A-6003-618 (REV 3)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F17-062-649	PAGE 1 OF 1

COLLECTOR Tim Calloway /CHPRC SL2824	**COMPANY CONTACT** FITZGERALD, SL	**TELEPHONE NO.** 373-7495	**PROJECT COORDINATOR** FITZGERALD, SL	**REQUIRED TAT** 30 Days
SAMPLING LOCATION C9866, Shallow Sample 1	**PROJECT DESIGNATION** 200-DV-1 Operable Unit Characterization - Shallow Sampling - Soil 2017		**SAF NO.** F17-062	ORIGINAL
ICE CHEST NO. 9231448 GWS-744 723	**FIELD LOGBOOK NO.** HNF-N-645 12-17	**ACTUAL SAMPLE DEPTH** 2.1 to 4.2 ft	**PURCHASE ORDER/CHARGE CODE** 303971	**METHOD OF SHIPMENT** FEDERAL EXPRESS
SHIPPED TO TestAmerica St. Louis	**OFFSITE PROPERTY NO.** 9164		**BILL OF LADING/AIR BILL NO.** 7800 5269 7952	

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

POSSIBLE SAMPLE HAZARDS/ REMARKS
*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 HANDLING AND/OR STORAGE
~~RADIOACTIVE TIE TO: B3H2B1~~
MAR 13 2018 Ed Kauer CHPRC

PRESERVATION	Cool <=6C	Cool <=6C	Cool <=6C
HOLDING TIME	28 Days	28 Days	14 Days
TYPE OF CONTAINER	G/P	G/P	aG
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	60mL	40mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	350.1_AMMONIA: COMMON;	9012_CYANIDE (TOTAL): COMMON;

SAMPLE NO.	FILTERED	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B3H2B3	N/A	SOIL	MAR 13 2018	1057	✓	✓	✓

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Tim Calloway /CHPRC	MAR 13 2018 1430	SSU-1	MAR 13 2018 1430
SSU-1	MAR 14 2018 0715	Troy Bacon CHPRC	MAR 14 2018 0715
Troy Bacon CHPRC	MAR 14 2018 1400	FEDEX	
FED EX		Brian Davis	3/15/18 0920

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS
TRVL-18-029
(1) 7471_MERCURY_CV: COMMON (SOLIDS); 6020_METALS_ICPMS: COMMON {Aluminum, Barium, Cadmium, Chromium, Copper, Lead, Selenium}; 6020_METALS_ICPMS: COMMON (Add-on) {Antimony, Arsenic, Manganese, Nickel, Silver, Uranium};

FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

PRINTED ON 11/30/2017 FSR ID = FSR54207 TRVL NUM = TRVL-18-029 A-6003-618 (REV 3)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F17-062-652	PAGE 1 OF 1
COLLECTOR Tim Callaway /CHPRC SL2824	COMPANY CONTACT FITZGERALD, SL	TELEPHONE NO. 373-7495	PROJECT COORDINATOR FITZGERALD, SL	REQUIRED TAT 30 Days	
SAMPLING LOCATION C9866, Shallow Sample 2	PROJECT DESIGNATION 200-DV-1 Operable Unit Characterization - Shallow Sampling - Soil 2017		SAF NO. F17-062	ORIGINAL	
ICE CHEST NO. 9231418 GWS-~~244~~ 723	FIELD LOGBOOK NO. HNF-N-645 12 - 17	ACTUAL SAMPLE DEPTH 4.2 to 6.3	PURCHASE ORDER/CHARGE CODE 303971	METHOD OF SHIPMENT FEDERAL EXPRESS	
SHIPPED TO TestAmerica St. Louis	OFFSITE PROPERTY NO. 91164		BILL OF LADING/AIR BILL NO. 7800 5269 7952		

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

POSSIBLE SAMPLE HAZARDS/ REMARKS
*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 HANDLING AND/OR STORAGE
~~RADIOACTIVE TIE TO: B3H2B4~~
MAR 13 2018 Ed Kauer CHPRC

PRESERVATION	Cool <=6C	Cool <=6C	Cool <=6C
HOLDING TIME	28 Days	28 Days	14 Days
TYPE OF CONTAINER	G/P	G/P	aG
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	60mL	40mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	350.1_AMMONIA: COMMON;	9012_CYANIDE (TOTAL): COMMON;

SAMPLE NO.	FILTERED	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B3H2B6	N/A	SOIL	MAR 13 2018	1102	✓	✓	✓

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	SIGN/ PRINT NAMES RECEIVED BY/STORED IN	DATE/TIME
Tim Callaway /CHPRC T. Callaway	MAR 13 2018 1430	SSU-1	MAR 13 2018 1430
SSU-1	MAR 14 2018 0715	Troy Bacon CHPRC Troy L. Bacon	MAR 14 2018 0715
Troy Bacon CHPRC Troy L. Bacon	MAR 14 2018 1400	FEDEX	
FED EX		B. Brian Davis	3/15/18 0920

SPECIAL INSTRUCTIONS
TRVL-18-029
(1) 7471_MERCURY_CV: COMMON (SOLIDS); 6020_METALS_ICPMS: COMMON {Aluminum, Barium, Cadmium, Chromium, Copper, Lead, Selenium}; 6020_METALS_ICPMS: COMMON (Add-on) {Antimony, Arsenic, Manganese, Nickel, Silver, Uranium};

FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

PRINTED ON 11/30/2017 FSR ID = FSR54208 TRVL NUM = TRVL-18-029 A-6003-618 (REV 3)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F17-062-655	PAGE 1 OF 1
COLLECTOR: Tim Callaway /CHPRC SL2824	COMPANY CONTACT: FITZGERALD, SL	TELEPHONE NO.: 373-7495	PROJECT COORDINATOR: FITZGERALD, SL	REQUIRED TAT: 30 Days	
SAMPLING LOCATION: C9866, Shallow Sample 3	PROJECT DESIGNATION: 200-DV-1 Operable Unit Characterization - Shallow Sampling - Soil 2017		SAF NO.: F17-062	ORIGINAL	
ICE CHEST NO.: 9237448 GWS-~~244~~ 723	FIELD LOGBOOK NO.: HNF-N-645 12-17	ACTUAL SAMPLE DEPTH: 6.3 to 8.2 Ft	PURCHASE ORDER/CHARGE CODE: 303971	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: TestAmerica St. Louis	OFFSITE PROPERTY NO.: 9164		BILL OF LADING/AIR BILL NO.: 7800 52697952		

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

POSSIBLE SAMPLE HAZARDS/ REMARKS
*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 HANDLING AND/OR STORAGE
~~RADIOACTIVE TIE TO: B3H2B7~~
Ed Kauer CHPRC
MAR 13 2018

PRESERVATION	Cool <=6C	Cool <=6C	Cool <=6C
HOLDING TIME	28 Days	28 Days	14 Days
TYPE OF CONTAINER	G/P	G/P	aG
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	60mL	40mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	350.1_AMMONIA: COMMON;	9012_CYANIDE (TOTAL): COMMON;

SAMPLE NO.	FILTERED	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B3H2B9	N/A	SOIL	MAR 13 2018	1109	✓	✓	✓

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Tim Callaway /CHPRC T. Callaway	MAR 13 2018 1430	SSU-1	MAR 13 2018 1430
SSU-1	MAR 14 2018 0715	Troy Bacon CHPRC Troy L. Bacon	MAR 14 2018 0715
Troy Bacon CHPRC Troy L. Bacon	MAR 14 2018 1400	FEDEX	
FED EX		B. R. Brian Davis	3/15/18 0920

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS
TRVL-18-029
(1) 7471_MERCURY_CV: COMMON (SOLIDS); 6020_METALS_ICPMS: COMMON {Aluminum, Barium, Cadmium, Chromium, Copper, Lead, Selenium}; 6020_METALS_ICPMS: COMMON (Add-on) {Antimony, Arsenic, Manganese, Nickel, Silver, Uranium};

FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

PRINTED ON 11/30/2017 FSR ID = FSR54209 TRVL NUM = TRVL-18-029 A-6003-618 (REV 3)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F17-062-658	PAGE 1 OF 1
COLLECTOR: Tim Callaway /CHPRC SL2824	COMPANY CONTACT: FITZGERALD, SL	TELEPHONE NO.: 373-7495	PROJECT COORDINATOR: FITZGERALD, SL	REQUIRED TAT: 30 Days	
SAMPLING LOCATION: C9866, Shallow Sample 4	PROJECT DESIGNATION: 200-DV-1 Operable Unit Characterization - Shallow Sampling - Soil 2017		SAF NO.: F17-062	ORIGINAL	
ICE CHEST NO.: ~~723-14-18~~ GWS-~~744~~ 723	FIELD LOGBOOK NO.: HNF-N-645 12-17	ACTUAL SAMPLE DEPTH: 8.2 to 10.1 ft	PURCHASE ORDER/CHARGE CODE: 303971	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: TestAmerica St. Louis	OFFSITE PROPERTY NO.: 9164		BILL OF LADING/AIR BILL NO.: 7800 5269 7952		

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

POSSIBLE SAMPLE HAZARDS/ REMARKS
*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 HANDLING AND/OR STORAGE
~~RADIOACTIVE TIE TO: B3H2C0~~
Ed Kauer CHPRC
MAR 13 2018

PRESERVATION	Cool <=6C	Cool <=6C	Cool <=6C
HOLDING TIME	28 Days	28 Days	14 Days
TYPE OF CONTAINER	G/P	G/P	aG
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	60mL	40mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	350.1_AMMONIA: COMMON;	9012_CYANIDE (TOTAL): COMMON;

SAMPLE NO.	FILTERED	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B3H2C2	N/A	SOIL	MAR 13 2018	1116	✓	✓	✓

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Tim Callaway /CHPRC	MAR 13 2018 1430	SSU-1	MAR 13 2018 1430
SSU-1	MAR 14 2018 0715	Troy Bacon CHPRC	MAR 14 2018 0715
Troy Bacon CHPRC	MAR 14 2018 1400	FEDEX	
FED EX		Brian Davis	3/15/18 0920

SPECIAL INSTRUCTIONS
TRVL-18-029
(1) 7471_MERCURY_CV: COMMON (SOLIDS); 6020_METALS_ICPMS: COMMON {Aluminum, Barium, Cadmium, Chromium, Copper, Lead, Selenium}; 6020_METALS_ICPMS: COMMON (Add-on) {Antimony, Arsenic, Manganese, Nickel, Silver, Uranium};

FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

PRINTED ON 11/30/2017 FSR ID = FSR54210 TRVL NUM = TRVL-18-029 A-6003-618 (REV 3)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F17-062-670	PAGE 1 OF 1
COLLECTOR: Tim Callaway /CHPRC SL2824	COMPANY CONTACT: FITZGERALD, SL	TELEPHONE NO.: 373-7495	PROJECT COORDINATOR: FITZGERALD, SL	REQUIRED TAT: 30 Days	
SAMPLING LOCATION: ~~C9866~~, Optional 2 C9945	PROJECT DESIGNATION: 200-DV-1 Operable Unit Characterization - Shallow Sampling - Soil 2017		SAF NO.: F17-062	ORIGINAL	
ICE CHEST NO.: GWS-~~744~~ 723 9237448	FIELD LOGBOOK NO.: HNF-N-645 12 - 17	ACTUAL SAMPLE DEPTH: 11.6 to 15.0 FT	PURCHASE ORDER/CHARGE CODE: 303971	METHOD OF SHIPMENT: FEDERAL EXPRESS	
SHIPPED TO: TestAmerica St. Louis	OFFSITE PROPERTY NO.: 9164		BILL OF LADING/AIR BILL NO.: 7800 5269 7952		

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

POSSIBLE SAMPLE HAZARDS/ REMARKS
*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 HANDLING AND/OR STORAGE
RADIOACTIVE TIF TO: B3H2D2

MAR 1 3 2018 Ed Kauer CHPRC

PRESERVATION	Cool <=6C	Cool <=6C	Cool <=6C
HOLDING TIME	28 Days	28 Days	14 Days
TYPE OF CONTAINER	G/P	G/P	aG
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	60mL	40mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	350.1_AMMONIA: COMMON;	9012_CYANIDE (TOTAL): COMMON;

SAMPLE NO.	FILTERED	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B3H2D4	N/A	SOIL	MAR 1 3 2018	1340	✓	✓	✓

CHAIN OF POSSESSION: RELINQUISHED BY/REMOVED FROM	DATE/TIME	SIGN/ PRINT NAMES: RECEIVED BY/STORED IN	DATE/TIME
Tim Callaway /CHPRC	MAR 1 3 2018 1430	SSU-1	MAR 1 3 2018 1430
SSU-1	MAR 1 4 2018 0715	Troy Bacon CHPRC	MAR 1 4 2018 0715
Troy Bacon CHPRC	MAR 1 4 2018	FEDEX	
FED EX		Brian Davis	3/15/18 0920

SPECIAL INSTRUCTIONS
TRVL-18-029
(1) 7471_MERCURY_CV: COMMON (SOLIDS); 6020_METALS_ICPMS: COMMON {Aluminum, Barium, Cadmium, Chromium, Copper, Lead, Selenium}; 6020_METALS_ICPMS: COMMON (Add-on) {Antimony, Arsenic, Manganese, Nickel, Silver, Uranium};

FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

PRINTED ON 11/30/2017 FSR ID = FSR54214 TRVL NUM = TRVL-18-029 A-6003-618 (REV 3)

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

FedEx ® Tracking

780052697952

Ship date:		Actual delivery:
Wed 3/14/2018		**Thu 3/15/2018 9:09 am**
Richland, WA US	**Delivered** *Signed for by: B.DANIELS*	EARTH CITY, MO US

Travel History

Date/Time	Activity	Location
- 3/15/2018 - Thursday		
9:09 am	Delivered	EARTH CITY, MO
7:05 am	On FedEx vehicle for delivery	EARTH CITY, MO
6:59 am	At local FedEx facility	EARTH CITY, MO
5:05 am	At destination sort facility	BERKELEY, MO
4:18 am	Departed FedEx location	MEMPHIS, TN
12:27 am	Arrived at FedEx location	MEMPHIS, TN
- 3/14/2018 - Wednesday		
4:48 pm	Left FedEx origin facility	PASCO, WA
11:37 am	Picked up	PASCO, WA
10:14 am	Shipment information sent to FedEx	

Shipment Facts

Tracking Number	780052697952	**Service**	FedEx Priority Overnight
Weight	47 lbs / 21.32 kgs	**Signature services**	Direct signature required
Delivered To	Shipping/Receiving	**Total pieces**	1
Total shipment weight	47 lbs / 21.32 kgs	**Terms**	Third Party
Shipper reference	9164	**Packaging**	Your Packaging
Special handling section	Deliver Weekday, Direct Signature Required	**Standard transit**	3/15/2018 by 10:30 am

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Qualifiers

Metals

Qualifier	Qualifier Description
U	Analyzed for but not detected.
D	The reported value is from a dilution.
B	Estimated result. Result is less than the RL, but greater than MDL
N	Recovery exceeds upper or lower control limits
X	See case narrative notes for explanation of the 'X' flag

General Chemistry

Qualifier	Qualifier Description
U	Analyzed for but not detected.
C	The analyte was detected in both the sample and the associated QC blank, and the sample concentration was </= 5X the blank concentration.
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
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: F17-062

TestAmerica Job ID: 160-27350-1
SDG: SL2824

Method	Method Description	Protocol	Laboratory
6020A	Metals (ICP/MS)	SW846	TAL SL
7471B	Mercury (CVAA)	SW846	TAL SL
350.1	Nitrogen, Ammonia	MCAWW	TAL SL
9012B	Cyanide, Total andor Amenable	SW846	TAL SL
Moisture	Percent Moisture	EPA	TAL SL

Protocol References:

EPA = US Environmental Protection Agency

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

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

Laboratory References:

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

Sample Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: F17-062

TestAmerica Job ID: 160-27350-1
SDG: SL2824

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-27350-1	B3H274	Soil	03/13/18 08:33	03/15/18 09:20
160-27350-2	B3H277	Soil	03/13/18 08:39	03/15/18 09:20
160-27350-3	B3H280	Soil	03/13/18 08:33	03/15/18 09:20
160-27350-4	B3H283	Soil	03/13/18 08:46	03/15/18 09:20
160-27350-5	B3H286	Soil	03/13/18 08:54	03/15/18 09:20
160-27350-6	B3H2B3	Soil	03/13/18 10:57	03/15/18 09:20
160-27350-7	B3H2B6	Soil	03/13/18 11:02	03/15/18 09:20
160-27350-8	B3H2B9	Soil	03/13/18 11:09	03/15/18 09:20
160-27350-9	B3H2C2	Soil	03/13/18 11:16	03/15/18 09:20
160-27350-10	B3H2D4	Soil	03/13/18 13:40	03/15/18 09:20

Method: 6020A - Metals (ICP/MS)

Client Sample ID: B3H274 — **Lab Sample ID: 160-27350-1**
Date Collected: 03/13/18 08:33 — **Matrix: Soil**
Date Received: 03/15/18 09:20 — **Percent Solids: 95.3**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	5900	D	11.7	4.7	mg/Kg	☼	03/19/18 11:10	04/02/18 23:56	5
Antimony	0.48	U D	1.2	0.48	mg/Kg	☼	03/19/18 11:13	04/02/18 18:49	5
Arsenic	3.9	D	2.3	0.94	mg/Kg	☼	03/19/18 11:10	04/02/18 23:56	5
Barium	72.8	D	4.7	1.2	mg/Kg	☼	03/19/18 11:10	04/02/18 23:56	5
Cadmium	0.094	B D	0.12	0.056	mg/Kg	☼	03/19/18 11:10	04/02/18 23:56	5
Chromium	8.3	D	2.3	1.1	mg/Kg	☼	03/19/18 11:10	04/02/18 23:56	5
Copper	15.9	D	2.3	0.94	mg/Kg	☼	03/19/18 11:10	04/02/18 23:56	5
Lead	4.7	D	0.70	0.29	mg/Kg	☼	03/19/18 11:10	04/02/18 23:56	5
Manganese	322	N D	1.2	0.47	mg/Kg	☼	03/19/18 11:10	04/02/18 23:56	5
Nickel	10.5	D	1.2	0.47	mg/Kg	☼	03/19/18 11:10	04/02/18 23:56	5
Selenium	2.9	D	1.2	0.75	mg/Kg	☼	03/19/18 11:10	04/02/18 23:56	5
Silver	0.18	U D	0.47	0.18	mg/Kg	☼	03/19/18 11:10	04/02/18 23:56	5
Uranium	0.41	D	0.23	0.094	mg/Kg	☼	03/19/18 11:10	04/02/18 23:56	5

Client Sample ID: B3H277 — **Lab Sample ID: 160-27350-2**
Date Collected: 03/13/18 08:39 — **Matrix: Soil**
Date Received: 03/15/18 09:20 — **Percent Solids: 94.8**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	5900	D	12.4	5.0	mg/Kg	☼	03/19/18 11:10	04/03/18 00:22	5
Antimony	0.49	U D	1.2	0.49	mg/Kg	☼	03/19/18 11:13	04/02/18 19:06	5
Arsenic	5.2	D	2.5	0.99	mg/Kg	☼	03/19/18 11:10	04/03/18 00:22	5
Barium	85.7	D	5.0	1.2	mg/Kg	☼	03/19/18 11:10	04/03/18 00:22	5
Cadmium	0.095	B D	0.12	0.059	mg/Kg	☼	03/19/18 11:10	04/03/18 00:22	5
Chromium	7.5	D	2.5	1.1	mg/Kg	☼	03/19/18 11:10	04/03/18 00:22	5
Copper	14.7	D	2.5	0.99	mg/Kg	☼	03/19/18 11:10	04/03/18 00:22	5
Lead	5.0	D	0.74	0.31	mg/Kg	☼	03/19/18 11:10	04/03/18 00:22	5
Manganese	360	N D	1.2	0.50	mg/Kg	☼	03/19/18 11:10	04/03/18 00:22	5
Nickel	10.9	D	1.2	0.50	mg/Kg	☼	03/19/18 11:10	04/03/18 00:22	5
Selenium	2.5	D	1.2	0.79	mg/Kg	☼	03/19/18 11:10	04/03/18 00:22	5
Silver	0.19	U D	0.50	0.19	mg/Kg	☼	03/19/18 11:10	04/03/18 00:22	5
Uranium	2.4	D	0.25	0.099	mg/Kg	☼	03/19/18 11:10	04/03/18 00:22	5

Client Sample ID: B3H280 — **Lab Sample ID: 160-27350-3**
Date Collected: 03/13/18 08:33 — **Matrix: Soil**
Date Received: 03/15/18 09:20 — **Percent Solids: 93.8**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6450	D	12.4	4.9	mg/Kg	☼	03/19/18 11:10	04/03/18 00:29	5
Antimony	0.51	U D	1.3	0.51	mg/Kg	☼	03/19/18 11:13	04/02/18 19:11	5
Arsenic	3.7	D	2.5	0.99	mg/Kg	☼	03/19/18 11:10	04/03/18 00:29	5
Barium	83.3	D	4.9	1.2	mg/Kg	☼	03/19/18 11:10	04/03/18 00:29	5
Cadmium	0.10	B D	0.12	0.059	mg/Kg	☼	03/19/18 11:10	04/03/18 00:29	5
Chromium	12.1	D	2.5	1.1	mg/Kg	☼	03/19/18 11:10	04/03/18 00:29	5
Copper	15.0	D	2.5	0.99	mg/Kg	☼	03/19/18 11:10	04/03/18 00:29	5
Lead	6.0	D	0.74	0.31	mg/Kg	☼	03/19/18 11:10	04/03/18 00:29	5
Manganese	377	N D	1.2	0.49	mg/Kg	☼	03/19/18 11:10	04/03/18 00:29	5
Nickel	12.8	D	1.2	0.49	mg/Kg	☼	03/19/18 11:10	04/03/18 00:29	5
Selenium	1.5	D	1.2	0.79	mg/Kg	☼	03/19/18 11:10	04/03/18 00:29	5
Silver	0.19	U D	0.49	0.19	mg/Kg	☼	03/19/18 11:10	04/03/18 00:29	5
Uranium	0.52	D	0.25	0.099	mg/Kg	☼	03/19/18 11:10	04/03/18 00:29	5

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: F17-062

TestAmerica Job ID: 160-27350-1
SDG: SL2824

Method: 6020A - Metals (ICP/MS)

Client Sample ID: B3H283
Date Collected: 03/13/18 08:46
Date Received: 03/15/18 09:20

Lab Sample ID: 160-27350-4
Matrix: Soil
Percent Solids: 93.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	5830	D	12.9	5.1	mg/Kg	☼	03/19/18 11:10	04/03/18 00:35	5
Antimony	0.49	U D	1.2	0.49	mg/Kg	☼	03/19/18 11:13	04/02/18 19:16	5
Arsenic	3.8	D	2.6	1.0	mg/Kg	☼	03/19/18 11:10	04/03/18 00:35	5
Barium	81.2	D	5.1	1.3	mg/Kg	☼	03/19/18 11:10	04/03/18 00:35	5
Cadmium	0.11	B D	0.13	0.062	mg/Kg	☼	03/19/18 11:10	04/03/18 00:35	5
Chromium	7.7	D	2.6	1.2	mg/Kg	☼	03/19/18 11:10	04/03/18 00:35	5
Copper	16.3	D	2.6	1.0	mg/Kg	☼	03/19/18 11:10	04/03/18 00:35	5
Lead	4.2	D	0.77	0.32	mg/Kg	☼	03/19/18 11:10	04/03/18 00:35	5
Manganese	353	N D	1.3	0.51	mg/Kg	☼	03/19/18 11:10	04/03/18 00:35	5
Nickel	10.2	D	1.3	0.51	mg/Kg	☼	03/19/18 11:10	04/03/18 00:35	5
Selenium	1.7	D	1.3	0.82	mg/Kg	☼	03/19/18 11:10	04/03/18 00:35	5
Silver	0.19	U D	0.51	0.19	mg/Kg	☼	03/19/18 11:10	04/03/18 00:35	5
Uranium	0.39	D	0.26	0.10	mg/Kg	☼	03/19/18 11:10	04/03/18 00:35	5

Client Sample ID: B3H286
Date Collected: 03/13/18 08:54
Date Received: 03/15/18 09:20

Lab Sample ID: 160-27350-5
Matrix: Soil
Percent Solids: 96.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	4810	D	12.4	5.0	mg/Kg	☼	03/19/18 11:10	04/03/18 01:02	5
Antimony	1.0	B D	1.2	0.47	mg/Kg	☼	03/19/18 11:13	04/02/18 19:20	5
Arsenic	3.6	D	2.5	0.99	mg/Kg	☼	03/19/18 11:10	04/03/18 01:02	5
Barium	50.3	D	5.0	1.2	mg/Kg	☼	03/19/18 11:10	04/03/18 01:02	5
Cadmium	0.076	B D	0.12	0.060	mg/Kg	☼	03/19/18 11:10	04/03/18 01:02	5
Chromium	5.8	D	2.5	1.1	mg/Kg	☼	03/19/18 11:10	04/03/18 01:02	5
Copper	12.0	D	2.5	0.99	mg/Kg	☼	03/19/18 11:10	04/03/18 01:02	5
Lead	3.5	D	0.74	0.31	mg/Kg	☼	03/19/18 11:10	04/03/18 01:02	5
Manganese	265	N D	1.2	0.50	mg/Kg	☼	03/19/18 11:10	04/03/18 01:02	5
Nickel	8.0	D	1.2	0.50	mg/Kg	☼	03/19/18 11:10	04/03/18 01:02	5
Selenium	1.3	D	1.2	0.79	mg/Kg	☼	03/19/18 11:10	04/03/18 01:02	5
Silver	0.19	U D	0.50	0.19	mg/Kg	☼	03/19/18 11:10	04/03/18 01:02	5
Uranium	0.39	D	0.25	0.099	mg/Kg	☼	03/19/18 11:10	04/03/18 01:02	5

Client Sample ID: B3H2B3
Date Collected: 03/13/18 10:57
Date Received: 03/15/18 09:20

Lab Sample ID: 160-27350-6
Matrix: Soil
Percent Solids: 94.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6110	D	12.8	5.1	mg/Kg	☼	03/19/18 11:10	04/03/18 01:09	5
Antimony	0.50	U D	1.2	0.50	mg/Kg	☼	03/19/18 11:13	04/02/18 19:39	5
Arsenic	3.7	D	2.6	1.0	mg/Kg	☼	03/19/18 11:10	04/03/18 01:09	5
Barium	71.0	D	5.1	1.3	mg/Kg	☼	03/19/18 11:10	04/03/18 01:09	5
Cadmium	0.084	B D	0.13	0.061	mg/Kg	☼	03/19/18 11:10	04/03/18 01:09	5
Chromium	11.0	D	2.6	1.2	mg/Kg	☼	03/19/18 11:10	04/03/18 01:09	5
Copper	15.9	D	2.6	1.0	mg/Kg	☼	03/19/18 11:10	04/03/18 01:09	5
Lead	8.8	D	0.77	0.32	mg/Kg	☼	03/19/18 11:10	04/03/18 01:09	5
Manganese	347	N D	1.3	0.51	mg/Kg	☼	03/19/18 11:10	04/03/18 01:09	5
Nickel	11.4	D	1.3	0.51	mg/Kg	☼	03/19/18 11:10	04/03/18 01:09	5
Selenium	1.6	D	1.3	0.82	mg/Kg	☼	03/19/18 11:10	04/03/18 01:09	5
Silver	0.19	U D	0.51	0.19	mg/Kg	☼	03/19/18 11:10	04/03/18 01:09	5
Uranium	0.50	D	0.26	0.10	mg/Kg	☼	03/19/18 11:10	04/03/18 01:09	5

Method: 6020A - Metals (ICP/MS)

Client Sample ID: B3H2B6 — **Lab Sample ID: 160-27350-7**
Date Collected: 03/13/18 11:02 — **Matrix: Soil**
Date Received: 03/15/18 09:20 — **Percent Solids: 94.5**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6090	D	12.4	5.0	mg/Kg	☼	03/19/18 11:10	04/03/18 01:16	5
Antimony	0.50	U D	1.3	0.50	mg/Kg	☼	03/19/18 11:13	04/02/18 19:43	5
Arsenic	3.6	D	2.5	0.99	mg/Kg	☼	03/19/18 11:10	04/03/18 01:16	5
Barium	73.7	D	5.0	1.2	mg/Kg	☼	03/19/18 11:10	04/03/18 01:16	5
Cadmium	0.078	B D	0.12	0.059	mg/Kg	☼	03/19/18 11:10	04/03/18 01:16	5
Chromium	8.1	D	2.5	1.1	mg/Kg	☼	03/19/18 11:10	04/03/18 01:16	5
Copper	14.3	D	2.5	0.99	mg/Kg	☼	03/19/18 11:10	04/03/18 01:16	5
Lead	4.4	D	0.74	0.31	mg/Kg	☼	03/19/18 11:10	04/03/18 01:16	5
Manganese	377	N D	1.2	0.50	mg/Kg	☼	03/19/18 11:10	04/03/18 01:16	5
Nickel	11.7	D	1.2	0.50	mg/Kg	☼	03/19/18 11:10	04/03/18 01:16	5
Selenium	1.5	D	1.2	0.79	mg/Kg	☼	03/19/18 11:10	04/03/18 01:16	5
Silver	0.19	U D	0.50	0.19	mg/Kg	☼	03/19/18 11:10	04/03/18 01:16	5
Uranium	0.44	D	0.25	0.099	mg/Kg	☼	03/19/18 11:10	04/03/18 01:16	5

Client Sample ID: B3H2B9 — **Lab Sample ID: 160-27350-8**
Date Collected: 03/13/18 11:09 — **Matrix: Soil**
Date Received: 03/15/18 09:20 — **Percent Solids: 92.6**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	5970	D	12.8	5.1	mg/Kg	☼	03/19/18 11:10	04/03/18 01:22	5
Antimony	0.49	U D	1.2	0.49	mg/Kg	☼	03/19/18 11:13	04/02/18 19:48	5
Arsenic	4.8	D	2.6	1.0	mg/Kg	☼	03/19/18 11:10	04/03/18 01:22	5
Barium	77.4	D	5.1	1.3	mg/Kg	☼	03/19/18 11:10	04/03/18 01:22	5
Cadmium	0.094	B D	0.13	0.061	mg/Kg	☼	03/19/18 11:10	04/03/18 01:22	5
Chromium	8.9	D	2.6	1.1	mg/Kg	☼	03/19/18 11:10	04/03/18 01:22	5
Copper	17.2	D	2.6	1.0	mg/Kg	☼	03/19/18 11:10	04/03/18 01:22	5
Lead	4.5	D	0.77	0.32	mg/Kg	☼	03/19/18 11:10	04/03/18 01:22	5
Manganese	411	N D	1.3	0.51	mg/Kg	☼	03/19/18 11:10	04/03/18 01:22	5
Nickel	12.5	D	1.3	0.51	mg/Kg	☼	03/19/18 11:10	04/03/18 01:22	5
Selenium	1.9	D	1.3	0.82	mg/Kg	☼	03/19/18 11:10	04/03/18 01:22	5
Silver	0.19	U D	0.51	0.19	mg/Kg	☼	03/19/18 11:10	04/03/18 01:22	5
Uranium	0.46	D	0.26	0.10	mg/Kg	☼	03/19/18 11:10	04/03/18 01:22	5

Client Sample ID: B3H2C2 — **Lab Sample ID: 160-27350-9**
Date Collected: 03/13/18 11:16 — **Matrix: Soil**
Date Received: 03/15/18 09:20 — **Percent Solids: 92.8**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	5810	D	12.5	5.0	mg/Kg	☼	03/19/18 11:10	04/03/18 01:29	5
Antimony	0.51	U D	1.3	0.51	mg/Kg	☼	03/19/18 11:13	04/02/18 19:52	5
Arsenic	3.4	D	2.5	1.0	mg/Kg	☼	03/19/18 11:10	04/03/18 01:29	5
Barium	67.6	D	5.0	1.2	mg/Kg	☼	03/19/18 11:10	04/03/18 01:29	5
Cadmium	0.073	B D	0.12	0.060	mg/Kg	☼	03/19/18 11:10	04/03/18 01:29	5
Chromium	8.0	D	2.5	1.1	mg/Kg	☼	03/19/18 11:10	04/03/18 01:29	5
Copper	13.3	D	2.5	1.0	mg/Kg	☼	03/19/18 11:10	04/03/18 01:29	5
Lead	4.1	D	0.75	0.31	mg/Kg	☼	03/19/18 11:10	04/03/18 01:29	5
Manganese	323	N D	1.2	0.50	mg/Kg	☼	03/19/18 11:10	04/03/18 01:29	5
Nickel	10.5	D	1.2	0.50	mg/Kg	☼	03/19/18 11:10	04/03/18 01:29	5
Selenium	1.2	D	1.2	0.80	mg/Kg	☼	03/19/18 11:10	04/03/18 01:29	5
Silver	0.19	U D	0.50	0.19	mg/Kg	☼	03/19/18 11:10	04/03/18 01:29	5
Uranium	0.37	D	0.25	0.10	mg/Kg	☼	03/19/18 11:10	04/03/18 01:29	5

Method: 6020A - Metals (ICP/MS)

Client Sample ID: B3H2D4 — **Lab Sample ID: 160-27350-10**
Date Collected: 03/13/18 13:40 — **Matrix: Soil**
Date Received: 03/15/18 09:20 — **Percent Solids: 97.1**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	4810	D	11.4	4.6	mg/Kg	☼	03/19/18 11:10	04/03/18 01:36	5
Antimony	0.48	U D	1.2	0.48	mg/Kg	☼	03/19/18 11:13	04/02/18 19:56	5
Arsenic	4.5	D	2.3	0.91	mg/Kg	☼	03/19/18 11:10	04/03/18 01:36	5
Barium	75.7	D	4.6	1.1	mg/Kg	☼	03/19/18 11:10	04/03/18 01:36	5
Cadmium	0.071	B D	0.11	0.055	mg/Kg	☼	03/19/18 11:10	04/03/18 01:36	5
Chromium	7.8	D	2.3	1.0	mg/Kg	☼	03/19/18 11:10	04/03/18 01:36	5
Copper	14.7	D	2.3	0.91	mg/Kg	☼	03/19/18 11:10	04/03/18 01:36	5
Lead	4.1	D	0.68	0.28	mg/Kg	☼	03/19/18 11:10	04/03/18 01:36	5
Manganese	344	N D	1.1	0.46	mg/Kg	☼	03/19/18 11:10	04/03/18 01:36	5
Nickel	12.9	D	1.1	0.46	mg/Kg	☼	03/19/18 11:10	04/03/18 01:36	5
Selenium	1.6	D	1.1	0.73	mg/Kg	☼	03/19/18 11:10	04/03/18 01:36	5
Silver	0.17	U D	0.46	0.17	mg/Kg	☼	03/19/18 11:10	04/03/18 01:36	5
Uranium	0.56	D	0.23	0.091	mg/Kg	☼	03/19/18 11:10	04/03/18 01:36	5

Method: 7471B - Mercury (CVAA)

Client Sample ID: B3H274 — **Lab Sample ID: 160-27350-1**
Date Collected: 03/13/18 08:33 — **Matrix: Soil**
Date Received: 03/15/18 09:20 — **Percent Solids: 95.3**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.013	U	0.039	0.013	mg/Kg	☼	03/19/18 08:50	03/21/18 14:16	1

Client Sample ID: B3H277 — **Lab Sample ID: 160-27350-2**
Date Collected: 03/13/18 08:39 — **Matrix: Soil**
Date Received: 03/15/18 09:20 — **Percent Solids: 94.8**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.012	U	0.037	0.012	mg/Kg	☼	03/19/18 08:50	03/21/18 14:31	1

Client Sample ID: B3H280 — **Lab Sample ID: 160-27350-3**
Date Collected: 03/13/18 08:33 — **Matrix: Soil**
Date Received: 03/15/18 09:20 — **Percent Solids: 93.8**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.016	B	0.041	0.014	mg/Kg	☼	03/19/18 08:50	03/21/18 14:32	1

Client Sample ID: B3H283 — **Lab Sample ID: 160-27350-4**
Date Collected: 03/13/18 08:46 — **Matrix: Soil**
Date Received: 03/15/18 09:20 — **Percent Solids: 93.7**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.013	U	0.040	0.013	mg/Kg	☼	03/19/18 08:50	03/21/18 14:34	1

Client Sample ID: B3H286 — **Lab Sample ID: 160-27350-5**
Date Collected: 03/13/18 08:54 — **Matrix: Soil**
Date Received: 03/15/18 09:20 — **Percent Solids: 96.5**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.012	U	0.035	0.012	mg/Kg	☼	03/19/18 08:50	03/21/18 14:36	1

Client Sample ID: B3H2B3 — **Lab Sample ID: 160-27350-6**
Date Collected: 03/13/18 10:57 — **Matrix: Soil**
Date Received: 03/15/18 09:20 — **Percent Solids: 94.8**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.013	U	0.039	0.013	mg/Kg	☼	03/19/18 08:50	03/21/18 14:38	1

Client Sample ID: B3H2B6 — **Lab Sample ID: 160-27350-7**
Date Collected: 03/13/18 11:02 — **Matrix: Soil**
Date Received: 03/15/18 09:20 — **Percent Solids: 94.5**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.012	U	0.037	0.012	mg/Kg	☼	03/19/18 08:50	03/21/18 14:40	1

Client Sample ID: B3H2B9 — **Lab Sample ID: 160-27350-8**
Date Collected: 03/13/18 11:09 — **Matrix: Soil**
Date Received: 03/15/18 09:20 — **Percent Solids: 92.6**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.014	U	0.041	0.014	mg/Kg	☼	03/19/18 08:50	03/21/18 14:42	1

Client Sample ID: B3H2C2 — **Lab Sample ID: 160-27350-9**
Date Collected: 03/13/18 11:16 — **Matrix: Soil**
Date Received: 03/15/18 09:20 — **Percent Solids: 92.8**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.012	U	0.037	0.012	mg/Kg	☼	03/19/18 08:50	03/21/18 14:44	1

Client Sample ID: B3H2D4 — **Lab Sample ID: 160-27350-10**
Date Collected: 03/13/18 13:40 — **Matrix: Soil**
Date Received: 03/15/18 09:20 — **Percent Solids: 97.1**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.012	U	0.037	0.012	mg/Kg	☼	03/19/18 08:50	03/21/18 14:46	1

General Chemistry

Client Sample ID: B3H274 — **Lab Sample ID: 160-27350-1**
Date Collected: 03/13/18 08:33 — **Matrix: Soil**
Date Received: 03/15/18 09:20 — **Percent Solids: 95.3**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**1.3**	**C**	0.52	0.23	mg/Kg	☼	04/10/18 19:35	04/10/18 21:16	1
Cyanide, Total	0.12	U	0.52	0.12	mg/Kg	☼	03/27/18 17:35	03/27/18 19:43	1

Client Sample ID: B3H277 — **Lab Sample ID: 160-27350-2**
Date Collected: 03/13/18 08:39 — **Matrix: Soil**
Date Received: 03/15/18 09:20 — **Percent Solids: 94.8**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**1.6**	**C**	0.53	0.23	mg/Kg	☼	04/10/18 19:35	04/10/18 21:23	1
Cyanide, Total	0.12	U	0.52	0.12	mg/Kg	☼	03/27/18 17:35	03/27/18 19:53	1

Client Sample ID: B3H280 — **Lab Sample ID: 160-27350-3**
Date Collected: 03/13/18 08:33 — **Matrix: Soil**
Date Received: 03/15/18 09:20 — **Percent Solids: 93.8**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**1.4**	**C**	0.53	0.24	mg/Kg	☼	04/10/18 19:35	04/10/18 21:26	1
Cyanide, Total	0.12	U	0.53	0.12	mg/Kg	☼	03/27/18 17:35	03/27/18 19:57	1

Client Sample ID: B3H283 — **Lab Sample ID: 160-27350-4**
Date Collected: 03/13/18 08:46 — **Matrix: Soil**
Date Received: 03/15/18 09:20 — **Percent Solids: 93.7**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**1.1**	**C**	0.53	0.24	mg/Kg	☼	04/10/18 19:35	04/10/18 21:28	1
Cyanide, Total	0.12	U	0.53	0.12	mg/Kg	☼	03/27/18 17:35	03/27/18 20:00	1

General Chemistry

Client Sample ID: B3H286 — **Lab Sample ID: 160-27350-5**
Date Collected: 03/13/18 08:54 — **Matrix: Soil**
Date Received: 03/15/18 09:20 — **Percent Solids: 96.5**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.93**	**C**	0.51	0.23	mg/Kg	☼	04/10/18 19:35	04/10/18 21:35	1
Cyanide, Total	0.12	U	0.51	0.12	mg/Kg	☼	03/27/18 17:35	03/27/18 20:04	1

Client Sample ID: B3H2B3 — **Lab Sample ID: 160-27350-6**
Date Collected: 03/13/18 10:57 — **Matrix: Soil**
Date Received: 03/15/18 09:20 — **Percent Solids: 94.8**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**1.2**	**C**	0.53	0.23	mg/Kg	☼	04/10/18 19:35	04/10/18 21:37	1
Cyanide, Total	0.12	U	0.53	0.12	mg/Kg	☼	03/27/18 17:35	03/27/18 20:14	1

Client Sample ID: B3H2B6 — **Lab Sample ID: 160-27350-7**
Date Collected: 03/13/18 11:02 — **Matrix: Soil**
Date Received: 03/15/18 09:20 — **Percent Solids: 94.5**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**1.3**	**C**	0.53	0.24	mg/Kg	☼	04/10/18 19:35	04/10/18 21:40	1
Cyanide, Total	0.12	U	0.53	0.12	mg/Kg	☼	03/27/18 17:35	03/27/18 20:17	1

Client Sample ID: B3H2B9 — **Lab Sample ID: 160-27350-8**
Date Collected: 03/13/18 11:09 — **Matrix: Soil**
Date Received: 03/15/18 09:20 — **Percent Solids: 92.6**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**1.2**	**C**	0.54	0.24	mg/Kg	☼	04/10/18 19:35	04/10/18 21:42	1
Cyanide, Total	0.12	U	0.53	0.12	mg/Kg	☼	03/27/18 17:35	03/27/18 20:21	1

Client Sample ID: B3H2C2 — **Lab Sample ID: 160-27350-9**
Date Collected: 03/13/18 11:16 — **Matrix: Soil**
Date Received: 03/15/18 09:20 — **Percent Solids: 92.8**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**1.2**	**C**	0.54	0.24	mg/Kg	☼	04/10/18 19:35	04/10/18 21:45	1
Cyanide, Total	0.12	U	0.54	0.12	mg/Kg	☼	03/27/18 17:35	03/27/18 20:24	1

Client Sample ID: B3H2D4 — **Lab Sample ID: 160-27350-10**
Date Collected: 03/13/18 13:40 — **Matrix: Soil**
Date Received: 03/15/18 09:20 — **Percent Solids: 97.1**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**1.1**	**C**	0.51	0.23	mg/Kg	☼	04/10/18 19:35	04/10/18 21:47	1
Cyanide, Total	0.12	U	0.51	0.12	mg/Kg	☼	03/27/18 17:35	03/27/18 20:27	1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 160-356431/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 358562 — **Prep Batch: 356431**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	1.9	U D	4.7	1.9	mg/Kg		03/19/18 11:10	04/02/18 23:36	2
Arsenic	0.38	U D	0.94	0.38	mg/Kg		03/19/18 11:10	04/02/18 23:36	2
Barium	0.47	U D	1.9	0.47	mg/Kg		03/19/18 11:10	04/02/18 23:36	2
Cadmium	0.023	U D	0.047	0.023	mg/Kg		03/19/18 11:10	04/02/18 23:36	2
Chromium	0.42	U D	0.94	0.42	mg/Kg		03/19/18 11:10	04/02/18 23:36	2
Copper	0.38	U D	0.94	0.38	mg/Kg		03/19/18 11:10	04/02/18 23:36	2
Lead	0.12	U D	0.28	0.12	mg/Kg		03/19/18 11:10	04/02/18 23:36	2
Manganese	0.19	U D	0.47	0.19	mg/Kg		03/19/18 11:10	04/02/18 23:36	2
Nickel	0.19	U D	0.47	0.19	mg/Kg		03/19/18 11:10	04/02/18 23:36	2
Selenium	0.30	U D	0.47	0.30	mg/Kg		03/19/18 11:10	04/02/18 23:36	2
Silver	0.070	U D	0.19	0.070	mg/Kg		03/19/18 11:10	04/02/18 23:36	2
Uranium	0.038	U D	0.094	0.038	mg/Kg		03/19/18 11:10	04/02/18 23:36	2

Lab Sample ID: LCS 160-356431/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 358562 — **Prep Batch: 356431**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Uranium	84.7	85.83	D	mg/Kg		101	80 - 120

Lab Sample ID: LCSSRM 160-356431/3-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 358562 — **Prep Batch: 356431**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	8090	6790	D	mg/Kg		83.9	39.6 - 160.7
Arsenic	100	106.3	D	mg/Kg		106.3	69.6 - 131.0
Barium	217	214.6	D	mg/Kg		98.9	73.7 - 128.1
Cadmium	83.7	79.43	D	mg/Kg		94.9	73.2 - 131.4
Chromium	107	105.3	D	mg/Kg		98.4	69.4 - 134.6
Copper	166	184.9	D	mg/Kg		111.4	75.3 - 128.3
Lead	88.4	93.81	D	mg/Kg		106.1	69.9 - 130.1
Manganese	311	364.4	D	mg/Kg		117.2	74.9 - 125.4
Nickel	49.8	56.13	D	mg/Kg		112.7	69.1 - 135.1
Selenium	87.7	91.12	D	mg/Kg		103.9	64.1 - 135.7
Silver	41.4	42.83	D	mg/Kg		103.5	65.9 - 133.8

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

Lab Sample ID: 160-27350-1 MS — **Client Sample ID: B3H274**
Matrix: Soil — **Prep Type: Total/NA**
Analysis Batch: 358562 — **Prep Batch: 356431**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	5900	D	980	8901	X D	mg/Kg	☼	306	75 - 125
Arsenic	3.9	D	98.0	101.1	D	mg/Kg	☼	99	75 - 125
Barium	72.8	D	98.0	173.3	D	mg/Kg	☼	103	75 - 125
Cadmium	0.094	B D	98.0	94.61	D	mg/Kg	☼	96	75 - 125
Chromium	8.3	D	98.0	103.9	D	mg/Kg	☼	98	75 - 125
Copper	15.9	D	98.0	118.5	D	mg/Kg	☼	105	75 - 125
Lead	4.7	D	98.0	99.83	D	mg/Kg	☼	97	75 - 125
Manganese	322	N D	98.0	490.5	D N	mg/Kg	☼	172	75 - 125
Nickel	10.5	D	98.0	117.8	D	mg/Kg	☼	110	75 - 125
Selenium	2.9	D	49.0	46.48	D	mg/Kg	☼	89	75 - 125
Silver	0.18	U D	19.6	19.14	D	mg/Kg	☼	98	75 - 125
Uranium	0.41	D	98.0	98.62	D	mg/Kg	☼	100	75 - 125

Lab Sample ID: 160-27350-1 MSD — **Client Sample ID: B3H274**
Matrix: Soil — **Prep Type: Total/NA**
Analysis Batch: 358562 — **Prep Batch: 356431**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	5900	D	968	9007	X D	mg/Kg	☼	321	75 - 125	1	30
Arsenic	3.9	D	96.8	99.53	D	mg/Kg	☼	99	75 - 125	2	30
Barium	72.8	D	96.8	175.2	D	mg/Kg	☼	106	75 - 125	1	30
Cadmium	0.094	B D	96.8	93.67	D	mg/Kg	☼	97	75 - 125	1	30
Chromium	8.3	D	96.8	109.9	D	mg/Kg	☼	105	75 - 125	6	30
Copper	15.9	D	96.8	117.4	D	mg/Kg	☼	105	75 - 125	1	30
Lead	4.7	D	96.8	99.04	D	mg/Kg	☼	98	75 - 125	1	30
Manganese	322	N D	96.8	472.1	N D	mg/Kg	☼	155	75 - 125	4	30
Nickel	10.5	D	96.8	117.9	D	mg/Kg	☼	111	75 - 125	0	30
Selenium	2.9	D	48.4	46.54	D	mg/Kg	☼	90	75 - 125	0	30
Silver	0.18	U D	19.4	19.35	D	mg/Kg	☼	100	75 - 125	1	30
Uranium	0.41	D	96.8	98.17	D	mg/Kg	☼	101	75 - 125	0	30

Lab Sample ID: MB 160-356435/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 358564 — **Prep Batch: 356435**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.19	U D	0.48	0.19	mg/Kg		03/19/18 11:13	04/02/18 18:40	2

Lab Sample ID: LCS 160-356435/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 358564 — **Prep Batch: 356435**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	45.8	42.69	D	mg/Kg		93	21 - 251

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

Lab Sample ID: 160-27350-1 MS — **Client Sample ID: B3H274**
Matrix: Soil — **Prep Type: Total/NA**
Analysis Batch: 358564 — **Prep Batch: 356435**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.48	U D	48.2	45.33	D	mg/Kg	☼	94	75 - 125

Lab Sample ID: 160-27350-1 MSD — **Client Sample ID: B3H274**
Matrix: Soil — **Prep Type: Total/NA**
Analysis Batch: 358564 — **Prep Batch: 356435**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.48	U D	47.5	45.00	D	mg/Kg	☼	95	75 - 125	1	30

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 160-356232/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 356987 — **Prep Batch: 356232**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.011	U	0.034	0.011	mg/Kg		03/19/18 08:50	03/21/18 14:12	1

Lab Sample ID: LCSSRM 160-356232/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 356987 — **Prep Batch: 356232**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.90	2.89	D	mg/Kg		99.7	50.7 - 149.3

Lab Sample ID: 160-27350-1 MS — **Client Sample ID: B3H274**
Matrix: Soil — **Prep Type: Total/NA**
Analysis Batch: 356987 — **Prep Batch: 356232**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.013	U	1.01	1.11		mg/Kg	☼	110	80 - 120

Lab Sample ID: 160-27350-1 MSD — **Client Sample ID: B3H274**
Matrix: Soil — **Prep Type: Total/NA**
Analysis Batch: 356987 — **Prep Batch: 356232**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.013	U	0.958	1.07		mg/Kg	☼	111	80 - 120	4	30

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 160-360123/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 360336 — **Prep Batch: 360123**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	0.496	B	0.50	0.22	mg/Kg		04/10/18 19:35	04/10/18 21:06	1

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: LCS 160-360123/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 360336 — **Prep Batch: 360123**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia (as N)	5.00	4.93		mg/Kg		99	90 - 110

Lab Sample ID: 160-27350-1 MS — **Client Sample ID: B3H274**
Matrix: Soil — **Prep Type: Total/NA**
Analysis Batch: 360336 — **Prep Batch: 360123**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia (as N)	1.3	C	5.22	6.10		mg/Kg	☼	92	90 - 110

Lab Sample ID: 160-27350-1 DU — **Client Sample ID: B3H274**
Matrix: Soil — **Prep Type: Total/NA**
Analysis Batch: 360336 — **Prep Batch: 360123**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Ammonia (as N)	1.3	C	1.32	C	mg/Kg	☼	0	30

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 160-357856/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 358196 — **Prep Batch: 357856**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.11	U	0.50	0.11	mg/Kg		03/27/18 17:35	03/27/18 19:33	1

Lab Sample ID: HLCS 160-357856/3-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 358196 — **Prep Batch: 357856**

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	4.80	4.71		mg/Kg		98	85 - 115

Lab Sample ID: LCS 160-357856/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 358196 — **Prep Batch: 357856**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	2.40	2.18		mg/Kg		91	85 - 115

Lab Sample ID: 160-27350-1 MS — **Client Sample ID: B3H274**
Matrix: Soil — **Prep Type: Total/NA**
Analysis Batch: 358196 — **Prep Batch: 357856**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.12	U	2.51	2.06		mg/Kg	☼	82	60 - 130

Client: CH2M Hill Plateau Remediation Company
Project/Site: F17-062

TestAmerica Job ID: 160-27350-1
SDG: SL2824

Method: 9012B - Cyanide, Total andor Amenable (Continued)

Lab Sample ID: 160-27350-1 DU
Matrix: Soil
Analysis Batch: 358196

Client Sample ID: B3H274
Prep Type: Total/NA
Prep Batch: 357856

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Cyanide, Total	0.12	U		0.12	U	mg/Kg	☼			NC	30

QC Association Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: F17-062

TestAmerica Job ID: 160-27350-1
SDG: SL2824

Metals

Prep Batch: 356232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-27350-1	B3H274	Total/NA	Soil	7471B	
160-27350-2	B3H277	Total/NA	Soil	7471B	
160-27350-3	B3H280	Total/NA	Soil	7471B	
160-27350-4	B3H283	Total/NA	Soil	7471B	
160-27350-5	B3H286	Total/NA	Soil	7471B	
160-27350-6	B3H2B3	Total/NA	Soil	7471B	
160-27350-7	B3H2B6	Total/NA	Soil	7471B	
160-27350-8	B3H2B9	Total/NA	Soil	7471B	
160-27350-9	B3H2C2	Total/NA	Soil	7471B	
160-27350-10	B3H2D4	Total/NA	Soil	7471B	
MB 160-356232/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 160-356232/2-A	Lab Control Sample	Total/NA	Solid	7471B	
160-27350-1 MS	B3H274	Total/NA	Soil	7471B	
160-27350-1 MSD	B3H274	Total/NA	Soil	7471B	

Prep Batch: 356431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-27350-1	B3H274	Total/NA	Soil	3050B	
160-27350-2	B3H277	Total/NA	Soil	3050B	
160-27350-3	B3H280	Total/NA	Soil	3050B	
160-27350-4	B3H283	Total/NA	Soil	3050B	
160-27350-5	B3H286	Total/NA	Soil	3050B	
160-27350-6	B3H2B3	Total/NA	Soil	3050B	
160-27350-7	B3H2B6	Total/NA	Soil	3050B	
160-27350-8	B3H2B9	Total/NA	Soil	3050B	
160-27350-9	B3H2C2	Total/NA	Soil	3050B	
160-27350-10	B3H2D4	Total/NA	Soil	3050B	
MB 160-356431/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 160-356431/2-A	Lab Control Sample	Total/NA	Solid	3050B	
LCSSRM 160-356431/3-A	Lab Control Sample	Total/NA	Solid	3050B	
160-27350-1 MS	B3H274	Total/NA	Soil	3050B	
160-27350-1 MSD	B3H274	Total/NA	Soil	3050B	

Prep Batch: 356435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-27350-1	B3H274	Total/NA	Soil	3050B-Sb	
160-27350-2	B3H277	Total/NA	Soil	3050B-Sb	
160-27350-3	B3H280	Total/NA	Soil	3050B-Sb	
160-27350-4	B3H283	Total/NA	Soil	3050B-Sb	
160-27350-5	B3H286	Total/NA	Soil	3050B-Sb	
160-27350-6	B3H2B3	Total/NA	Soil	3050B-Sb	
160-27350-7	B3H2B6	Total/NA	Soil	3050B-Sb	
160-27350-8	B3H2B9	Total/NA	Soil	3050B-Sb	
160-27350-9	B3H2C2	Total/NA	Soil	3050B-Sb	
160-27350-10	B3H2D4	Total/NA	Soil	3050B-Sb	
MB 160-356435/1-A	Method Blank	Total/NA	Solid	3050B-Sb	
LCS 160-356435/2-A	Lab Control Sample	Total/NA	Solid	3050B-Sb	
160-27350-1 MS	B3H274	Total/NA	Soil	3050B-Sb	
160-27350-1 MSD	B3H274	Total/NA	Soil	3050B-Sb	

Metals (Continued)

Analysis Batch: 356987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-27350-1	B3H274	Total/NA	Soil	7471B	356232
160-27350-2	B3H277	Total/NA	Soil	7471B	356232
160-27350-3	B3H280	Total/NA	Soil	7471B	356232
160-27350-4	B3H283	Total/NA	Soil	7471B	356232
160-27350-5	B3H286	Total/NA	Soil	7471B	356232
160-27350-6	B3H2B3	Total/NA	Soil	7471B	356232
160-27350-7	B3H2B6	Total/NA	Soil	7471B	356232
160-27350-8	B3H2B9	Total/NA	Soil	7471B	356232
160-27350-9	B3H2C2	Total/NA	Soil	7471B	356232
160-27350-10	B3H2D4	Total/NA	Soil	7471B	356232
MB 160-356232/1-A	Method Blank	Total/NA	Solid	7471B	356232
LCSSRM 160-356232/2-A	Lab Control Sample	Total/NA	Solid	7471B	356232
160-27350-1 MS	B3H274	Total/NA	Soil	7471B	356232
160-27350-1 MSD	B3H274	Total/NA	Soil	7471B	356232

Analysis Batch: 358562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-27350-1	B3H274	Total/NA	Soil	6020A	356431
160-27350-2	B3H277	Total/NA	Soil	6020A	356431
160-27350-3	B3H280	Total/NA	Soil	6020A	356431
160-27350-4	B3H283	Total/NA	Soil	6020A	356431
160-27350-5	B3H286	Total/NA	Soil	6020A	356431
160-27350-6	B3H2B3	Total/NA	Soil	6020A	356431
160-27350-7	B3H2B6	Total/NA	Soil	6020A	356431
160-27350-8	B3H2B9	Total/NA	Soil	6020A	356431
160-27350-9	B3H2C2	Total/NA	Soil	6020A	356431
160-27350-10	B3H2D4	Total/NA	Soil	6020A	356431
MB 160-356431/1-A	Method Blank	Total/NA	Solid	6020A	356431
LCS 160-356431/2-A	Lab Control Sample	Total/NA	Solid	6020A	356431
LCSSRM 160-356431/3-A	Lab Control Sample	Total/NA	Solid	6020A	356431
160-27350-1 MS	B3H274	Total/NA	Soil	6020A	356431
160-27350-1 MSD	B3H274	Total/NA	Soil	6020A	356431

Analysis Batch: 358564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-27350-1	B3H274	Total/NA	Soil	6020A	356435
160-27350-2	B3H277	Total/NA	Soil	6020A	356435
160-27350-3	B3H280	Total/NA	Soil	6020A	356435
160-27350-4	B3H283	Total/NA	Soil	6020A	356435
160-27350-5	B3H286	Total/NA	Soil	6020A	356435
160-27350-6	B3H2B3	Total/NA	Soil	6020A	356435
160-27350-7	B3H2B6	Total/NA	Soil	6020A	356435
160-27350-8	B3H2B9	Total/NA	Soil	6020A	356435
160-27350-9	B3H2C2	Total/NA	Soil	6020A	356435
160-27350-10	B3H2D4	Total/NA	Soil	6020A	356435
MB 160-356435/1-A	Method Blank	Total/NA	Solid	6020A	356435
LCS 160-356435/2-A	Lab Control Sample	Total/NA	Solid	6020A	356435
160-27350-1 MS	B3H274	Total/NA	Soil	6020A	356435
160-27350-1 MSD	B3H274	Total/NA	Soil	6020A	356435

General Chemistry

Analysis Batch: 356016

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-27350-1	B3H274	Total/NA	Soil	Moisture	
160-27350-2	B3H277	Total/NA	Soil	Moisture	
160-27350-3	B3H280	Total/NA	Soil	Moisture	
160-27350-4	B3H283	Total/NA	Soil	Moisture	
160-27350-5	B3H286	Total/NA	Soil	Moisture	
160-27350-6	B3H2B3	Total/NA	Soil	Moisture	
160-27350-7	B3H2B6	Total/NA	Soil	Moisture	
160-27350-8	B3H2B9	Total/NA	Soil	Moisture	
160-27350-9	B3H2C2	Total/NA	Soil	Moisture	
160-27350-10	B3H2D4	Total/NA	Soil	Moisture	
160-27329-A-1 DU	Duplicate	Total/NA	Solid	Moisture	

Prep Batch: 357856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-27350-1	B3H274	Total/NA	Soil	9010C	
160-27350-2	B3H277	Total/NA	Soil	9010C	
160-27350-3	B3H280	Total/NA	Soil	9010C	
160-27350-4	B3H283	Total/NA	Soil	9010C	
160-27350-5	B3H286	Total/NA	Soil	9010C	
160-27350-6	B3H2B3	Total/NA	Soil	9010C	
160-27350-7	B3H2B6	Total/NA	Soil	9010C	
160-27350-8	B3H2B9	Total/NA	Soil	9010C	
160-27350-9	B3H2C2	Total/NA	Soil	9010C	
160-27350-10	B3H2D4	Total/NA	Soil	9010C	
MB 160-357856/1-A	Method Blank	Total/NA	Solid	9010C	
HLCS 160-357856/3-A	Lab Control Sample	Total/NA	Solid	9010C	
LCS 160-357856/2-A	Lab Control Sample	Total/NA	Solid	9010C	
160-27350-1 MS	B3H274	Total/NA	Soil	9010C	
160-27350-1 DU	B3H274	Total/NA	Soil	9010C	

Analysis Batch: 358196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-27350-1	B3H274	Total/NA	Soil	9012B	357856
160-27350-2	B3H277	Total/NA	Soil	9012B	357856
160-27350-3	B3H280	Total/NA	Soil	9012B	357856
160-27350-4	B3H283	Total/NA	Soil	9012B	357856
160-27350-5	B3H286	Total/NA	Soil	9012B	357856
160-27350-6	B3H2B3	Total/NA	Soil	9012B	357856
160-27350-7	B3H2B6	Total/NA	Soil	9012B	357856
160-27350-8	B3H2B9	Total/NA	Soil	9012B	357856
160-27350-9	B3H2C2	Total/NA	Soil	9012B	357856
160-27350-10	B3H2D4	Total/NA	Soil	9012B	357856
MB 160-357856/1-A	Method Blank	Total/NA	Solid	9012B	357856
HLCS 160-357856/3-A	Lab Control Sample	Total/NA	Solid	9012B	357856
LCS 160-357856/2-A	Lab Control Sample	Total/NA	Solid	9012B	357856
160-27350-1 MS	B3H274	Total/NA	Soil	9012B	357856
160-27350-1 DU	B3H274	Total/NA	Soil	9012B	357856

Prep Batch: 360123

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-27350-1	B3H274	Total/NA	Soil	DILeach_Prep	

General Chemistry (Continued)

Prep Batch: 360123 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-27350-2	B3H277	Total/NA	Soil	DILeach_Prep	
160-27350-3	B3H280	Total/NA	Soil	DILeach_Prep	
160-27350-4	B3H283	Total/NA	Soil	DILeach_Prep	
160-27350-5	B3H286	Total/NA	Soil	DILeach_Prep	
160-27350-6	B3H2B3	Total/NA	Soil	DILeach_Prep	
160-27350-7	B3H2B6	Total/NA	Soil	DILeach_Prep	
160-27350-8	B3H2B9	Total/NA	Soil	DILeach_Prep	
160-27350-9	B3H2C2	Total/NA	Soil	DILeach_Prep	
160-27350-10	B3H2D4	Total/NA	Soil	DILeach_Prep	
MB 160-360123/1-A	Method Blank	Total/NA	Solid	DILeach_Prep	
LCS 160-360123/2-A	Lab Control Sample	Total/NA	Solid	DILeach_Prep	
160-27350-1 MS	B3H274	Total/NA	Soil	DILeach_Prep	
160-27350-1 DU	B3H274	Total/NA	Soil	DILeach_Prep	

Analysis Batch: 360336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-27350-1	B3H274	Total/NA	Soil	350.1	360123
160-27350-2	B3H277	Total/NA	Soil	350.1	360123
160-27350-3	B3H280	Total/NA	Soil	350.1	360123
160-27350-4	B3H283	Total/NA	Soil	350.1	360123
160-27350-5	B3H286	Total/NA	Soil	350.1	360123
160-27350-6	B3H2B3	Total/NA	Soil	350.1	360123
160-27350-7	B3H2B6	Total/NA	Soil	350.1	360123
160-27350-8	B3H2B9	Total/NA	Soil	350.1	360123
160-27350-9	B3H2C2	Total/NA	Soil	350.1	360123
160-27350-10	B3H2D4	Total/NA	Soil	350.1	360123
MB 160-360123/1-A	Method Blank	Total/NA	Solid	350.1	360123
LCS 160-360123/2-A	Lab Control Sample	Total/NA	Solid	350.1	360123
160-27350-1 MS	B3H274	Total/NA	Soil	350.1	360123
160-27350-1 DU	B3H274	Total/NA	Soil	350.1	360123