Thursday, December 10, 2015

Dave Todak
CH2M HILL Plateau Remediation Company
2420 Stevens Center
Richland, WA 99352

Re: ALS Workorder: 1511416
Project Name: FY15 100-K AB Waste Sites - Soil
Project Number: F16-002

Dear Mr. Todak:

Thirteen soil samples were received from CH2M HILL Plateau Remediation Company, on 11/21/2015. The samples were scheduled for the following analyses:

Metals
Inorganics

The results for these analyses are contained in the enclosed reports. This report includes theadditional requested tests.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

Thank you for your confidence in ALS Environmental. Should you have any questions, please call.

Sincerely,

ALS Environmental
Julie Ellingson
Project Manager

SAMPLE ISSUE RESOLUTION

SIR NUM	SIR16-122
REV NUM	0
DATE INITIATED	12/3/2015

SAMPLE EVENT INFORMATION

SAF NUM(S)	F16-002
OPERABLE UNIT(S)	100-KR-2
PROJECT(S)	100-KE FSB
SAMPLE EVENT TITLE(S)	Characterization Boreholes in UPR-100-K-1 and 1116-KE-3 Waste Sites
LABORATORY	ALS Environmental Ft. Collins

SAMPLING INFORMATION

NUMBER OF SAMPLES	2
SAMPLE NUMBERS	B33W51, B33W60
SAMPLE MATRIX	SOIL
COLLECTION DATE	11/20/2015 - 11/20/2015
SDG NUM	ALS1511416

ISSUE BACKGROUND

CLASS	General Laboratory Direction
TYPE	Addition of Analyses
DESCRIPTION	Request that the lab add TCLP Hg on samples B33W60 and B33W51.

DISPOSITION

DESCRIPTION	PROPOSED DISPOSITION: Request that the lab add TCLP Hg and Ph on samples B33W60 and B33W51. Please include the quickest TAT you can provide in your accepted disposition.
JUSTIFICATION	ACCEPTED DISPOSITION: Lab can do a 7 day TAT for the additional analyses. Data will be ready on 12/10/15.

SUBMITTED BY: David Todak/CHPRC DATE: 12/3/15
ACCEPTED BY: Julie Ellingson DATE: 12/7/15

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

73 lbs

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COLLECTOR: F.M. Hall/CHPRC

COMPANY CONTACT: TODAK, D

TELEPHONE NO.: 376-6427

PROJECT COORDINATOR: TODAK, D

PRICE CODE: C05

DATA TURNAROUND: 7 Days / 7 Days

AIR QUALITY: ☐

SAMPLING LOCATION: 100-KE, AB waste sites, Sample 5

PROJECT DESIGNATION: FY15 100-K AB Waste Sites - Soil

SAF NO.: F16-002

ICE CHEST NO.: GWS-305

FIELD LOGBOOK NO.: HNF-N-507 30

ACTUAL SAMPLE DEPTH: 0-6"

COA: 303808

METHOD OF SHIPMENT: FEDERAL EXPRESS

ORIGINAL

SHIPPED TO: ALS Environmental Ft. Collins

OFFSITE PROPERTY NO.: 6157

BILL OF LADING/AIR BILL NO.: 7750 3088 6409

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. NA

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	Cool <=6C	Cool <=6C
HOLDING TIME	6 Months	28 Days	30 Days	28 Days/48 Hours
TYPE OF CONTAINER	G/P	G	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	60mL	60mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	7471_MERCURY _CV: COMMON (SOLIDS) {Mercury};	7196_CR6: COMMON {Hexavalent Chromium};	SEE ITEM (2) IN SPECIAL INSTRUCTIONS

SAMPLE NO.		MATRIX*	SAMPLE DATE	SAMPLE TIME				
B33W52	1	SOIL	NOV 20 2015	1128	✓	✓	✓	✓

1511416

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
F.M. Hall/CHPRC	NOV 20 2015 1210	L.D. Wall CHPRC	NOV 20 2015 1210
L.D. Wall CHPRC	NOV 20 2015 1400	FEDEX	
Fedex	11-21-15 0930	Scott Malley	11-21-15 0930

SPECIAL INSTRUCTIONS

TRVL-16-026
(1) 6020_METALS_ICPMS: COMMON {Aluminum, Antimony, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Molybdenum, Selenium, Silver}; 6020_METALS_ICPMS: COMMON (Add-on) {Arsenic, Iron, Manganese, Nickel, Sodium, Strontium, Tin, Uranium, Vanadium, Zinc};
(2) 300.0_ANIONS_IC: COMMON {Chloride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

PRINTED ON 11/18/2015 FSR ID = FSR10579 TRVL NUM = TRVL-16-026 NA-6003-618 (REV 2)

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CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F16-002-001	PAGE 1 OF 1
COLLECTOR: F.M. Hall/CHPRC	COMPANY CONTACT: TODAK, D	TELEPHONE NO.: 376-6427	PROJECT COORDINATOR: TODAK, D	PRICE CODE: C05	DATA TURNAROUND: 7 Days / 7 Days
SAMPLING LOCATION: 100-KE, AB waste sites, Sample 1	PROJECT DESIGNATION: FY15 100-K AB Waste Sites - Soil		SAF NO.: F16-002	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-305	FIELD LOGBOOK NO.: HNF-N-507 30	ACTUAL SAMPLE DEPTH: 0-6"	COA: 303808	METHOD OF SHIPMENT: FEDERAL EXPRESS	ORIGINAL
SHIPPED TO: ALS Environmental Ft. Collins	OFFSITE PROPERTY NO.: 6157			BILL OF LADING/AIR BILL NO.: 7750 3088 6409	

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. NA

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	Cool <=6C	Cool <=6C
HOLDING TIME	6 Months	28 Days	30 Days	28 Days/48 Hours
TYPE OF CONTAINER	G/P	G	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	60mL	60mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	7471_MERCURY_CV: COMMON (SOLIDS) {Mercury};	7196_CR6: COMMON {Hexavalent Chromium};	SEE ITEM (2) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME				
B33W48 (2)	SOIL	NOV 2 0 2015	0850	✓	✓	✓	✓

1511416

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
F.M. Hall/CHPRC	NOV 2 0 2015 1210	L.D. Wall CHPRC	NOV 2 0 2015 1210
L.D. Wall CHPRC	NOV 2 0 2015 1400	FEDEX	
Fedex	11-21-15 0930	Scott Malky	11-21-15 0930

SPECIAL INSTRUCTIONS
TRVL-16-026
(1) 6020_METALS_ICPMS: COMMON {Aluminum, Antimony, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Molybdenum, Selenium, Silver}; 6020_METALS_ICPMS: COMMON (Add-on) {Arsenic, Iron, Manganese, Nickel, Sodium, Strontium, Tin, Uranium, Vanadium, Zinc};
(2) 300.0_ANIONS_IC: COMMON {Chloride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

PRINTED ON 11/18/2015 FSR ID = FSR10575 TRVL NUM = TRVL-16-026 A-6003-618 (REV 2)

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CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F16-002-002 | PAGE 1 OF 1

COLLECTOR F.M. Hall/CHPRC	**COMPANY CONTACT** TODAK, D	**TELEPHONE NO.** 376-6427	**PROJECT COORDINATOR** TODAK, D
SAMPLING LOCATION 100-KE, AB waste sites, Sample 2	**PROJECT DESIGNATION** FY15 100-K AB Waste Sites - Soil		**SAF NO.** F16-002
ICE CHEST NO. GUS-305	**FIELD LOGBOOK NO.** HNF-N-507 30	**ACTUAL SAMPLE DEPTH** 0-6"	**COA** 303808
SHIPPED TO ALS Environmental Ft. Collins	**OFFSITE PROPERTY NO.** 6157		**BILL OF LADING/AIR BILL NO.** 7750 3088 6409

PRICE CODE C05 | **DATA TURNAROUND** 7 Days / 7 Days | **AIR QUALITY** ☐ | **METHOD OF SHIPMENT** FEDERAL EXPRESS | **ORIGINAL**

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. NA

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	Cool <=6C	Cool <=6C
HOLDING TIME	6 Months	28 Days	30 Days	28 Days/48 Hours
TYPE OF CONTAINER	G/P	G	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	60mL	60mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	7471_MERCURY _CV: COMMON (SOLIDS) {Mercury};	7196_CR6: COMMON {Hexavalent Chromium};	SEE ITEM (2) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME				
B33W49 (3)	SOIL	NOV 2 0 2015	0855	✓	✓	✓	✓

151146

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
F.M. Hall/CHPRC	NOV 2 0 2015 1210	L.D. Wall CHPRC	NOV 2 0 2015 1210
L.D. Wall CHPRC	NOV 2 0 2015 1400	FEDEX	
Fedex	11-21-15 0930	Scott Malloy	11-21-15 0930

SPECIAL INSTRUCTIONS
TRVL-16-026
(1) 6020_METALS_ICPMS: COMMON {Aluminum, Antimony, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Molybdenum, Selenium, Silver}; 6020_METALS_ICPMS: COMMON (Add-on) {Arsenic, Iron, Manganese, Nickel, Sodium, Strontium, Tin, Uranium, Vanadium, Zinc};
(2) 300.0_ANIONS_IC: COMMON {Chloride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

PRINTED ON 11/18/2015 | **FSR ID = FSR10576** | **TRVL NUM = TRVL-16-026** | A-6003-618 (REV 2)

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CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

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COLLECTOR F.M. Hall/CHPRC	**COMPANY CONTACT** TODAK, D	**TELEPHONE NO.** 376-6427	**PROJECT COORDINATOR** TODAK, D
SAMPLING LOCATION 100-KE, AB waste sites, Sample 13	**PROJECT DESIGNATION** FY15 100-K AB Waste Sites - Soil		**SAF NO.** F16-002
ICE CHEST NO. GWS-305	**FIELD LOGBOOK NO.** HNF-N-507 30	**ACTUAL SAMPLE DEPTH** 0-6"	**COA** 303808
SHIPPED TO ALS Environmental Ft. Collins	**OFFSITE PROPERTY NO.** 6157		**BILL OF LADING/AIR BILL NO.** 7750 3088 6409

PRICE CODE C05 | **DATA TURNAROUND** 7 Days / 7 Days | **AIR QUALITY** ☐ | **METHOD OF SHIPMENT** FEDERAL EXPRESS | **ORIGINAL**

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. NA

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	Cool <=6C	Cool <=6C	
HOLDING TIME	6 Months	28 Days	30 Days	28 Days/48 Hours	
TYPE OF CONTAINER	G/P	G	G/P	G/P	
NO. OF CONTAINER(S)	1	1	1	1	
VOLUME	250mL	60mL	60mL	60mL	
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	7471_MERCURY _CV: COMMON (SOLIDS) {Mercury};	7196_CR6: COMMON {Hexavalent Chromium};	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	
SAMPLE NO.	**MATRIX***	**SAMPLE DATE**	**SAMPLE TIME**		
B33W60 (4)	SOIL	NOV 2 0 2015	1133	✓	✓ ✓ ✓

1511416

CHAIN OF POSSESSION		**SIGN/ PRINT NAMES**	
RELINQUISHED BY/REMOVED FROM F.M. Hall/CHPRC	**DATE/TIME** NOV 2 0 2015 1210	**RECEIVED BY/STORED IN** L.D. Wall CHPRC	**DATE/TIME** NOV 2 0 2015 1210
RELINQUISHED BY/REMOVED FROM L.D. Wall CHPRC	**DATE/TIME** NOV 2 0 2015 1400	**RECEIVED BY/STORED IN** FEDEX	**DATE/TIME**
RELINQUISHED BY/REMOVED FROM Fedex	**DATE/TIME** 11-21-15 0930	**RECEIVED BY/STORED IN** Scott Malby	**DATE/TIME** 11-21-15 0930
RELINQUISHED BY/REMOVED FROM	**DATE/TIME**	**RECEIVED BY/STORED IN**	**DATE/TIME**
RELINQUISHED BY/REMOVED FROM	**DATE/TIME**	**RECEIVED BY/STORED IN**	**DATE/TIME**
RELINQUISHED BY/REMOVED FROM	**DATE/TIME**	**RECEIVED BY/STORED IN**	**DATE/TIME**

SPECIAL INSTRUCTIONS
TRVL-16-026
(1) 6020_METALS_ICPMS: COMMON {Aluminum, Antimony, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Molybdenum, Selenium, Silver}; 6020_METALS_ICPMS: COMMON (Add-on) {Arsenic, Iron, Manganese, Nickel, Sodium, Strontium, Tin, Uranium, Vanadium, Zinc};
(2) 300.0_ANIONS_IC: COMMON {Chloride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

PRINTED ON 11/18/2015 | **FSR ID =** FSR10587 | **TRVL NUM =** TRVL-16-026 | A-6003-618 (REV 2)

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CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

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COLLECTOR F.M. Hall/CHPRC	**COMPANY CONTACT** TODAK, D	**TELEPHONE NO.** 376-6427	**PROJECT COORDINATOR** TODAK, D
SAMPLING LOCATION 100-KE, AB waste sites, Sample 12	**PROJECT DESIGNATION** FY15 100-K AB Waste Sites - Soil		**SAF NO.** F16-002
ICE CHEST NO. GWS-305	**FIELD LOGBOOK NO.** HNF-N-507 30	**ACTUAL SAMPLE DEPTH** 0-6"	**COA** 303808
SHIPPED TO ALS Environmental Ft. Collins	**OFFSITE PROPERTY NO.** 6157		**BILL OF LADING/AIR BILL NO.** 7750 3088 6409

PRICE CODE C05 | **AIR QUALITY** ☐ | **DATA TURNAROUND** 7 Days / 7 Days

METHOD OF SHIPMENT FEDERAL EXPRESS

ORIGINAL

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. NA

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	Cool <=6C	Cool <=6C	
HOLDING TIME	6 Months	28 Days	30 Days	28 Days/48 Hours	
TYPE OF CONTAINER	G/P	G	G/P	G/P	
NO. OF CONTAINER(S)	1	1	1	1	
VOLUME	250mL	60mL	60mL	60mL	
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	7471_MERCURY _CV: COMMON (SOLIDS) {Mercury};	7196_CR6: COMMON {Hexavalent Chromium};	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	
SAMPLE NO.	**MATRIX***	**SAMPLE DATE**	**SAMPLE TIME**		
B33W59 (5)	SOIL	NOV 20 2015	1052	✓	✓ ✓ ✓

1511416

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
F.M. Hall/CHPRC	NOV 20 2015 1210	L.D. Wall CHPRC	NOV 20 2015 1210
L.D. Wall CHPRC	NOV 20 2015 1400	FEDEX	
fedex	11-21-15 0930	Scott Malky	11-21-15 0930

SPECIAL INSTRUCTIONS

TRVL-16-026
(1) 6020_METALS_ICPMS: COMMON {Aluminum, Antimony, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Molybdenum, Selenium, Silver}; 6020_METALS_ICPMS: COMMON (Add-on) {Arsenic, Iron, Manganese, Nickel, Sodium, Strontium, Tin, Uranium, Vanadium, Zinc};
(2) 300.0_ANIONS_IC: COMMON {Chloride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

PRINTED ON 11/18/2015 | **FSR ID = FSR10586** | **TRVL NUM = TRVL-16-026** | A-6003-618 (REV 2)

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CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F16-002-006	PAGE 1 OF 1
COLLECTOR: F.M. Hall/CHPRC	COMPANY CONTACT: TODAK, D	TELEPHONE NO.: 376-6427	PROJECT COORDINATOR: TODAK, D	PRICE CODE: C05	DATA TURNAROUND: 7 Days / 7 Days
SAMPLING LOCATION: 100-KE, AB waste sites, Sample 6	PROJECT DESIGNATION: FY15 100-K AB Waste Sites - Soil		SAF NO.: F16-002	AIR QUALITY: ☐	
ICE CHEST NO.: GW5-305	FIELD LOGBOOK NO.: HNF-N-507 30	ACTUAL SAMPLE DEPTH: 0-6"	COA: 303808	METHOD OF SHIPMENT: FEDERAL EXPRESS	ORIGINAL
SHIPPED TO: ALS Environmental Ft. Collins	OFFSITE PROPERTY NO.: 6157		BILL OF LADING/AIR BILL NO.: 7750 3088 6409		

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. NA

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	Cool <=6C	Cool <=6C
HOLDING TIME	6 Months	28 Days	30 Days	28 Days/48 Hours
TYPE OF CONTAINER	G/P	G	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	60mL	60mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	7471_MERCURY_CV: COMMON (SOLIDS) {Mercury};	7196_CR6: COMMON {Hexavalent Chromium};	SEE ITEM (2) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME				
B33W53 (6)	SOIL	NOV 20 2015	1121	✓	✓	✓	✓

151146

CHAIN OF POSSESSION	DATE/TIME	SIGN/ PRINT NAMES	DATE/TIME
RELINQUISHED BY/REMOVED FROM: F.M. Hall/CHPRC	NOV 20 2015 1210	RECEIVED BY/STORED IN: L.D. Wall CHPRC	NOV 20 2015 1210
RELINQUISHED BY/REMOVED FROM: L.D. Wall CHPRC	NOV 20 2015 1400	RECEIVED BY/STORED IN: FEDEX	
RELINQUISHED BY/REMOVED FROM: Fedex	11-21-15 0930	RECEIVED BY/STORED IN: Scott Malby	11-21-15 0930
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
TRVL-16-026
(1) 6020_METALS_ICPMS: COMMON {Aluminum, Antimony, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Molybdenum, Selenium, Silver}; 6020_METALS_ICPMS: COMMON (Add-on) {Arsenic, Iron, Manganese, Nickel, Sodium, Strontium, Tin, Uranium, Vanadium, Zinc};
(2) 300.0_ANIONS_IC: COMMON {Chloride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

PRINTED ON 11/18/2015 FSR ID = FSR10580 TRVL NUM = TRVL-16-026 A-6003-618 (REV 2)

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CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

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COLLECTOR F.M. Hall/CHPRC	**COMPANY CONTACT** TODAK, D	**TELEPHONE NO.** 376-6427	**PROJECT COORDINATOR** TODAK, D
SAMPLING LOCATION 100-KE, AB waste sites, Sample 8	**PROJECT DESIGNATION** FY15 100-K AB Waste Sites - Soil		**SAF NO.** F16-002
ICE CHEST NO. GW5-305	**FIELD LOGBOOK NO.** HNF-N-507 30	**ACTUAL SAMPLE DEPTH** 0-6"	**COA** 303808
SHIPPED TO ALS Environmental Ft. Collins	**OFFSITE PROPERTY NO.** 6157		**BILL OF LADING/AIR BILL NO.** 7750 3088 6409

PRICE CODE C05 | **AIR QUALITY** ☐ | **DATA TURNAROUND** 7 Days / 7 Days | **METHOD OF SHIPMENT** FEDERAL EXPRESS | **ORIGINAL**

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. NA

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	Cool <=6C	Cool <=6C
HOLDING TIME	6 Months	28 Days	30 Days	28 Days/48 Hours
TYPE OF CONTAINER	G/P	G	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	60mL	60mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	7471_MERCURY _CV: COMMON (SOLIDS) {Mercury};	7196_CR6: COMMON {Hexavalent Chromium};	SEE ITEM (2) IN SPECIAL INSTRUCTIONS

SAMPLE NO.		MATRIX*	SAMPLE DATE	SAMPLE TIME				
B33W55	7	SOIL	NOV 2 0 2015	1107	✓	✓	✓	✓

1511416

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM F.M. Hall/CHPRC	DATE/TIME NOV 2 0 2015 1210	RECEIVED BY/STORED IN L.D. Wall CHPRC	DATE/TIME NOV 2 0 2015 1210
RELINQUISHED BY/REMOVED FROM L.D. Wall CHPRC	DATE/TIME NOV 2 0 2015 1400	RECEIVED BY/STORED IN FEDEX	DATE/TIME
RELINQUISHED BY/REMOVED FROM Fedex	DATE/TIME 11-21-15 0930	RECEIVED BY/STORED IN Scott Mackey	DATE/TIME 11-21-15 0930
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
TRVL-16-026
(1) 6020_METALS_ICPMS: COMMON {Aluminum, Antimony, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Molybdenum, Selenium, Silver}; 6020_METALS_ICPMS: COMMON (Add-on) {Arsenic, Iron, Manganese, Nickel, Sodium, Strontium, Tin, Uranium, Vanadium, Zinc};
(2) 300.0_ANIONS_IC: COMMON {Chloride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

PRINTED ON 11/18/2015 | **FSR ID = FSR10582** | **TRVL NUM = TRVL-16-026** | A-6003-618 (REV 2)

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CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F16-002-011	PAGE 1 OF 1
COLLECTOR: F.M. Hall/CHPRC	COMPANY CONTACT: TODAK, D	TELEPHONE NO.: 376-6427	PROJECT COORDINATOR: TODAK, D	PRICE CODE: C05	DATA TURNAROUND: 7 Days / 7 Days
SAMPLING LOCATION: 100-KE, AB waste sites, Sample 11	PROJECT DESIGNATION: FY15 100-K AB Waste Sites - Soil		SAF NO.: F16-002	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-305	FIELD LOGBOOK NO.: HNF-N-507 30	ACTUAL SAMPLE DEPTH: 0-6"	COA: 303808	METHOD OF SHIPMENT: FEDERAL EXPRESS	ORIGINAL
SHIPPED TO: ALS Environmental Ft. Collins	OFFSITE PROPERTY NO.: 6157			BILL OF LADING/AIR BILL NO.: 7750 3088 6409	

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. NA

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	Cool <=6C	Cool <=6C	
HOLDING TIME	6 Months	28 Days	30 Days	28 Days/48 Hours	
TYPE OF CONTAINER	G/P	G	G/P	G/P	
NO. OF CONTAINER(S)	1	1	1	1	
VOLUME	250mL	60mL	60mL	60mL	
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	7471_MERCURY _CV: COMMON (SOLIDS) {Mercury};	7196_CR6: COMMON {Hexavalent Chromium};	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	
SAMPLE NO. / MATRIX* / SAMPLE DATE / SAMPLE TIME					
B33W58 (8) / SOIL / NOV 20 2015 / 1056	✓	✓	✓	✓	

1511416

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
F.M. Hall/CHPRC	NOV 20 2015 1210	L.D. Wall CHPRC	NOV 20 2015 1210
L.D. Wall CHPRC	NOV 20 2015 1400	FEDEX	
Fedex	11-21-15 0930	Scott Malky	11-21-15 0930

SPECIAL INSTRUCTIONS
TRVL-16-026
(1) 6020_METALS_ICPMS: COMMON {Aluminum, Antimony, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Molybdenum, Selenium, Silver}; 6020_METALS_ICPMS: COMMON (Add-on) {Arsenic, Iron, Manganese, Nickel, Sodium, Strontium, Tin, Uranium, Vanadium, Zinc};
(2) 300.0_ANIONS_IC: COMMON {Chloride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

PRINTED ON 11/18/2015 FSR ID = FSR10585 TRVL NUM = TRVL-16-026 A-6003-618 (REV 2)

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CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F16-002-004	PAGE 1 OF 1
COLLECTOR F.M. Hall/CHPRC	COMPANY CONTACT TODAK, D	TELEPHONE NO. 376-6427	PROJECT COORDINATOR TODAK, D	PRICE CODE C05	DATA TURNAROUND
SAMPLING LOCATION 100-KE, AB waste sites, Sample 4	PROJECT DESIGNATION FY15 100-K AB Waste Sites - Soil		SAF NO. F16-002	AIR QUALITY ☐	7 Days / 7 Days
ICE CHEST NO. GWS-305	FIELD LOGBOOK NO. HNF-N-507 30	ACTUAL SAMPLE DEPTH 0-6"	COA 303808	METHOD OF SHIPMENT FEDERAL EXPRESS	ORIGINAL
SHIPPED TO ALS Environmental Ft. Collins	OFFSITE PROPERTY NO. 6157			BILL OF LADING/AIR BILL NO. 7750 30886409	

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. NA

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	Cool <=6C	Cool <=6C	
HOLDING TIME	6 Months	28 Days	30 Days	28 Days/48 Hours	
TYPE OF CONTAINER	G/P	G	G/P	G/P	
NO. OF CONTAINER(S)	1	1	1	1	
VOLUME	250mL	60mL	60mL	60mL	
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	7471_MERCURY _CV: COMMON (SOLIDS) {Mercury};	7196_CR6: COMMON {Hexavalent Chromium};	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME				
B33W51	9	SOIL	NOV 2 0 2015	0932	✓	✓	✓ ✓

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CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
F.M. Hall/CHPRC	NOV 2 0 2015 1210	L.D. Wall / CHPRC	NOV 2 0 2015 1210
L.D. Wall / CHPRC	NOV 2 0 2015 1400		
Fedex	11-21-15 0930	FEDEX Scott Malky	11-21-15 0930

SPECIAL INSTRUCTIONS
TRVL-16-026
(1) 6020_METALS_ICPMS: COMMON {Aluminum, Antimony, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Molybdenum, Selenium, Silver}; 6020_METALS_ICPMS: COMMON (Add-on) {Arsenic, Iron, Manganese, Nickel, Sodium, Strontium, Tin, Uranium, Vanadium, Zinc};
(2) 300.0_ANIONS_IC: COMMON {Chloride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

PRINTED ON 11/18/2015 FSR ID = FSR10578 TRVL NUM = TRVL-16-026 A-6003-618 (REV 2)

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CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F16-002-010

COLLECTOR
F.M. Hall/CHPRC

COMPANY CONTACT
TODAK, D

TELEPHONE NO.
376-6427

PROJECT COORDINATOR
TODAK, D

PRICE CODE C05

DATA TURNAROUND
7 Days / 7 Days

AIR QUALITY ☐

SAMPLING LOCATION
100-KE, AB waste sites, Sample 10

PROJECT DESIGNATION
FY15 100-K AB Waste Sites - Soil

SAF NO.
F16-002

ICE CHEST NO. GWS-305

FIELD LOGBOOK NO. HNF-N-507 30

ACTUAL SAMPLE DEPTH 0-6"

COA
303808

METHOD OF SHIPMENT
FEDERAL EXPRESS

ORIGINAL

SHIPPED TO
ALS Environmental Ft. Collins

OFFSITE PROPERTY NO. 6157

BILL OF LADING/AIR BILL NO. 7750 3088 6409

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. NA

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	Cool <=6C	Cool <=6C
HOLDING TIME	6 Months	28 Days	30 Days	28 Days/48 Hours
TYPE OF CONTAINER	G/P	G	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	60mL	60mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	7471_MERCURY _CV: COMMON (SOLIDS) {Mercury};	7196_CR6: COMMON {Hexavalent Chromium};	SEE ITEM (2) IN SPECIAL INSTRUCTIONS

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SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME				
B33W57 (10)	SOIL	NOV 2 0 2015	1039	✓	✓	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
F.M. Hall/CHPRC	NOV 2 0 2015 1210	L.D. Wall CHPRC	NOV 2 0 2015 1210
L.D. Wall CHPRC	NOV 2 0 2015 1400	FEDEX	
Fedex	11-21-15 0930	Scott Malkey	11-21-15 0930

SPECIAL INSTRUCTIONS
TRVL-16-026
(1) 6020_METALS_ICPMS: COMMON {Aluminum, Antimony, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Molybdenum, Selenium, Silver}; 6020_METALS_ICPMS: COMMON (Add-on) {Arsenic, Iron, Manganese, Nickel, Sodium, Strontium, Tin, Uranium, Vanadium, Zinc};
(2) 300.0_ANIONS_IC: COMMON {Chloride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

PRINTED ON 11/18/2015 **FSR ID = FSR10584** **TRVL NUM = TRVL-16-026** A-6003-618 (REV 2)

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CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F16-002-007	PAGE 1 OF 1
COLLECTOR: F.M. Hall/CHPRC	COMPANY CONTACT: TODAK, D	TELEPHONE NO.: 376-6427	PROJECT COORDINATOR: TODAK, D	PRICE CODE: C05	DATA TURNAROUND: 7 Days / 7 Days
SAMPLING LOCATION: 100-KE, AB waste sites, Sample 7	PROJECT DESIGNATION: FY15 100-K AB Waste Sites - Soil		SAF NO.: F16-002	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-305	FIELD LOGBOOK NO.: HNF-N-507 30	ACTUAL SAMPLE DEPTH: 0-6"	COA: 303808	METHOD OF SHIPMENT: FEDERAL EXPRESS	ORIGINAL
SHIPPED TO: ALS Environmental Ft. Collins	OFFSITE PROPERTY NO.: 6157			BILL OF LADING/AIR BILL NO.: 7750 3088 6409	

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. NA

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	Cool <=6C	Cool <=6C
HOLDING TIME	6 Months	28 Days	30 Days	28 Days/48 Hours
TYPE OF CONTAINER	G/P	G	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	60mL	60mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	7471_MERCURY_CV: COMMON (SOLIDS) {Mercury};	7196_CR6: COMMON {Hexavalent Chromium};	SEE ITEM (2) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME				
B33W54 (11)	SOIL	NOV 2 0 2015	1103	✓	✓	✓	✓

1511416

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: F.M. Hall/CHPRC	DATE/TIME: NOV 2 0 2015 1210	RECEIVED BY/STORED IN: L.D. Wall CHPRC	DATE/TIME: NOV 2 0 2015 1210
RELINQUISHED BY/REMOVED FROM: L.D. Wall CHPRC	DATE/TIME: NOV 2 0 2015 1400	RECEIVED BY/STORED IN: FEDEX	DATE/TIME:
RELINQUISHED BY/REMOVED FROM: Fedex	DATE/TIME: 11-21-15 0930	RECEIVED BY/STORED IN: Scott Malky	DATE/TIME: 11-21-15 0930
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
TRVL-16-026
(1) 6020_METALS_ICPMS: COMMON {Aluminum, Antimony, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Molybdenum, Selenium, Silver}; 6020_METALS_ICPMS: COMMON (Add-on) {Arsenic, Iron, Manganese, Nickel, Sodium, Strontium, Tin, Uranium, Vanadium, Zinc};
(2) 300.0_ANIONS_IC: COMMON {Chloride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

PRINTED ON 11/18/2015 FSR ID = FSR10581 TRVL NUM = TRVL-16-026 ALS 6003-618 (REV 2)

December 10, 2015
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CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F16-002-009	PAGE 1 OF 1
COLLECTOR F.M. Hall/CHPRC	COMPANY CONTACT TODAK, D	TELEPHONE NO. 376-6427	PROJECT COORDINATOR TODAK, D	PRICE CODE C05	DATA TURNAROUND
SAMPLING LOCATION 100-KE, AB waste sites, Sample 9	PROJECT DESIGNATION FY15 100-K AB Waste Sites - Soil		SAF NO. F16-002	AIR QUALITY ☐	7 Days / 7 Days
ICE CHEST NO. GWS-305	FIELD LOGBOOK NO. HNF-N-506 30	ACTUAL SAMPLE DEPTH 0-6"	COA 303808	METHOD OF SHIPMENT FEDERAL EXPRESS	ORIGINAL
SHIPPED TO ALS Environmental Ft. Collins	OFFSITE PROPERTY NO. 6157		BILL OF LADING/AIR BILL NO. 7750 3088 6409		

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. NA

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	Cool <=6C	Cool <=6C	
HOLDING TIME	6 Months	28 Days	30 Days	28 Days/48 Hours	
TYPE OF CONTAINER	G/P	G	G/P	G/P	
NO. OF CONTAINER(S)	1	1	1	1	
VOLUME	250mL	60mL	60mL	60mL	
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	7471_MERCURY_CV: COMMON (SOLIDS) {Mercury};	7196_CR6: COMMON {Hexavalent Chromium};	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME				
B33W56 (12)	SOIL	NOV 2 0 2015	1030	✓	✓	✓	✓

1511416

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
F.M. Hall/CHPRC	NOV 2 0 2015 1210	L.D. Wall CHPRC	NOV 2 0 2015 1210
L.D. Wall CHPRC	NOV 2 0 2015 1400	FEDEX	
Fedex	11-21-15 0920	Scott Malky	11-21-15 0920

SPECIAL INSTRUCTIONS
TRVL-16-026
(1) 6020_METALS_ICPMS: COMMON {Aluminum, Antimony, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Molybdenum, Selenium, Silver}; 6020_METALS_ICPMS: COMMON (Add-on) {Arsenic, Iron, Manganese, Nickel, Sodium, Strontium, Tin, Uranium, Vanadium, Zinc};
(2) 300.0_ANIONS_IC: COMMON {Chloride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

PRINTED ON 11/18/2015 FSR ID = FSR10583 TRVL NUM = TRVL16-026 A-6003-618 (REV 2)

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CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F16-002-003 | PAGE 1 OF 1

COLLECTOR F.M. Hall/CHPRC	**COMPANY CONTACT** TODAK, D	**TELEPHONE NO.** 376-6427	**PROJECT COORDINATOR** TODAK, D
SAMPLING LOCATION 100-KE, AB waste sites, Sample 3	**PROJECT DESIGNATION** FY15 100-K AB Waste Sites - Soil		**SAF NO.** F16-002
ICE CHEST NO. GWS-305	**FIELD LOGBOOK NO.** HNF-N-507 30	**ACTUAL SAMPLE DEPTH** 0-6"	**COA** 303808
SHIPPED TO ALS Environmental Ft. Collins	**OFFSITE PROPERTY NO.** 6157		**BILL OF LADING/AIR BILL NO.** 7750 3088 6409

PRICE CODE C05 | **DATA TURNAROUND** 7 Days / 7 Days

AIR QUALITY ☐

METHOD OF SHIPMENT FEDERAL EXPRESS

ORIGINAL

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. NA

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	Cool <=6C	Cool <=6C
HOLDING TIME	6 Months	28 Days	30 Days	28 Days/48 Hours
TYPE OF CONTAINER	G/P	G	G/P	G/P
NO. OF CONTAINER(S)	1	1	1	1
VOLUME	250mL	60mL	60mL	60mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	7471_MERCURY_CV: COMMON (SOLIDS) {Mercury};	7196_CR6: COMMON {Hexavalent Chromium};	SEE ITEM (2) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME				
B33W50 (13)	SOIL	NOV 2 0 2015	0900	✓	✓	✓	✓

1511416

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
F.M. Hall/CHPRC	NOV 2 0 2015 1210	L.D. Wall CHPRC	NOV 2 0 2015 1210
L.D. Wall CHPRC	NOV 2 0 2015 1400	FEDEX	
Fedex	11-21-15 0910	Scott Malky	11-21-15 0920

SPECIAL INSTRUCTIONS
TRVL-16-026
(1) 6020_METALS_ICPMS: COMMON {Aluminum, Antimony, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Molybdenum, Selenium, Silver}; 6020_METALS_ICPMS: COMMON (Add-on) {Arsenic, Iron, Manganese, Nickel, Sodium, Strontium, Tin, Uranium, Vanadium, Zinc};
(2) 300.0_ANIONS_IC: COMMON {Chloride, Nitrogen in Nitrate, Nitrogen in Nitrite, Sulfate};

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

PRINTED ON 11/18/2015 | FSR ID = FSR10577 | TRVL NUM = TRVL-16-026 | A-6003-618 (REV 2)

December 10, 2015 | ALS1511416_R1 | Rev 1

1511416

ORIGIN ID:PSCA (509) 528-9426
LESLY WALL
CFI2M
6267 LATAH ST.
6269 LATAH ST.
RICHLAND WA 99354
UNITED STATES US

SHIP DATE: 20NOV15
ACTWGT: 73.00 LB
CAD: 10706051/INET3670

BILL THIRD PARTY

TO JULIE ELLINGSON
ALS GLOBAL
225 COMMERCE DRIVE
FORT COLLINS CO 80524
(970) 490-1511
INV:
PO:
REF: PTR#6157
DEPT:

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-2

539J2/3F56/31D0

FedEx Express

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Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Metals
Case Narrative

CH2M HILL Plateau Remediation Company

FY15 00-K AB Waste Sites - Soil -- F16-002

Work Order Number: 1511416

1. This report consists of 2 TCLP samples and 13 soil samples.

2. The samples were received cool and intact by ALS on 11/21/15.

3. The samples were prepared and analyzed based on SW-846, 3rd Edition procedures.

   The samples for TCLP analysis were processed through the TCLP leaching procedure based on method 1311. The leachates were then digested at a ten-fold dilution.

   For analysis by ICP-MS, the soil samples were digested following method 3050B and the current revision of SOP 806.

   For analysis by Cold Vapor AA (CVAA), the soil samples were digested following method 7471A and the current revision of SOP 812. The leachates were digested following method 7470A and the current revision of SOP 812.

4. Analysis by ICP-MS followed method 6020A and the current revision of SOP 827.

   Soil analysis by CVAA followed method 7471A and the current revision of SOP 812. Leachate analysis by CVAA followed method 7470A and the current revision of SOP 812.

5. All standards and solutions are NIST traceable and were used within their recommended shelf life.

6. The samples were prepared and analyzed within the established hold times.

All in house quality control procedures were followed, as described below.

7. General quality control procedures.

- A preparation (method) blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- The preparation (method) blank associated with each digestion batch was below the reporting limit for the requested analytes. Beryllium, chromium, manganese, nickel, selenium, and vanadium have results above the MDL. Sample results have been compared to the blank results.
- All laboratory control sample criteria were met.
- All initial and continuing calibration blanks were below the reporting limit for the requested analytes, with the exception of CCB13, CCB17, and CCB19 for vanadium. The samples bracketed by these CCBs contained more than ten times the concentration of vanadium that was detected in the CCBs.
- All initial and continuing calibration verifications were within the acceptance criteria for the requested analytes.
- The interference check samples associated with Method 6020A were analyzed.

8. Matrix specific quality control procedures.

Sample 1511416-1 was designated as the quality control sample for the mercury soil analysis. Sample 1511416-14 was designated as the quality control sample for the mercury leachate analysis. Sample 1511416-13 was designated as the quality control sample for the ICP-MS soil analysis.

Similarity of matrix and therefore relevance of the QC results should not be automatically inferred for any sample other than the native sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each batch. All acceptance criteria for accuracy were met with the following exceptions:

Analyte	Sample ID
Antimony	1511416-13MS/MSD
Lead	1511416-13MS/MSD
Strontium	1511416-13MSD
Uranium	1511416-13MS/MSD
Vanadium	1511416-13MSD

The native sample results are flagged for matrix spike failure and an analytical post spike was performed. The results of the spike for strontium and vanadium were unacceptable indicating that the matrix may be affecting quantitation of these analytes. The results of the spike for the remaining were acceptable indicating that the matrix was not significantly affecting quantitation of these analytes.

- Matrix spike recoveries could not be evaluated for the following analytes:

Analyte	Sample ID
Aluminum	1511416-13
Barium	1511416-13
Iron	1511416-13

Manganese	1511416-13

The concentrations of these analytes in the native sample were greater than four times the concentration of matrix spike added during the digestion. When sample concentration is that much greater than the spike added, spike recoveries may not be accurate. The laboratory control sample indicates that the digestion and analysis were in control.

- A sample duplicate and matrix spike duplicate were digested and analyzed with each batch. All acceptance criteria for precision were met with the following exceptions:

Analyte	Sample ID
Lead	1511416-13D
Strontium	1511416-13D
Uranium	1511416-13D, -13MSD

The native sample results are flagged for duplicate failure. Where spike duplicate precision was outside control limits only the duplicate page shows the flag.

- A serial dilution was analyzed with the ICP batch. All acceptance criteria were met.

9. It is a standard practice that samples for ICP-MS are analyzed at a dilution. The 10X factor can be considered an artifact of the prep and does not indicate a secondary dilution and is therefore not flagged as a dilution.

   Samples 1511416-4 and -9 required dilutions to bring mercury into the analytical range of the instrument.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

Jill Latelle — 12/10/15
Jill Latelle — Date
Inorganics Primary Data Reviewer

Julie Ellis — 12/10/15
Inorganics Final Data Reviewer — Date

Inorganic Data Reporting Qualifiers

The following qualifiers are used as needed by the laboratory when reporting results of inorganic analyses.

- Result qualifier -- A “B” is entered if the reported value was obtained from a reading that was less than the Reporting Limit but greater than or equal to the Method Detection Limit (MDL). If the analyte was analyzed for but not detected a “U” is entered. For samples, negative values are reported as non-detects (“U” flagged). For blanks, if the absolute value of the negative value is above the MDL and below the reporting limit, then the result is “B” flagged.

- QC qualifier -- Specified entries and their meanings are as follows:

  E - The reported value is estimated because of the presence of interference. An explanatory note may be included in the narrative.

  M - Duplicate injection precision was not met.

  N - Spiked sample recovery not within control limits. A post spike is analyzed for all ICP analyses when the matrix spike and or spike duplicate fail and the native sample concentration is less than four times the spike added concentration.

  Z - Spiked recovery not within control limits. An explanatory note may be included in the narrative.

  * - Duplicate analysis (relative percent difference) not within control limits.

  S - SAR value is estimated as one or more analytes used in the calculation were not detected above the detection limit.

  C - The analyte was detected in both the sample and the associated QC blank, and the sample concentration was <=5X the blank concentration.

  D - Analyte was reported at a secondary dilution factor, typically DF>1 (i.e., the primary preparation required dilution to either bring the analyte within the calibration range or to minimize interference). Required for organics/wetchem if the sample was diluted.

Total ICPMS Metals

Method SW6020A

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Field ID: B33W52
Lab ID: 1511416-1

Sample Matrix: SOIL
% Moisture: 8.7
Date Collected: 20-Nov-15
Date Extracted: 24-Nov-15
Date Analyzed: 24-Nov-15
Prep Method: SW3050 Rev B

Prep Batch: IP151124-1
QCBatchID: IP151124-1-2
Run ID: IM151124-11A5
Cleanup: NONE
Basis: Dry Weight
File Name: 125SMPL_

Analyst: Brent A. Stanfield
Sample Aliquot: 1.023 g
Final Volume: 100 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	10	5200000	5400	1700		
7440-36-0	ANTIMONY	10	130	32	18		
7440-38-2	ARSENIC	10	3100	210	35		
7440-39-3	BARIUM	10	59000	110	62		
7440-41-7	BERYLLIUM	10	260	54	14		
7440-43-9	CADMIUM	10	95	32	18		
7440-47-3	CHROMIUM	10	11000	1100	77		
7440-48-4	COBALT	10	8100	110	56		
7440-50-8	COPPER	10	17000	1100	260		
7439-89-6	IRON	10	21000000	11000	3600		
7439-92-1	LEAD	10	8200	54	20		
7439-96-5	MANGANESE	10	290000	210	66		
7439-98-7	MOLYBDENUM	10	380	110	45		
7440-02-0	NICKEL	10	7800	540	270		
7782-49-2	SELENIUM	10	650	110	39		
7440-22-4	SILVER	10	47	11	5.4		
7440-23-5	SODIUM	10	210000	110000	18000		
7440-24-6	STRONTIUM	10	23000	110	96		
7440-31-5	TIN	10	470	520	140	B	
7440-61-1	URANIUM	10	410	11	5.8		
7440-62-2	VANADIUM	10	55000	110	47		
7440-66-6	ZINC	10	45000	2100	450		

Data Package ID: *IM1511416-1*

Total ICPMS Metals

Method SW6020A

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Field ID: B33W48
Lab ID: 1511416-2

Sample Matrix: SOIL
% Moisture: 6.9
Date Collected: 20-Nov-15
Date Extracted: 24-Nov-15
Date Analyzed: 24-Nov-15
Prep Method: SW3050 Rev B

Prep Batch: IP151124-1
QCBatchID: IP151124-1-2
Run ID: IM151124-11A5
Cleanup: NONE
Basis: Dry Weight
File Name: 126SMPL_

Analyst: Brent A. Stanfield
Sample Aliquot: 1.042 g
Final Volume: 100 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	10	5400000	5200	1600		
7440-36-0	ANTIMONY	10	88	31	17		
7440-38-2	ARSENIC	10	2700	210	34		
7440-39-3	BARIUM	10	65000	100	60		
7440-41-7	BERYLLIUM	10	280	52	14		
7440-43-9	CADMIUM	10	75	31	17		
7440-47-3	CHROMIUM	10	6100	1000	74		
7440-48-4	COBALT	10	10000	100	54		
7440-50-8	COPPER	10	17000	1000	250		
7439-89-6	IRON	10	24000000	10000	3500		
7439-92-1	LEAD	10	5100	52	19		
7439-96-5	MANGANESE	10	390000	210	63		
7439-98-7	MOLYBDENUM	10	430	100	43		
7440-02-0	NICKEL	10	9300	520	260		
7782-49-2	SELENIUM	10	860	100	38		
7440-22-4	SILVER	10	45	10	5.2		
7440-23-5	SODIUM	10	240000	100000	17000		
7440-24-6	STRONTIUM	10	21000	100	92		
7440-31-5	TIN	10	850	510	140		
7440-61-1	URANIUM	10	440	10	5.6		
7440-62-2	VANADIUM	10	67000	100	46		
7440-66-6	ZINC	10	53000	2100	430		

Data Package ID: *IM1511416-1*

Total ICPMS Metals

Method SW6020A

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Field ID: B33W49
Lab ID: 1511416-3

Sample Matrix: SOIL
% Moisture: 5.7
Date Collected: 20-Nov-15
Date Extracted: 24-Nov-15
Date Analyzed: 24-Nov-15
Prep Method: SW3050 Rev B

Prep Batch: IP151124-1
QCBatchID: IP151124-1-2
Run ID: IM151124-11A5
Cleanup: NONE
Basis: Dry Weight
File Name: 127SMPL_

Analyst: Brent A. Stanfield
Sample Aliquot: 1.081 g
Final Volume: 100 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	10	4800000	4900	1500		
7440-36-0	ANTIMONY	10	45	29	16		
7440-38-2	ARSENIC	10	1700	200	32		
7440-39-3	BARIUM	10	55000	98	57		
7440-41-7	BERYLLIUM	10	200	49	13		
7440-43-9	CADMIUM	10	76	29	16		
7440-47-3	CHROMIUM	10	6300	980	70		
7440-48-4	COBALT	10	7200	98	51		
7440-50-8	COPPER	10	11000	980	240		
7439-89-6	IRON	10	18000000	9800	3300		
7439-92-1	LEAD	10	3200	49	18		
7439-96-5	MANGANESE	10	290000	200	60		
7439-98-7	MOLYBDENUM	10	290	98	41		
7440-02-0	NICKEL	10	7500	490	250		
7782-49-2	SELENIUM	10	450	98	36		
7440-22-4	SILVER	10	21	9.8	5		
7440-23-5	SODIUM	10	120000	98000	16000		
7440-24-6	STRONTIUM	10	19000	98	88		
7440-31-5	TIN	10	290	510	140	B	
7440-61-1	URANIUM	10	370	9.8	5.3		
7440-62-2	VANADIUM	10	47000	98	43		
7440-66-6	ZINC	10	37000	2000	410		

Data Package ID: *IM1511416-1*

Total ICPMS Metals

Method SW6020A

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Field ID: B33W60
Lab ID: 1511416-4

Sample Matrix: SOIL
% Moisture: 14.5
Date Collected: 20-Nov-15
Date Extracted: 24-Nov-15
Date Analyzed: 24-Nov-15
Prep Method: SW3050 Rev B

Prep Batch: IP151124-1
QCBatchID: IP151124-1-2
Run ID: IM151124-11A5
Cleanup: NONE
Basis: Dry Weight
File Name: 128SMPL_

Analyst: Brent A. Stanfield
Sample Aliquot: 1.09 g
Final Volume: 100 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	10	1200000	5400	1700		
7440-36-0	ANTIMONY	10	150	32	18		
7440-38-2	ARSENIC	10	2600	210	35		
7440-39-3	BARIUM	10	130000	110	62		
7440-41-7	BERYLLIUM	10	14	54	14	U	
7440-43-9	CADMIUM	10	18	32	18	U	
7440-47-3	CHROMIUM	10	13000	1100	77		
7440-48-4	COBALT	10	1100	110	56		
7440-50-8	COPPER	10	4600	1100	260		
7439-89-6	IRON	10	29000000	11000	3600		
7439-92-1	LEAD	10	5600	54	20		
7439-96-5	MANGANESE	10	81000	210	66		
7439-98-7	MOLYBDENUM	10	520	110	45		
7440-02-0	NICKEL	10	1200	540	270	C	
7782-49-2	SELENIUM	10	620	110	39		
7440-22-4	SILVER	10	54	11	5.5		
7440-23-5	SODIUM	10	3400000	110000	18000		
7440-24-6	STRONTIUM	10	79000	110	96		
7440-31-5	TIN	10	680	540	150		
7440-61-1	URANIUM	10	120	11	5.8		
7440-62-2	VANADIUM	10	42000	110	47		
7440-66-6	ZINC	10	6900	2100	450		

Data Package ID: *IM1511416-1*

Total ICPMS Metals

Method SW6020A

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Field ID: B33W59
Lab ID: 1511416-5

Sample Matrix: SOIL
% Moisture: 17.3
Date Collected: 20-Nov-15
Date Extracted: 24-Nov-15
Date Analyzed: 24-Nov-15
Prep Method: SW3050 Rev B

Prep Batch: IP151124-1
QCBatchID: IP151124-1-2
Run ID: IM151124-11A5
Cleanup: NONE
Basis: Dry Weight
File Name: 129SMPL_

Analyst: Brent A. Stanfield
Sample Aliquot: 1.031 g
Final Volume: 100 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	10	10000000	5900	1800		
7440-36-0	ANTIMONY	10	160	35	20		
7440-38-2	ARSENIC	10	6200	230	38		
7440-39-3	BARIUM	10	70000	120	68		
7440-41-7	BERYLLIUM	10	320	59	16		
7440-43-9	CADMIUM	10	89	35	20		
7440-47-3	CHROMIUM	10	25000	1200	84		
7440-48-4	COBALT	10	15000	120	61		
7440-50-8	COPPER	10	36000	1200	290		
7439-89-6	IRON	10	39000000	12000	4000		
7439-92-1	LEAD	10	8500	59	22		
7439-96-5	MANGANESE	10	710000	230	72		
7439-98-7	MOLYBDENUM	10	390	120	49		
7440-02-0	NICKEL	10	13000	590	300		
7782-49-2	SELENIUM	10	810	120	43		
7440-22-4	SILVER	10	84	12	6		
7440-23-5	SODIUM	10	320000	120000	20000		
7440-24-6	STRONTIUM	10	17000	120	110		
7440-31-5	TIN	10	300	570	150	B	
7440-61-1	URANIUM	10	690	12	6.4		
7440-62-2	VANADIUM	10	95000	120	52		
7440-66-6	ZINC	10	65000	2300	490		

Data Package ID: *IM1511416-1*

Total ICPMS Metals

Method SW6020A

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Field ID: B33W53
Lab ID: 1511416-6

Sample Matrix: SOIL
% Moisture: 11.8
Date Collected: 20-Nov-15
Date Extracted: 24-Nov-15
Date Analyzed: 24-Nov-15
Prep Method: SW3050 Rev B

Prep Batch: IP151124-1
QCBatchID: IP151124-1-2
Run ID: IM151124-11A5
Cleanup: NONE
Basis: Dry Weight
File Name: 130SMPL_

Analyst: Brent A. Stanfield
Sample Aliquot: 1.029 g
Final Volume: 100 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	10	7500000	5500	1700		
7440-36-0	ANTIMONY	10	150	33	19		
7440-38-2	ARSENIC	10	5500	220	36		
7440-39-3	BARIUM	10	100000	110	64		
7440-41-7	BERYLLIUM	10	310	55	15		
7440-43-9	CADMIUM	10	95	33	18		
7440-47-3	CHROMIUM	10	27000	1100	79		
7440-48-4	COBALT	10	7600	110	57		
7440-50-8	COPPER	10	22000	1100	270		
7439-89-6	IRON	10	25000000	11000	3700		
7439-92-1	LEAD	10	7200	55	21		
7439-96-5	MANGANESE	10	300000	220	68		
7439-98-7	MOLYBDENUM	10	450	110	46		
7440-02-0	NICKEL	10	10000	550	280		
7782-49-2	SELENIUM	10	760	110	40		
7440-22-4	SILVER	10	82	11	5.6		
7440-23-5	SODIUM	10	160000	110000	18000		
7440-24-6	STRONTIUM	10	30000	110	99		
7440-31-5	TIN	10	510	550	150	B	
7440-61-1	URANIUM	10	550	11	6		
7440-62-2	VANADIUM	10	60000	110	49		
7440-66-6	ZINC	10	43000	2200	460		

Data Package ID: *IM1511416-1*

Total ICPMS Metals

Method SW6020A

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Field ID: B33W55
Lab ID: 1511416-7

Sample Matrix: SOIL
% Moisture: 10.2
Date Collected: 20-Nov-15
Date Extracted: 24-Nov-15
Date Analyzed: 24-Nov-15
Prep Method: SW3050 Rev B

Prep Batch: IP151124-1
QCBatchID: IP151124-1-2
Run ID: IM151124-11A5
Cleanup: NONE
Basis: Dry Weight
File Name: 131SMPL_

Analyst: Brent A. Stanfield
Sample Aliquot: 1.044 g
Final Volume: 100 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	10	5100000	5300	1700		
7440-36-0	ANTIMONY	10	74	32	18		
7440-38-2	ARSENIC	10	2900	210	35		
7440-39-3	BARIUM	10	54000	110	62		
7440-41-7	BERYLLIUM	10	260	53	14		
7440-43-9	CADMIUM	10	77	32	18		
7440-47-3	CHROMIUM	10	5600	1100	76		
7440-48-4	COBALT	10	9400	110	55		
7440-50-8	COPPER	10	19000	1100	260		
7439-89-6	IRON	10	23000000	11000	3600		
7439-92-1	LEAD	10	4200	53	20		
7439-96-5	MANGANESE	10	310000	210	66		
7439-98-7	MOLYBDENUM	10	410	110	45		
7440-02-0	NICKEL	10	8800	530	270		
7782-49-2	SELENIUM	10	650	110	39		
7440-22-4	SILVER	10	13	11	5.4		
7440-23-5	SODIUM	10	370000	110000	18000		
7440-24-6	STRONTIUM	10	35000	110	96		
7440-31-5	TIN	10	320	520	140	B	
7440-61-1	URANIUM	10	480	11	5.8		
7440-62-2	VANADIUM	10	62000	110	47		
7440-66-6	ZINC	10	48000	2100	450		

Data Package ID: *IM1511416-1*

Total ICPMS Metals

Method SW6020A

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Field ID: B33W58
Lab ID: 1511416-8

Sample Matrix: SOIL
% Moisture: 9.6
Date Collected: 20-Nov-15
Date Extracted: 24-Nov-15
Date Analyzed: 24-Nov-15
Prep Method: SW3050 Rev B

Prep Batch: IP151124-1
QCBatchID: IP151124-1-2
Run ID: IM151124-11A5
Cleanup: NONE
Basis: Dry Weight
File Name: 132SMPL_

Analyst: Brent A. Stanfield
Sample Aliquot: 1.087 g
Final Volume: 100 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	10	7200000	5100	1600		
7440-36-0	ANTIMONY	10	66	31	17		
7440-38-2	ARSENIC	10	3100	200	33		
7440-39-3	BARIUM	10	50000	100	59		
7440-41-7	BERYLLIUM	10	440	51	14		
7440-43-9	CADMIUM	10	99	31	17		
7440-47-3	CHROMIUM	10	11000	1000	73		
7440-48-4	COBALT	10	9800	100	53		
7440-50-8	COPPER	10	24000	1000	250		
7439-89-6	IRON	10	27000000	10000	3400		
7439-92-1	LEAD	10	4900	51	19		
7439-96-5	MANGANESE	10	280000	200	63		
7439-98-7	MOLYBDENUM	10	340	100	43		
7440-02-0	NICKEL	10	11000	510	260		
7782-49-2	SELENIUM	10	890	100	37		
7440-22-4	SILVER	10	19	10	5.2		
7440-23-5	SODIUM	10	230000	100000	17000		
7440-24-6	STRONTIUM	10	20000	100	91		
7440-31-5	TIN	10	360	540	150	B	
7440-61-1	URANIUM	10	590	10	5.5		
7440-62-2	VANADIUM	10	76000	100	45		
7440-66-6	ZINC	10	52000	2000	430		

Data Package ID: *IM1511416-1*

Total ICPMS Metals

Method SW6020A

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Field ID: B33W51
Lab ID: 1511416-9

Sample Matrix: SOIL
% Moisture: 12.7
Date Collected: 20-Nov-15
Date Extracted: 24-Nov-15
Date Analyzed: 24-Nov-15
Prep Method: SW3050 Rev B

Prep Batch: IP151124-1
QCBatchID: IP151124-1-2
Run ID: IM151124-11A5
Cleanup: NONE
Basis: Dry Weight
File Name: 135SMPL_

Analyst: Brent A. Stanfield
Sample Aliquot: 1.049 g
Final Volume: 100 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	10	3000000	5500	1700		
7440-36-0	ANTIMONY	10	820	33	18		
7440-38-2	ARSENIC	10	23000	220	36		
7440-39-3	BARIUM	10	71000	110	63		
7440-41-7	BERYLLIUM	10	85	55	15		
7440-43-9	CADMIUM	10	800	33	18		
7440-47-3	CHROMIUM	10	8200	1100	78		
7440-48-4	COBALT	10	5400	110	57		
7440-50-8	COPPER	10	24000	1100	270		
7439-89-6	IRON	10	47000000	11000	3700		
7439-92-1	LEAD	10	17000	55	21		
7439-96-5	MANGANESE	10	230000	220	67		
7439-98-7	MOLYBDENUM	10	3600	110	46		
7440-02-0	NICKEL	10	7800	550	280		
7782-49-2	SELENIUM	10	830	110	40		
7440-22-4	SILVER	10	130	11	5.6		
7440-23-5	SODIUM	10	3100000	110000	18000		
7440-24-6	STRONTIUM	10	88000	110	98		
7440-31-5	TIN	10	11000	560	150		
7440-61-1	URANIUM	10	280	11	5.9		
7440-62-2	VANADIUM	10	51000	110	48		
7440-66-6	ZINC	10	36000	2200	460		

Data Package ID: *IM1511416-1*

Total ICPMS Metals

Method SW6020A

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Field ID: B33W57
Lab ID: 1511416-10

Sample Matrix: SOIL
% Moisture: 10.4
Date Collected: 20-Nov-15
Date Extracted: 24-Nov-15
Date Analyzed: 24-Nov-15
Prep Method: SW3050 Rev B

Prep Batch: IP151124-1
QCBatchID: IP151124-1-2
Run ID: IM151124-11A5
Cleanup: NONE
Basis: Dry Weight
File Name: 136SMPL_

Analyst: Brent A. Stanfield
Sample Aliquot: 1.064 g
Final Volume: 100 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	10	4900000	5200	1600		
7440-36-0	ANTIMONY	10	36	31	18		
7440-38-2	ARSENIC	10	2200	210	34		
7440-39-3	BARIUM	10	48000	100	61		
7440-41-7	BERYLLIUM	10	150	52	14		
7440-43-9	CADMIUM	10	50	31	18		
7440-47-3	CHROMIUM	10	12000	1000	75		
7440-48-4	COBALT	10	5000	100	55		
7440-50-8	COPPER	10	24000	1000	260		
7439-89-6	IRON	10	35000000	10000	3500		
7439-92-1	LEAD	10	3700	52	20		
7439-96-5	MANGANESE	10	150000	210	65		
7439-98-7	MOLYBDENUM	10	420	100	44		
7440-02-0	NICKEL	10	4600	520	270		
7782-49-2	SELENIUM	10	740	100	39		
7440-22-4	SILVER	10	23	10	5.3		
7440-23-5	SODIUM	10	800000	100000	17000		
7440-24-6	STRONTIUM	10	28000	100	94		
7440-31-5	TIN	10	480	540	150	B	
7440-61-1	URANIUM	10	380	10	5.7		
7440-62-2	VANADIUM	10	99000	100	46		
7440-66-6	ZINC	10	41000	2100	440		

Data Package ID: *IM1511416-1*

Total ICPMS Metals

Method SW6020A

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Field ID: B33W54
Lab ID: 1511416-11

Sample Matrix: SOIL
% Moisture: 12.5
Date Collected: 20-Nov-15
Date Extracted: 24-Nov-15
Date Analyzed: 24-Nov-15
Prep Method: SW3050 Rev B

Prep Batch: IP151124-1
QCBatchID: IP151124-1-2
Run ID: IM151124-11A5
Cleanup: NONE
Basis: Dry Weight
File Name: 137SMPL_

Analyst: Brent A. Stanfield
Sample Aliquot: 1.049 g
Final Volume: 100 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	10	5800000	5400	1700		
7440-36-0	ANTIMONY	10	140	33	18		
7440-38-2	ARSENIC	10	3100	220	36		
7440-39-3	BARIUM	10	61000	110	63		
7440-41-7	BERYLLIUM	10	290	54	15		
7440-43-9	CADMIUM	10	97	33	18		
7440-47-3	CHROMIUM	10	8600	1100	78		
7440-48-4	COBALT	10	8300	110	57		
7440-50-8	COPPER	10	17000	1100	270		
7439-89-6	IRON	10	20000000	11000	3700		
7439-92-1	LEAD	10	4900	54	20		
7439-96-5	MANGANESE	10	320000	220	67		
7439-98-7	MOLYBDENUM	10	350	110	46		
7440-02-0	NICKEL	10	9200	540	280		
7782-49-2	SELENIUM	10	820	110	40		
7440-22-4	SILVER	10	40	11	5.5		
7440-23-5	SODIUM	10	160000	110000	18000		
7440-24-6	STRONTIUM	10	26000	110	98		
7440-31-5	TIN	10	360	550	150	B	
7440-61-1	URANIUM	10	460	11	5.9		
7440-62-2	VANADIUM	10	50000	110	48		
7440-66-6	ZINC	10	42000	2200	460		

Data Package ID: *IM1511416-1*

Total ICPMS Metals

Method SW6020A

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Field ID: B33W56
Lab ID: 1511416-12

Sample Matrix: SOIL
% Moisture: 22.5
Date Collected: 20-Nov-15
Date Extracted: 24-Nov-15
Date Analyzed: 24-Nov-15
Prep Method: SW3050 Rev B

Prep Batch: IP151124-1
QCBatchID: IP151124-1-2
Run ID: IM151124-11A5
Cleanup: NONE
Basis: Dry Weight
File Name: 138SMPL_

Analyst: Brent A. Stanfield
Sample Aliquot: 1.047 g
Final Volume: 100 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	10	8200000	6200	1900		
7440-36-0	ANTIMONY	10	320	37	21		
7440-38-2	ARSENIC	10	8200	250	40		
7440-39-3	BARIUM	10	100000	120	72		
7440-41-7	BERYLLIUM	10	230	62	17		
7440-43-9	CADMIUM	10	78	37	21		
7440-47-3	CHROMIUM	10	18000	1200	88		
7440-48-4	COBALT	10	7500	120	64		
7440-50-8	COPPER	10	28000	1200	300		
7439-89-6	IRON	10	56000000	12000	4200		
7439-92-1	LEAD	10	9600	62	23		
7439-96-5	MANGANESE	10	220000	250	76		
7439-98-7	MOLYBDENUM	10	510	120	52		
7440-02-0	NICKEL	10	9200	620	310		
7782-49-2	SELENIUM	10	650	120	45		
7440-22-4	SILVER	10	54	12	6.3		
7440-23-5	SODIUM	10	970000	120000	20000		
7440-24-6	STRONTIUM	10	38000	120	110		
7440-31-5	TIN	10	700	600	160		
7440-61-1	URANIUM	10	530	12	6.7		
7440-62-2	VANADIUM	10	170000	120	54		
7440-66-6	ZINC	10	58000	2500	520		

Data Package ID: *IM1511416-1*

Total ICPMS Metals

Method SW6020A

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Field ID: B33W50
Lab ID: 1511416-13

Sample Matrix: SOIL
% Moisture: 4.9
Date Collected: 20-Nov-15
Date Extracted: 24-Nov-15
Date Analyzed: 24-Nov-15
Prep Method: SW3050 Rev B

Prep Batch: IP151124-1
QCBatchID: IP151124-1-2
Run ID: IM151124-11A5
Cleanup: NONE
Basis: Dry Weight
File Name: 139SMPL_

Analyst: Brent A. Stanfield
Sample Aliquot: 1.044 g
Final Volume: 100 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	10	4300000	5000	1600		
7440-36-0	ANTIMONY	10	61	30	17		N
7440-38-2	ARSENIC	10	1900	200	33		
7440-39-3	BARIUM	10	49000	100	59		
7440-41-7	BERYLLIUM	10	150	50	14		
7440-43-9	CADMIUM	10	77	30	17		
7440-47-3	CHROMIUM	10	7600	1000	72		
7440-48-4	COBALT	10	5500	100	52		
7440-50-8	COPPER	10	10000	1000	250		
7439-89-6	IRON	10	14000000	10000	3400		
7439-92-1	LEAD	10	5200	50	19		N*
7439-96-5	MANGANESE	10	250000	200	62		
7439-98-7	MOLYBDENUM	10	260	100	42		
7440-02-0	NICKEL	10	8500	500	260		
7782-49-2	SELENIUM	10	190	100	37	C	
7440-22-4	SILVER	10	27	10	5.1		
7440-23-5	SODIUM	10	100000	100000	17000		
7440-24-6	STRONTIUM	10	19000	100	90		N*
7440-31-5	TIN	10	150	500	140	B	
7440-61-1	URANIUM	10	620	10	5.5		N*
7440-62-2	VANADIUM	10	36000	100	45		N
7440-66-6	ZINC	10	31000	2000	420		

Data Package ID: *IM1511416-1*

Total MERCURY

Method SW7471A

Sample Results

Lab Name: ALS Environmental -- FC
Client Name: CH2M HILL Plateau Remediation Company
Client Project ID: FY15 100-K AB Waste Sites - Soil F16-002
Work Order Number: 1511416 **Final Volume:** 100 ml
Reporting Basis: Dry Weight **Matrix:** SOIL
Analyst: Nathan A. Quatier **Result Units:** UG/KG

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Flag	Sample Aliquot
B33W52	1511416-1	11/20/2015	11/23/2015	11/23/2015	8.661	1	99	35	3.7		0.634 g
B33W48	1511416-2	11/20/2015	11/23/2015	11/23/2015	6.877	1	21	35	3.8	B	0.605 g
B33W49	1511416-3	11/20/2015	11/23/2015	11/23/2015	5.722	1	17	34	3.7	B	0.624 g
B33W60	1511416-4	11/20/2015	11/23/2015	11/23/2015	14.54	10	12000	360	39	D	0.642 g
B33W59	1511416-5	11/20/2015	11/23/2015	11/23/2015	17.32	1	74	36	3.9		0.671 g
B33W53	1511416-6	11/20/2015	11/23/2015	11/23/2015	11.85	1	320	37	4		0.61 g
B33W55	1511416-7	11/20/2015	11/23/2015	11/23/2015	10.21	1	370	33	3.6		0.675 g
B33W58	1511416-8	11/20/2015	11/23/2015	11/23/2015	9.624	1	150	37	4		0.601 g
B33W51	1511416-9	11/20/2015	11/23/2015	11/23/2015	12.69	100	160000	3600	390	D	0.64 g
B33W57	1511416-10	11/20/2015	11/23/2015	11/23/2015	10.43	1	210	36	3.8		0.627 g
B33W54	1511416-11	11/20/2015	11/23/2015	11/23/2015	12.53	1	27	38	4.1	B	0.603 g
B33W56	1511416-12	11/20/2015	11/23/2015	11/23/2015	22.5	1	890	39	4.2		0.662 g
B33W50	1511416-13	11/20/2015	11/23/2015	11/23/2015	4.873	1	18	31	3.3	B	0.682 g

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: *hg1511416-1*

TCLP MERCURY

Method SW7470A

Sample Results

Lab Name: ALS Environmental -- FC
Client Name: CH2M HILL Plateau Remediation Company
Client Project ID: FY15 100-K AB Waste Sites - Soil F16-002
Work Order Number: 1511416 **Final Volume:** 10 ml
Reporting Basis: As Received **Matrix:** LEACHATE
Analyst: Nathan A. Quatier **Result Units:** MG/L

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Flag	Sample Aliquot
B33W60	1511416-14	11/20/2015	12/8/2015	12/08/2015	N/A	1	0.0021	0.002	0.0006		1 ml
B33W51	1511416-15	11/20/2015	12/8/2015	12/08/2015	N/A	1	0.0024	0.002	0.0006		1 ml

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: *HG1511416-1*

ICPMS Metals

Method SW6020A

Method Blank

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Lab ID: IP151124-1MB

Sample Matrix: SOIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 24-Nov-15
Date Analyzed: 24-Nov-15

Prep Batch: IP151124-1
QCBatchID: IP151124-1-2
Run ID: IM151124-11A5
Cleanup: NONE
Basis: N/A
File Name: 123SMPL_

Sample Aliquot: 1 g
Final Volume: 100 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	DF	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	10	1600	5000	1600	U	
7440-36-0	ANTIMONY	10	17	30	17	U	
7440-38-2	ARSENIC	10	33	200	33	U	
7440-39-3	BARIUM	10	58	100	58	U	
7440-41-7	BERYLLIUM	10	-25	50	14	B	
7440-43-9	CADMIUM	10	17	30	17	U	
7440-47-3	CHROMIUM	10	-95	1000	72	B	
7440-48-4	COBALT	10	52	100	52	U	
7440-50-8	COPPER	10	240	1000	240	U	
7439-89-6	IRON	10	3400	10000	3400	U	
7439-92-1	LEAD	10	19	50	19	U	
7439-96-5	MANGANESE	10	-150	200	62	B	
7439-98-7	MOLYBDENUM	10	42	100	42	U	
7440-02-0	NICKEL	10	410	500	250	B	
7782-49-2	SELENIUM	10	56	100	37	B	
7440-22-4	SILVER	10	5.1	10	5.1	U	
7440-23-5	SODIUM	10	17000	100000	17000	U	
7440-24-6	STRONTIUM	10	90	100	90	U	
7440-61-1	URANIUM	10	5.4	10	5.4	U	
7440-62-2	VANADIUM	10	-85	100	44	B	
7440-66-6	ZINC	10	420	2000	420	U	

Data Package ID: *IM1511416-1*

ICPMS Metals

Method SW6020A

Method Blank

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Lab ID: IP151125-3MB

Sample Matrix: SOIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 25-Nov-15
Date Analyzed: 28-Nov-15

Prep Batch: IP151125-3
QCBatchID: IP151125-3-1
Run ID: IM151128-11A7
Cleanup: NONE
Basis: N/A
File Name: 099SMPL_

Sample Aliquot: 1 g
Final Volume: 100 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	DF	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
7440-31-5	TIN	10	140	500	140	U	

Data Package ID: *IM1511416-1*

ICPMS Metals

Method SW6020A

Laboratory Control Sample

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Lab ID: IM151124-1LCS

Sample Matrix: SOIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 11/24/2015
Date Analyzed: 11/24/2015
Prep Method: SW3050B

Prep Batch: IP151124-1
QCBatchID: IP151124-1-2
Run ID: IM151124-11A5
Cleanup: NONE
Basis: N/A
File Name: 124SMPL_

Sample Aliquot: 1 g
Final Volume: 100 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
7429-90-5	ALUMINUM	500000	447000	5000		89	80 - 120%
7440-36-0	ANTIMONY	3000	2500	30		83	80 - 120%
7440-38-2	ARSENIC	10000	8410	200		84	80 - 120%
7440-39-3	BARIUM	10000	9260	100		93	80 - 120%
7440-41-7	BERYLLIUM	5000	4550	50		91	80 - 120%
7440-43-9	CADMIUM	3000	2850	30		95	80 - 120%
7440-47-3	CHROMIUM	50000	43300	1000		87	80 - 120%
7440-48-4	COBALT	10000	8960	100		90	80 - 120%
7440-50-8	COPPER	100000	89600	1000		90	80 - 120%
7439-89-6	IRON	500000	427000	10000		85	80 - 120%
7439-92-1	LEAD	5000	4470	50		89	80 - 120%
7439-96-5	MANGANESE	10000	8800	200		88	80 - 120%
7439-98-7	MOLYBDENUM	10000	8970	100		90	80 - 120%
7440-02-0	NICKEL	50000	44300	500		89	80 - 120%
7782-49-2	SELENIUM	10000	9510	100		95	80 - 120%
7440-22-4	SILVER	1000	953	10		95	80 - 120%
7440-23-5	SODIUM	1E+06	893000	100000		89	80 - 120%
7440-24-6	STRONTIUM	10000	8950	100		89	80 - 120%
7440-61-1	URANIUM	1000	927	10		93	80 - 120%
7440-62-2	VANADIUM	10000	8940	100		89	80 - 120%
7440-66-6	ZINC	200000	172000	2000		86	80 - 120%

Data Package ID: *IM1511416-1*

ICPMS Metals

Method SW6020

Laboratory Control Sample

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Lab ID: IP151125-3LCS

Sample Matrix: SOIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 11/25/2015
Date Analyzed: 11/28/2015
Prep Method: SW3050B

Prep Batch: IP151125-3
QCBatchID: IP151125-3-1
Run ID: IM151128-11A7
Cleanup: NONE
Basis: N/A
File Name: 100SMPL_

Sample Aliquot: 1 g
Final Volume: 100 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
7440-31-5	TIN	50000	48800	500		98	80 - 120%

Data Package ID: *IM1511416-1*

ICPMS Metals

Method SW6020A

Matrix Spike And Matrix Spike Duplicate

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Field ID: B33W50
LabID: 1511416-13MS

Sample Matrix: SOIL
% Moisture: 4.9
Date Collected: 20-Nov-15
Date Extracted: 24-Nov-15
Date Analyzed: 24-Nov-15
Prep Method: SW3050 Rev B

Prep Batch: IP151124-1
QCBatchID: IP151124-1-2
Run ID: IM151124-11A5
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1.052 g
Final Volume: 100 ml
Result Units: UG/KG
File Name: 142SMPL_

CASNO	Target Analyte	Sample Result	Samp Qual	MS Result	MS Qual	Reporting Limit	Spike Added	MS % Rec.	Control Limits
7429-90-5	ALUMINUM	4300000		4960000		5000	500000	131	75 - 125%
7440-36-0	ANTIMONY	61		1820	N	30	3000	59	75 - 125%
7440-38-2	ARSENIC	1900		11300		200	9990	93	75 - 125%
7440-39-3	BARIUM	49000		53300		99.9	9990	41	75 - 125%
7440-41-7	BERYLLIUM	150		4710		50	5000	91	75 - 125%
7440-43-9	CADMIUM	77		3090		30	3000	101	75 - 125%
7440-47-3	CHROMIUM	7600		53200		999	50000	91	75 - 125%
7440-48-4	COBALT	5500		14600		99.9	9990	92	75 - 125%
7440-50-8	COPPER	10000		105000		999	99900	95	75 - 125%
7439-89-6	IRON	1.4E+07		14900000		9990	500000	191	75 - 125%
7439-92-1	LEAD	5200		7910	N	50	5000	55	75 - 125%
7439-96-5	MANGANESE	250000		244000		200	9990	-48	75 - 125%
7439-98-7	MOLYBDENUM	260		9560		99.9	9990	93	75 - 125%
7440-02-0	NICKEL	8500		55200		500	50000	93	75 - 125%
7782-49-2	SELENIUM	190	C	9710		99.9	9990	95	75 - 125%
7440-22-4	SILVER	27		994		9.99	999	97	75 - 125%
7440-23-5	SODIUM	100000		1050000		99900	999000	95	75 - 125%
7440-24-6	STRONTIUM	19000		31600		99.9	9990	124	75 - 125%
7440-31-5	TIN	150	B	51100		501	50100	102	75 - 125%
7440-61-1	URANIUM	620		1340	N	9.99	999	72	75 - 125%
7440-62-2	VANADIUM	36000		48300		99.9	9990	121	75 - 125%
7440-66-6	ZINC	31000		221000		2000	200000	95	75 - 125%

Data Package ID: *IM1511416-1*

ICPMS Metals

Method SW6020A

Matrix Spike And Matrix Spike Duplicate

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Field ID: B33W50
LabID: 1511416-13MSD

Sample Matrix: SOIL
% Moisture: 4.9
Date Collected: 20-Nov-15
Date Extracted: 24-Nov-15
Date Analyzed: 24-Nov-15
Prep Method: SW3050 Rev B

Prep Batch: IP151124-1
QCBatchID: IP151124-1-2
Run ID: IM151124-11A5
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1.043 g
Final Volume: 100 ml
Result Units: UG/KG
File Name: 143SMPL_

CASNO	Target Analyte	MSD Result	MSD Qual	Spike Added	MSD % Rec.	Reporting Limit	RPD Limit	RPD
7429-90-5	ALUMINUM	5180000		504000	172	5040	20	4
7440-36-0	ANTIMONY	1920	N	3020	62	30.2	20	5
7440-38-2	ARSENIC	12200		10100	102	202	20	8
7440-39-3	BARIUM	56800		10100	76	101	20	6
7440-41-7	BERYLLIUM	4960		5040	95	50.4	20	5
7440-43-9	CADMIUM	2870		3020	92	30.2	20	8
7440-47-3	CHROMIUM	55000		50400	94	1010	20	3
7440-48-4	COBALT	15700		10100	101	101	20	7
7440-50-8	COPPER	110000		101000	99	1010	20	5
7439-89-6	IRON	15600000		504000	339	10100	20	5
7439-92-1	LEAD	8390	N	5040	64	50.4	20	6
7439-96-5	MANGANESE	257000		10100	83	202	20	5
7439-98-7	MOLYBDENUM	9630		10100	93	101	20	1
7440-02-0	NICKEL	58400		50400	99	504	20	6
7782-49-2	SELENIUM	10500		10100	102	101	20	7
7440-22-4	SILVER	1130		1010	109	10.1	20	13
7440-23-5	SODIUM	1070000		1010000	96	101000	20	3
7440-24-6	STRONTIUM	32400	N	10100	130	101	20	2
7440-31-5	TIN	49100		50100	98	501	20	4
7440-61-1	URANIUM	1980	N*	1010	135	10.1	20	39
7440-62-2	VANADIUM	50600	N	10100	142	101	20	5
7440-66-6	ZINC	233000		202000	101	2020	20	5

Data Package ID: *IM1511416-1*

ICPMS Metals

Method SW6020

Analytical Spike Sample Recovery

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Field ID: B33W50
LabID: 1511416-13A

Run ID: IM151124-11A5
Date Analyzed: 11/24/2015
Result Units: ug/l

Target Analyte	Sample Result	Samp Qual	PS Result	PS Qual	Spike Added	PS % Rec.	Control Limits
ANTIMONY	0.0610		3.34		3	109	75 - 125%
LEAD	5.14		10.5		5	107	75 - 125%
STRONTIUM	19.1		32.2	N	10	131	75 - 125%
URANIUM	0.619		1.68		1	106	75 - 125%
VANADIUM	36.0		49.1	N	10	131	75 - 125%

Data Package ID: *IM1511416-1*

Mercury

Method SW7471A

Method Blank

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Lab ID: HG151123-2MB

Sample Matrix: SOIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 23-Nov-15
Date Analyzed: 23-Nov-15

Prep Batch: HG151123-2
QCBatchID: HG151123-2-1
Run ID: HG151123-1A3
Cleanup: NONE
Basis: N/A
File Name: HG151123-1

Sample Aliquot: 0.6 g
Final Volume: 100 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	DF	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
7439-97-6	MERCURY	1	3.6	33	3.6	U	

Data Package ID: *hg1511416-1*

Mercury

Method SW7470A--Leachate

Method Blank

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Lab ID: EX151207-7MB

LEACH DATE: 12/7/2015

Sample Matrix: LEACHATE
% Moisture: N/A
Date Collected: N/A
Date Extracted: 08-Dec-15
Date Analyzed: 08-Dec-15

Prep Batch: HG151208-1
QCBatchID: HG151208-1-1
Run ID: HG151208-2A2
Cleanup: NONE
Basis: N/A
File Name: HG151208-2

Sample Aliquot: 1 ml
Final Volume: 10 ml
Result Units: MG/L
Clean DF: 1

CASNO	Target Analyte	DF	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
7439-97-6	MERCURY	1	0.0012	0.002	0.0006	J	

Data Package ID: *HG1511416-1*

Mercury

Method SW7471A

Laboratory Control Sample

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Lab ID: HG151123-2LCS

Sample Matrix: SOIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 11/23/2015
Date Analyzed: 11/23/2015
Prep Method: METHOD

Prep Batch: HG151123-2
QCBatchID: HG151123-2-1
Run ID: HG151123-1A3
Cleanup: NONE
Basis: N/A
File Name: HG151123-1

Sample Aliquot: 0.6 g
Final Volume: 100 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
7439-97-6	MERCURY	167	162	33.3		97	80 - 120%

Data Package ID: *hg1511416-1*

Mercury

Method SW7470

Laboratory Control Sample

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Lab ID: HG151208-1LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 12/08/2015
Date Analyzed: 12/08/2015
Prep Method: METHOD

Prep Batch: HG151208-1
QCBatchID: HG151208-1-1
Run ID: HG151208-2A2
Cleanup: NONE
Basis: N/A
File Name: HG151208-2

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: MG/L
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
7439-97-6	MERCURY	0.001	0.00114	0.0002		114	80 - 120%

Data Package ID: *HG1511416-1*

Mercury

Method SW7471A

Matrix Spike And Matrix Spike Duplicate

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Field ID: B33W52
LabID: 1511416-1MS

Sample Matrix: SOIL
% Moisture: 8.7
Date Collected: 20-Nov-15
Date Extracted: 23-Nov-15
Date Analyzed: 23-Nov-15
Prep Method: METHOD

Prep Batch: HG151123-2
QCBatchID: HG151123-2-1
Run ID: HG151123-1A3
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 0.638 g
Final Volume: 100 ml
Result Units: UG/KG
File Name: HG151123-1

CASNO	Target Analyte	Sample Result	Samp Qual	MS Result	MS Qual	Reporting Limit	Spike Added	MS % Rec.	Control Limits
7439-97-6	MERCURY	99		406		34.3	343	90	80 - 120%

Field ID: B33W52
LabID: 1511416-1MSD

Sample Matrix: SOIL
% Moisture: 8.7
Date Collected: 20-Nov-15
Date Extracted: 23-Nov-15
Date Analyzed: 23-Nov-15
Prep Method: METHOD

Prep Batch: HG151123-2
QCBatchID: HG151123-2-1
Run ID: HG151123-1A3
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 0.633 g
Final Volume: 100 ml
Result Units: UG/KG
File Name: HG151123-1

CASNO	Target Analyte	MSD Result	MSD Qual	Spike Added	MSD % Rec.	Reporting Limit	RPD Limit	RPD
7439-97-6	MERCURY	509		346	119	34.6	20	

Data Package ID: *hg1511416-1*

Mercury

Method SW7470A--Leachate
Matrix Spike And Matrix Spike Duplicate

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Field ID: B33W60
LabID: 1511416-14MS

LEACH DATE: 12/7/2015

Sample Matrix: LEACHATE
% Moisture: N/A
Date Collected: 20-Nov-15
Date Extracted: 08-Dec-15
Date Analyzed: 08-Dec-15
Prep Method: METHOD

Prep Batch: HG151208-1
QCBatchID: HG151208-1-1
Run ID: HG151208-2A2
Cleanup: NONE
Basis: As Received

Sample Aliquot: 1 ml
Final Volume: 10 ml
Result Units: MG/L
File Name: HG151208-2

CASNO	Target Analyte	Sample Result	Samp Qual	MS Result	MS Qual	Reporting Limit	Spike Added	MS % Rec.	Control Limits
7439-97-6	MERCURY	0.0021		0.022		0.002	0.02	100	80 - 120%

Field ID: B33W60
LabID: 1511416-14MSD

LEACH DATE: 12/7/2015

Sample Matrix: LEACHATE
% Moisture: N/A
Date Collected: 20-Nov-15
Date Extracted: 08-Dec-15
Date Analyzed: 08-Dec-15
Prep Method: METHOD

Prep Batch: HG151208-1
QCBatchID: HG151208-1-1
Run ID: HG151208-2A2
Cleanup: NONE
Basis: As Received

Sample Aliquot: 1 ml
Final Volume: 10 ml
Result Units: MG/L
File Name: HG151208-2

CASNO	Target Analyte	MSD Result	MSD Qual	Spike Added	MSD % Rec.	Reporting Limit	RPD Limit	RPD
7439-97-6	MERCURY	0.0213		0.02	96	0.002	20	3

Data Package ID: *HG1511416-1*

Inorganics

Case Narrative

CH2M HILL Plateau Remediation Company

FY15 100-K AB Waste Sites - Soil -- F16-002

Work Order Number: 1511416

1. This report consists of 13 soil samples.
2. The samples were received cool and intact by ALS on 11/21/2015.
3. The samples were prepared for analysis based on SW-846, 3rd Edition procedures and Environmental Monitoring Systems Laboratory (EMSL) Rev 2.1 procedures.
4. The samples were analyzed following SW-846 and EMSL procedures for the current revisions of the following SOPs and methods:

Analyte	Method	SOP #
Hexavalent chromium	7196A	1122
pH	9045D	1126
Chloride	300.0 Revision 2.1	1113
Nitrate as N	300.0 Revision 2.1	1113
Nitrite as N	300.0 Revision 2.1	1113
Sulfate	300.0 Revision 2.1	1113

5. All standards and solutions were used within their recommended shelf life.
6. The samples were prepared and analyzed within the established hold time for each analysis.

All in house quality control procedures were followed, as described below.

7. General quality control procedures.
   - A preparation (method) blank and laboratory control sample (LCS) were prepared and analyzed with the samples in each applicable preparation batch.
   - The method blank associated with each applicable batch was below the reporting limit for the requested analytes.

- All laboratory control sample criteria were met.
- All initial and continuing calibration blanks were below the reporting limit for the requested analytes.
- All initial and continuing calibration verifications were within the acceptance criteria for the requested analytes.

8. Matrix specific quality control procedures.

   Sample 1511416-13 was designated as the quality control sample for the hexavalent chromium analysis. Sample 1511416-9 was designated as the quality control sample for the pH analysis. Sample 1511416-2 was designated as the quality control sample for the chloride, nitrate as N, nitrite as N and sulfate analysis.

   Similarity of matrix and therefore relevance of the QC results should not be automatically inferred for any sample other than the native sample selected for QC.

   - A matrix spike (MS) and matrix spike duplicate (MSD) were prepared and analyzed with each batch. All guidance criteria for precision and accuracy were met.
   - A sample duplicate was prepared and analyzed with the pH batch. All guidance criteria for precision were met.

     For pH, the difference between the pH of the sample and its duplicate must be less than or equal to 0.5 pH units to be in control. RPD is not calculated for this analysis.

9. Electrical conductivity screening indicated that the concentration of dissolved salts was high in samples 1511416-9 and -10. Therefore, it was necessary to dilute the samples prior to injection into the ion chromatograph in order to minimize the amount of salts loaded into the analytical column.

   It was necessary to dilute samples 1511416-5, -7, -9, -10 and -12 in order to bring the chloride or sulfate concentrations into the analytical range of the ion chromatograph (IC).

10. Manual integrations are performed when needed to provide consistent and defensible data following the guidelines in the current revision of SOP 939.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

Megan Johnstone — 12/10/15
Megan Johnstone — Date
Inorganics Primary Data Reviewer

12/10/15
Inorganics Final Data Reviewer — Date

Inorganic Data Reporting Qualifiers

The following qualifiers are used as needed by the laboratory when reporting results of inorganic analyses.

- Concentration qualifier -- A "J" is entered if the reported value was obtained from a reading that was less than the Reporting Limit but greater than or equal to ALS's Method Detection Limit. If the analyte was analyzed for but not detected a "U" is entered.

- QC qualifier -- Specified entries and their meanings are as follows:

  E - The reported value is estimated because of the presence of interference. An explanatory note may be included in the narrative.

  M - Duplicate injection precision was not met.

  N - Spiked sample recovery not within control limits. A post spike is analyzed for all ICP analyses when the matrix spike and or spike duplicate fail and the native sample concentration is less than four times the spike added concentration.

  Z - Spiked recovery not within control limits. An explanatory note may be included in the narrative.

  * - Duplicate analysis (relative percent difference) not within control limits.

  S - SAR value is estimated as one or more analytes used in the calculation were not detected above the detection limit.

  C - The analyte was detected in both the sample and the associated QC blank, and the sample concentration was <=5X the blank concentration.

  D - Analyte was reported at a secondary dilution factor, typically DF>1 (i.e., the primary preparation required dilution to either bring the analyte within the calibration range or to minimize interference). Required for organics/wetchem if the sample was diluted.

ALS Environmental -- FC

Sample Number(s) Cross-Reference Table

OrderNum: 1511416
Client Name: CH2M HILL Plateau Remediation Company
Client Project Name: FY15 100-K AB Waste Sites - Soil
Client Project Number: F16-002
Client PO Number: BOA 54854

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
B33W52	1511416-1		SOIL	20-Nov-15	11:28
B33W48	1511416-2		SOIL	20-Nov-15	8:50
B33W49	1511416-3		SOIL	20-Nov-15	8:55
B33W60	1511416-4		SOIL	20-Nov-15	11:33
B33W59	1511416-5		SOIL	20-Nov-15	10:52
B33W53	1511416-6		SOIL	20-Nov-15	11:21
B33W55	1511416-7		SOIL	20-Nov-15	11:07
B33W58	1511416-8		SOIL	20-Nov-15	10:56
B33W51	1511416-9		SOIL	20-Nov-15	9:32
B33W57	1511416-10		SOIL	20-Nov-15	10:39
B33W54	1511416-11		SOIL	20-Nov-15	11:03
B33W56	1511416-12		SOIL	20-Nov-15	10:30
B33W50	1511416-13		SOIL	20-Nov-15	9:00

CHROMIUM VI

Method SW7196A

Sample Results

Lab Name: ALS Environmental -- FC
Client Name: CH2M HILL Plateau Remediation Company
Client Project ID: FY15 100-K AB Waste Sites - Soil F16-002
Work Order Number: 1511416 **Final Volume:** 40 ml
Reporting Basis: Dry Weight **Matrix:** SOIL
Analyst: Teresa Buettgenbach **Result Units:** UG/KG

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Flag	Sample Aliquot
B33W52	1511416-1	11/20/2015	11/25/2015	11/30/2015	8.661	1	110	97	29		4.5 g
B33W48	1511416-2	11/20/2015	11/25/2015	11/30/2015	6.877	1	110	100	31		4.2 g
B33W49	1511416-3	11/20/2015	11/25/2015	11/30/2015	5.722	1	190	100	30		4.2 g
B33W60	1511416-4	11/20/2015	11/25/2015	11/30/2015	14.54	1	390	100	31		4.6 g
B33W59	1511416-5	11/20/2015	11/25/2015	11/30/2015	17.32	1	520	120	35		4.2 g
B33W53	1511416-6	11/20/2015	11/25/2015	11/30/2015	11.85	1	130	93	28		4.9 g
B33W55	1511416-7	11/20/2015	11/25/2015	11/30/2015	10.21	1	65	95	28	J	4.7 g
B33W58	1511416-8	11/20/2015	11/25/2015	11/30/2015	9.624	1	1300	110	33		4 g
B33W51	1511416-9	11/20/2015	11/25/2015	11/30/2015	12.69	1	670	110	32		4.3 g
B33W57	1511416-10	11/20/2015	11/25/2015	11/30/2015	10.43	1	130	100	30		4.4 g
B33W54	1511416-11	11/20/2015	11/25/2015	11/30/2015	12.53	1	29	97	29	U	4.7 g
B33W56	1511416-12	11/20/2015	11/25/2015	11/30/2015	22.5	1	37	110	32	J	4.9 g
B33W50	1511416-13	11/20/2015	11/25/2015	11/30/2015	4.873	1	29	98	29	U	4.3 g

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: *cr1511416-1*

Solid pH in water @25 Degrees Celsius

Method SW9045

Sample Results

Lab Name: ALS Environmental -- FC
Client Name: CH2M HILL Plateau Remediation Company
Client Project ID: FY15 100-K AB Waste Sites - Soil F16-002
Work Order Number: 1511416 **Final Volume:** 20 ml
Reporting Basis: As Received **Matrix:** SOIL
Prep Method: METHOD **Result Units:** pH
Analyst: Dylan R. Hodges

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	RptLimit/ LOQ/LOD	Flag	Sample Aliquot
B33W60	1511416-4	11/20/2015	12/09/2015	12/09/2015	N/A	1	8.06	0.1		20.73 g
B33W51	1511416-9	11/20/2015	12/09/2015	12/09/2015	N/A	1	6.55	0.1		20.32 g

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: *pH1511416-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Field ID: B33W52
Lab ID: 1511416-1

Analysis ReqCode: 300.0_ANIONS_I

Sample Matrix: SOIL
% Moisture: 8.7
Date Collected: 20-Nov-15
Date Extracted: 25-Nov-15
Date Analyzed: 25-Nov-15
Prep Method: METHOD

Prep Batch: IC151125-1
QCBatchID: IC151125-1-1
Run ID: IC151125-1A5
Cleanup: NONE
Basis: Dry Weight
File Name: 51125_a050.dxd

Analyst: Dylan R. Hodges
Sample Aliquot: 4.21 g
Final Volume: 40 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
16887-00-6	CHLORIDE AnalysisTime: 21:58	1	13000	2100	620		
14797-65-0	NITRITE AS N AnalysisTime: 21:58	1	310	1000	310	U	
14797-55-8	NITRATE AS N AnalysisTime: 21:58	1	1500	2100	620	J	
14808-79-8	SULFATE AnalysisTime: 21:58	1	16000	10000	3100		

Data Package ID: *IC1511416-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Field ID: B33W48
Lab ID: 1511416-2

Analysis ReqCode: 300.0_ANIONS_I

Sample Matrix: SOIL
% Moisture: 6.9
Date Collected: 20-Nov-15
Date Extracted: 25-Nov-15
Date Analyzed: 25-Nov-15
Prep Method: METHOD

Prep Batch: IC151125-1
QCBatchID: IC151125-1-1
Run ID: IC151125-1A5
Cleanup: NONE
Basis: Dry Weight
File Name: 51125_a051.dxd

Analyst: Dylan R. Hodges
Sample Aliquot: 4.25 g
Final Volume: 40 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
16887-00-6	CHLORIDE AnalysisTime: 22:13	1	9100	2000	610		
14797-65-0	NITRITE AS N AnalysisTime: 22:13	1	300	1000	300	U	
14797-55-8	NITRATE AS N AnalysisTime: 22:13	1	3300	2000	610		
14808-79-8	SULFATE AnalysisTime: 22:13	1	11000	10000	3000		

Data Package ID: *IC1511416-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Field ID: B33W49
Lab ID: 1511416-3

Analysis ReqCode: 300.0_ANIONS_I

Sample Matrix: SOIL
% Moisture: 5.7
Date Collected: 20-Nov-15
Date Extracted: 25-Nov-15
Date Analyzed: 25-Nov-15
Prep Method: METHOD

Prep Batch: IC151125-1
QCBatchID: IC151125-1-1
Run ID: IC151125-1A5
Cleanup: NONE
Basis: Dry Weight
File Name: 51125_a052.dxd

Analyst: Dylan R. Hodges
Sample Aliquot: 4.72 g
Final Volume: 40 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
16887-00-6	CHLORIDE AnalysisTime: 22:28	1	1900	1800	540		
14797-65-0	NITRITE AS N AnalysisTime: 22:28	1	270	900	270	U	
14797-55-8	NITRATE AS N AnalysisTime: 22:28	1	2600	1800	540		
14808-79-8	SULFATE AnalysisTime: 22:28	1	6600	9000	2700	J	

Data Package ID: *IC1511416-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Field ID: B33W60
Lab ID: 1511416-4

Analysis ReqCode: 300.0_ANIONS_I

Sample Matrix: SOIL
% Moisture: 14.5
Date Collected: 20-Nov-15
Date Extracted: 25-Nov-15
Date Analyzed: 25-Nov-15
Prep Method: METHOD

Prep Batch: IC151125-1
QCBatchID: IC151125-1-1
Run ID: IC151125-1A5
Cleanup: NONE
Basis: Dry Weight
File Name: 51125_a053.dxd

Analyst: Dylan R. Hodges
Sample Aliquot: 4.6 g
Final Volume: 40 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
16887-00-6	CHLORIDE AnalysisTime: 22:43	1	1200	2000	610	J	
14797-65-0	NITRITE AS N AnalysisTime: 22:43	1	310	1000	310	U	
14797-55-8	NITRATE AS N AnalysisTime: 22:43	1	970	2000	610	J	
14808-79-8	SULFATE AnalysisTime: 22:43	1	97000	10000	3100		

Data Package ID: *IC1511416-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Field ID: B33W59
Lab ID: 1511416-5

Analysis ReqCode: 300.0_ANIONS_I

Sample Matrix: SOIL
% Moisture: 17.3
Date Collected: 20-Nov-15
Date Extracted: 25-Nov-15
Date Analyzed: 25-Nov-15
Prep Method: METHOD

Prep Batch: IC151125-1
QCBatchID: IC151125-1-1
Run ID: IC151125-1A5
Cleanup: NONE
Basis: Dry Weight
File Name: 51125_a054.dxd

Analyst: Dylan R. Hodges
Sample Aliquot: 4.47 g
Final Volume: 40 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
16887-00-6	CHLORIDE AnalysisTime: 22:58	1	6900	2200	650		
14797-65-0	NITRITE AS N AnalysisTime: 22:58	1	320	1100	320	U	
14797-55-8	NITRATE AS N AnalysisTime: 22:58	1	2600	2200	650		
14808-79-8	SULFATE AnalysisTime: 17:20	10	1500000	110000	32000	D	

Data Package ID: *IC1511416-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Field ID: B33W53
Lab ID: 1511416-6

Analysis ReqCode: 300.0_ANIONS_I

Sample Matrix: SOIL
% Moisture: 11.8
Date Collected: 20-Nov-15
Date Extracted: 25-Nov-15
Date Analyzed: 25-Nov-15
Prep Method: METHOD

Prep Batch: IC151125-1
QCBatchID: IC151125-1-1
Run ID: IC151125-1A5
Cleanup: NONE
Basis: Dry Weight
File Name: 51125_a055.dxd

Analyst: Dylan R. Hodges
Sample Aliquot: 4.29 g
Final Volume: 40 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
16887-00-6	CHLORIDE AnalysisTime: 23:13	1	11000	2100	630		
14797-65-0	NITRITE AS N AnalysisTime: 23:13	1	320	1100	320	U	
14797-55-8	NITRATE AS N AnalysisTime: 23:13	1	4700	2100	630		
14808-79-8	SULFATE AnalysisTime: 23:13	1	230000	11000	3200		

Data Package ID: *IC1511416-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Field ID: B33W55
Lab ID: 1511416-7

Analysis ReqCode: 300.0_ANIONS_I

Sample Matrix: SOIL
% Moisture: 10.2
Date Collected: 20-Nov-15
Date Extracted: 25-Nov-15
Date Analyzed: 28-Nov-15
Prep Method: METHOD

Prep Batch: IC151125-1
QCBatchID: IC151125-1-1
Run ID: IC151128-1A5
Cleanup: NONE
Basis: Dry Weight
File Name: 51127_a047.dxd

Analyst: Dylan R. Hodges
Sample Aliquot: 4.33 g
Final Volume: 40 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
16887-00-6	CHLORIDE AnalysisTime: 20:42	5	190000	10000	3100	D	
14797-65-0	NITRITE AS N AnalysisTime: 23:28	1	310	1000	310	U	
14797-55-8	NITRATE AS N AnalysisTime: 23:28	1	2700	2100	620		
14808-79-8	SULFATE AnalysisTime: 23:28	1	420000	10000	3100		

Data Package ID: *IC1511416-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Field ID: B33W58
Lab ID: 1511416-8

Analysis ReqCode: 300.0_ANIONS_I

Sample Matrix: SOIL
% Moisture: 9.6
Date Collected: 20-Nov-15
Date Extracted: 25-Nov-15
Date Analyzed: 25-Nov-15
Prep Method: METHOD

Prep Batch: IC151125-1
QCBatchID: IC151125-1-1
Run ID: IC151125-1A5
Cleanup: NONE
Basis: Dry Weight
File Name: 51125_a057.dxd

Analyst: Dylan R. Hodges
Sample Aliquot: 4.35 g
Final Volume: 40 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
16887-00-6	CHLORIDE AnalysisTime: 23:43	1	17000	2000	610		
14797-65-0	NITRITE AS N AnalysisTime: 23:43	1	310	1000	310	U	
14797-55-8	NITRATE AS N AnalysisTime: 23:43	1	930	2000	610	J	
14808-79-8	SULFATE AnalysisTime: 23:43	1	720000	10000	3100		

Data Package ID: *IC1511416-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Field ID: B33W51
Lab ID: 1511416-9

Analysis ReqCode: 300.0_ANIONS_I

Sample Matrix: SOIL
% Moisture: 12.7
Date Collected: 20-Nov-15
Date Extracted: 25-Nov-15
Date Analyzed: 25-Nov-15
Prep Method: METHOD

Prep Batch: IC151125-1
QCBatchID: IC151125-1-1
Run ID: IC151125-1A5
Cleanup: NONE
Basis: Dry Weight
File Name: 51125_a058.dxd

Analyst: Dylan R. Hodges
Sample Aliquot: 4.16 g
Final Volume: 40 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
16887-00-6	CHLORIDE AnalysisTime: 23:58	10	1400000	22000	6600	D	
14797-65-0	NITRITE AS N AnalysisTime: 23:58	10	3300	11000	3300	UD	
14797-55-8	NITRATE AS N AnalysisTime: 23:58	10	8800	22000	6600	JD	
14808-79-8	SULFATE AnalysisTime: 17:35	25	19000000	280000	83000	D	

Data Package ID: *IC1511416-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Field ID: B33W57
Lab ID: 1511416-10

Analysis ReqCode: 300.0_ANIONS_I

Sample Matrix: SOIL
% Moisture: 10.4
Date Collected: 20-Nov-15
Date Extracted: 25-Nov-15
Date Analyzed: 26-Nov-15
Prep Method: METHOD

Prep Batch: IC151125-1
QCBatchID: IC151125-1-1
Run ID: IC151125-1A5
Cleanup: NONE
Basis: Dry Weight
File Name: 51125_a059.dxd

Analyst: Dylan R. Hodges
Sample Aliquot: 4.51 g
Final Volume: 40 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
16887-00-6	CHLORIDE AnalysisTime: 00:14	10	56000	20000	5900	D	
14797-65-0	NITRITE AS N AnalysisTime: 00:14	10	3000	9900	3000	UD	
14797-55-8	NITRATE AS N AnalysisTime: 00:14	10	7800	20000	5900	JD	
14808-79-8	SULFATE AnalysisTime: 17:50	25	14000000	250000	74000	D	

Data Package ID: *IC1511416-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Field ID: B33W54
Lab ID: 1511416-11

Analysis ReqCode: 300.0_ANIONS_I

Sample Matrix: SOIL
% Moisture: 12.5
Date Collected: 20-Nov-15
Date Extracted: 25-Nov-15
Date Analyzed: 26-Nov-15
Prep Method: METHOD

Prep Batch: IC151125-1
QCBatchID: IC151125-1-1
Run ID: IC151125-1A5
Cleanup: NONE
Basis: Dry Weight
File Name: 51125_a062.dxd

Analyst: Dylan R. Hodges
Sample Aliquot: 4.56 g
Final Volume: 40 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
16887-00-6	CHLORIDE AnalysisTime: 00:59	1	46000	2000	600		
14797-65-0	NITRITE AS N AnalysisTime: 00:59	1	300	1000	300	U	
14797-55-8	NITRATE AS N AnalysisTime: 00:59	1	3500	2000	600		
14808-79-8	SULFATE AnalysisTime: 00:59	1	53000	10000	3000		

Data Package ID: *IC1511416-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Field ID: B33W56
Lab ID: 1511416-12

Analysis ReqCode: 300.0_ANIONS_I

Sample Matrix: SOIL
% Moisture: 22.5
Date Collected: 20-Nov-15
Date Extracted: 25-Nov-15
Date Analyzed: 26-Nov-15
Prep Method: METHOD

Prep Batch: IC151125-1
QCBatchID: IC151125-1-1
Run ID: IC151125-1A5
Cleanup: NONE
Basis: Dry Weight
File Name: 51125_a063.dxd

Analyst: Dylan R. Hodges
Sample Aliquot: 4.26 g
Final Volume: 40 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
16887-00-6	CHLORIDE AnalysisTime: 01:14	1	33000	2400	730		
14797-65-0	NITRITE AS N AnalysisTime: 01:14	1	360	1200	360	U	
14797-55-8	NITRATE AS N AnalysisTime: 01:14	1	1800	2400	730	J	
14808-79-8	SULFATE AnalysisTime: 18:05	10	1600000	120000	36000	D	

Data Package ID: *IC1511416-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Field ID: B33W50
Lab ID: 1511416-13

Analysis ReqCode: 300.0_ANIONS_I

Sample Matrix: SOIL
% Moisture: 4.9
Date Collected: 20-Nov-15
Date Extracted: 25-Nov-15
Date Analyzed: 26-Nov-15
Prep Method: METHOD

Prep Batch: IC151125-1
QCBatchID: IC151125-1-1
Run ID: IC151125-1A5
Cleanup: NONE
Basis: Dry Weight
File Name: 51125_a064.dxd

Analyst: Dylan R. Hodges
Sample Aliquot: 4.21 g
Final Volume: 40 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
16887-00-6	CHLORIDE AnalysisTime: 01:29	1	1400	2000	600	J	
14797-65-0	NITRITE AS N AnalysisTime: 01:29	1	300	1000	300	U	
14797-55-8	NITRATE AS N AnalysisTime: 01:29	1	1500	2000	600	J	
14808-79-8	SULFATE AnalysisTime: 01:29	1	15000	10000	3000		

Data Package ID: *IC1511416-1*

Hexavalent Chromium

Method SW7196A

Method Blank

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Lab ID: CR151125-1MB

Sample Matrix: SOIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 25-Nov-15
Date Analyzed: 30-Nov-15

Prep Batch: CR151125-1
QCBatchID: CR151125-1-1
Run ID: CR151130-1A5
Cleanup: NONE
Basis: N/A
File Name: Manual Entry

Sample Aliquot: 4 g
Final Volume: 40 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	DF	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
18540-29-9	CHROMIUM VI	1	30	100	30	U	

Data Package ID: *cr1511416-1*

Hexavalent Chromium

Method SW7196A

Laboratory Control Sample

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Lab ID: CR151125-1LCS

Sample Matrix: SOIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 11/25/2015
Date Analyzed: 11/30/2015
Prep Method: METHOD

Prep Batch: CR151125-1
QCBatchID: CR151125-1-1
Run ID: CR151130-1A5
Cleanup: NONE
Basis: N/A
File Name: Manual Entry

Sample Aliquot: 4 g
Final Volume: 40 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
18540-29-9	CHROMIUM VI	300	2470	100		82	80 - 120%

Data Package ID: *cr1511416-1*

Hexavalent Chromium

Method SW7196A

Matrix Spike And Matrix Spike Duplicate

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Field ID: B33W50
LabID: 1511416-13MS

Sample Matrix: SOIL
% Moisture: 4.9
Date Collected: 20-Nov-15
Date Extracted: 25-Nov-15
Date Analyzed: 30-Nov-15
Prep Method: METHOD

Prep Batch: CR151125-1
QCBatchID: CR151125-1-1
Run ID: CR151130-1A5
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 4.8 g
Final Volume: 40 ml
Result Units: UG/KG
File Name: Manual Entry

CASNO	Target Analyte	Sample Result	Samp Qual	MS Result	MS Qual	Reporting Limit	Spike Added	MS % Rec.	Control Limits
18540-29-9	CHROMIUM VI	98	U	893		87.6	876	102	75 - 125%

Field ID: B33W50
LabID: 1511416-13MSD

Sample Matrix: SOIL
% Moisture: 4.9
Date Collected: 20-Nov-15
Date Extracted: 25-Nov-15
Date Analyzed: 30-Nov-15
Prep Method: METHOD

Prep Batch: CR151125-1
QCBatchID: CR151125-1-1
Run ID: CR151130-1A5
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 4.3 g
Final Volume: 40 ml
Result Units: UG/KG
File Name: Manual Entry

CASNO	Target Analyte	MSD Result	MSD Qual	Spike Added	MSD % Rec.	Reporting Limit	RPD Limit	RPD
18540-29-9	CHROMIUM VI	1020		978	104	97.8	20	13

Data Package ID: *cr1511416-1*

pH

Method SW9045

Duplicate Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Field ID: B33W51
Lab ID: 1511416-9D

Sample Matrix: SOIL
% Moisture: N/A
Date Collected: 11/20/2015
Date Extracted: 12/09/2015
Date Analyzed: 12/09/2015

Prep Batch: PH151209-2
QCBatchID: PH151209-2-1
Run ID: PH151209-2A1
Cleanup: NONE
Basis: As Received
File Name:

Sample Aliquot: 20.61 g
Final Volume: 20 ml
Result Units: pH
Clean DF: 1

CASNO	Target Analyte	Sample Result	Samp Qual	Duplicate Result	Dup Qual	Reporting Limit	Dilution Factor	RPD	RPD Limit
10-29-7	PH	6.55		6.45		0.1	1		0.5

Data Package ID: *pH1511416-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Method Blank

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Lab ID: IC151125-1MB

Sample Matrix: SOIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 25-Nov-15
Date Analyzed: 26-Nov-15

Prep Batch: IC151125-1
QCBatchID: IC151125-1-1
Run ID: IC151125-1A5
Cleanup: NONE
Basis: N/A
File Name: 51125_a065.dxd

Sample Aliquot: 4 g
Final Volume: 40 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	DF	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
16887-00-6	CHLORIDE	1	600	2000	600	U	
14797-65-0	NITRITE AS N	1	300	1000	300	U	
14797-55-8	NITRATE AS N	1	600	2000	600	U	
14808-79-8	SULFATE	1	3000	10000	3000	U	

Data Package ID: *IC1511416-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Laboratory Control Sample

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Lab ID: IC151125-1LCS

Sample Matrix: SOIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 11/25/2015
Date Analyzed: 11/26/2015
Prep Method: METHOD

Prep Batch: IC151125-1
QCBatchID: IC151125-1-1
Run ID: IC151125-1A5
Cleanup: NONE
Basis: N/A
File Name: 51125_a066.dxd

Sample Aliquot: 4 g
Final Volume: 40 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
16887-00-6	CHLORIDE	5000	51200	2000		102	85 - 115%
14797-65-0	NITRITE AS N	2000	20200	1000		101	85 - 115%
14797-55-8	NITRATE AS N	5000	48600	2000		97	85 - 115%
14808-79-8	SULFATE	20000	199000	10000		100	85 - 115%

Data Package ID: *IC1511416-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Matrix Spike And Matrix Spike Duplicate

Lab Name: ALS Environmental -- FC
Work Order Number: 1511416
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: FY15 100-K AB Waste Sites - Soil F16-002

Field ID: B33W48
LabID: 1511416-2MS

Sample Matrix: SOIL
% Moisture: 6.9
Date Collected: 20-Nov-15
Date Extracted: 25-Nov-15
Date Analyzed: 26-Nov-15
Prep Method: METHOD

Prep Batch: IC151125-1
QCBatchID: IC151125-1-1
Run ID: IC151125-1A5
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 4 g
Final Volume: 40 ml
Result Units: UG/KG
File Name: 51125_a068.dxd

CASNO	Target Analyte	Sample Result	Samp Qual	MS Result	MS Qual	Reporting Limit	Spike Added	MS % Rec.	Control Limits
16887-00-6	CHLORIDE	9100		61000		2150	53700	97	85 - 115%
14797-65-0	NITRITE AS N	1000	U	20800		1070	21500	97	85 - 115%
14797-55-8	NITRATE AS N	3300		52700		2150	53700	92	85 - 115%
14808-79-8	SULFATE	11000		211000		10700	215000	93	85 - 115%

Field ID: B33W48
LabID: 1511416-2MSD

Sample Matrix: SOIL
% Moisture: 6.9
Date Collected: 20-Nov-15
Date Extracted: 25-Nov-15
Date Analyzed: 26-Nov-15
Prep Method: METHOD

Prep Batch: IC151125-1
QCBatchID: IC151125-1-1
Run ID: IC151125-1A5
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 4.23 g
Final Volume: 40 ml
Result Units: UG/KG
File Name: 51125_a069.dxd

CASNO	Target Analyte	MSD Result	MSD Qual	Spike Added	MSD % Rec.	Reporting Limit	RPD Limit	RPD
16887-00-6	CHLORIDE	59600		50800	99	2030	30	2
14797-65-0	NITRITE AS N	20300		20300	100	1020	30	2
14797-55-8	NITRATE AS N	51200		50800	95	2030	30	3
14808-79-8	SULFATE	205000		203000	96	10200	30	3

Data Package ID: *IC1511416-1*