March 9, 2016

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

Re: ALS Workorder: 1601118
Project Name: 300-FF-5 Post ROD Field Investigation - Soils
Project Number: F15-014

Dear Mr. Todak:

Fourteen soil samples were received from CH2M HILL Plateau Remediation Company, on 1/13/2016. The samples were scheduled for the following analyses:

Metals
Inorganics

The results for this analysis are contained in the enclosed reports.

This report was originally submitted on 1/15/2016. It is being re-submitted to report additional requested metals and anions.

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

Sincerely,

ALS Environmental
Julie Ellingson
Project Manager

The data package has the following issues:

- SIR 16-216 was issued 02/09/2016 requesting that anions and Ca/P be added to all samples. The electronic data has been uploaded but no hard copy data package has been received.

Resolution: *Provide correction.*

Lab Response: Submit report.

Please correct the issue and resubmit the hard copy packages.

SAMPLE ISSUE RESOLUTION

SIR NUM	SIR16-251
REV NUM	0
DATE INITIATED	3/14/2016

SAMPLE EVENT INFORMATION

SAF NUM(S)	F15-014
OPERABLE UNIT(S)	300-FF-5
PROJECT(S)	300FF5 Post ROD
SAMPLE EVENT TITLE(S)	300-FF-5 Post ROD Field Investigation
LABORATORY	ALS Environmental Ft. Collins

SAMPLING INFORMATION

NUMBER OF SAMPLES	14
SAMPLE NUMBERS	B347J9, B347K0, B347K5, B347L0, B347L5, B347L6, B347M1, B347P1, B347P6, B347P7, B347R2, B347R3, B347R8, B347T8
SAMPLE MATRIX	SOIL
COLLECTION DATE	1/7/2016 - 1/11/2016
SDG NUM	ALS1601118

ISSUE BACKGROUND

CLASS	Laboratory Issue
TYPE	Quality Control Failure
DESCRIPTION	The LCS fails high at 158% and LCSD at 168% for orthophosphate as P.

DISPOSITION

DESCRIPTION	Proposed resolution: ALS proposes to report the sample results. Orthophosphate is problematic in soils. All run QC is in control. However the MS/MSD for the batch is low.
JUSTIFICATION	Final Disposition: Accept proposed resolution SUBMITTED BY: Julie Ellingson DATE: 03/09/2016 ACCEPTED BY: Scot Fitzgerald DATE: 03/14/2016

SAMPLE ISSUE RESOLUTION

SIR NUM	SIR16-219
REV NUM	0
DATE INITIATED	2/9/2016

SAMPLE EVENT INFORMATION

SAF NUM(S)	F15-014
OPERABLE UNIT(S)	300-FF-5
PROJECT(S)	300FF5 Post ROD
SAMPLE EVENT TITLE(S)	300-FF-5 Post ROD Field Investigation
LABORATORY	ALS Environmental Ft. Collins

SAMPLING INFORMATION

NUMBER OF SAMPLES	14
SAMPLE NUMBERS	B347J9, B347K0, B347K5, B347L0, B347L5, B347L6, B347M1, B347P1, B347P6, B347P7, B347R2, B347R3, B347R8, B347T8
SAMPLE MATRIX	SOIL
COLLECTION DATE	1/7/2016 - 1/11/2016
SDG NUM	ALS1601118

ISSUE BACKGROUND

CLASS	Sample Management Issues
TYPE	Addition of Analyses
DESCRIPTION	The project needs to add anion analysis and additional ICP results for, Calcium and Phosphorous for the samples listed above.

DISPOSITION

DESCRIPTION	Proposed resolution: The lab will run the samples for phosphate, chloride, nitrite, nitrate, sulfate and flouride and add phosphorus and calcium analysis to the samples listed above.
JUSTIFICATION	Final Disposition:

SUBMITTED BY: Scot Fitzgerald DATE: 02/09/2016
ACCEPTED BY: Julie Ellingson DATE: 02/22/2016

ALS Environmental -- FC

Sample Number(s) Cross-Reference Table

OrderNum: 1601118
Client Name: CH2M HILL Plateau Remediation Company
Client Project Name: 300-FF-5 Post ROD Field Investigation - Soils
Client Project Number: F15-014
Client PO Number: BOA 54854

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
B347L0	1601118-1		SOIL	07-Jan-16	12:20
B347J9	1601118-2		SOIL	07-Jan-16	11:40
B347L5	1601118-3		SOIL	07-Jan-16	13:13
B347L6	1601118-4		SOIL	07-Jan-16	13:13
B347M1	1601118-5		SOIL	07-Jan-16	13:35
B347K5	1601118-6		SOIL	07-Jan-16	12:02
B347K0	1601118-7		SOIL	07-Jan-16	9:25
B347R3	1601118-8		SOIL	11-Jan-16	12:55
B347R8	1601118-9		SOIL	11-Jan-16	13:18
B347T8	1601118-10		SOIL	11-Jan-16	14:00
B347P7	1601118-11		SOIL	11-Jan-16	9:00
B347P1	1601118-12		SOIL	11-Jan-16	12:10
B347P6	1601118-13		SOIL	11-Jan-16	12:32
B347R2	1601118-14		SOIL	11-Jan-16	12:55

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST 1601118			F15-014-402	PAGE 1 OF 1
COLLECTOR J.R. Aguilar/CHPRC	COMPANY CONTACT TODAK, D	TELEPHONE NO. 376-6427	PROJECT COORDINATOR TODAK, D	PRICE CODE C13	DATA TURNAROUND
SAMPLING LOCATION C9581, I-003	PROJECT DESIGNATION 300-FF-5 Post ROD Field Investigation - Soils		SAF NO. F15-014	AIR QUALITY ☐	3 Days / 3 Days
ICE CHEST NO. GWS-447	FIELD LOGBOOK NO. HNF-N-507-331 Pg 25	ACTUAL SAMPLE DEPTH 25.50'-26.00'	COA 303492	METHOD OF SHIPMENT FEDERAL EXPRESS	ORIGINAL
SHIPPED TO ALS Environmental Ft. Collins	OFFSITE PROPERTY NO. 62667		BILL OF LADING/AIR BILL NO. 7753 8545 5241		

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS		
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	*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. N/A	PRESERVATION	None
		HOLDING TIME	6 Months
		TYPE OF CONTAINER	G/P
		NO. OF CONTAINER(S)	1
		VOLUME	60mL
	SPECIAL HANDLING AND/OR STORAGE	SAMPLE ANALYSIS	6020_METALS_ICPMS: COMMON (Add-on) (Uranium);

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B347L0 (1)	SOIL	01-07-16	1220	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM J.R. Aguilar/CHPRC	DATE/TIME JAN 07 2016 1330	RECEIVED BY/STORED IN Kevin Patterson CHPRC	DATE/TIME JAN 07 2016 1330	PORTION B
RELINQUISHED BY/REMOVED FROM Kevin Patterson CHPRC	DATE/TIME JAN 07 2016 1415	RECEIVED BY/STORED IN SSU-1	DATE/TIME JAN 07 2016 1415	
RELINQUISHED BY/REMOVED FROM SSU-1	DATE/TIME JAN 11 2016 0840	RECEIVED BY/STORED IN L.D. Wall CHPRC	DATE/TIME JAN 11 2016 0840	
RELINQUISHED BY/REMOVED FROM L.D. Wall CHPRC	DATE/TIME JAN 11 2016 1400	RECEIVED BY/STORED IN FEDEX	DATE/TIME	
RELINQUISHED BY/REMOVED FROM FED EX	DATE/TIME	RECEIVED BY/STORED IN C Trimble	DATE/TIME 1-13-16 0950	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

PRINTED ON 12/29/2015 FSR ID = FSR15659 TRVL NUM = TRVL-16-055 A-6003-618 (REV. 2)

June 10, 2016
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REV. 1

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CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST 160111 5			F15-014-391	PAGE 1 OF 1
COLLECTOR J.R. Aguilar/CHPRC	COMPANY CONTACT TODAK, D	TELEPHONE NO. 376-6427	PROJECT COORDINATOR TODAK, D	PRICE CODE C13	DATA TURNAROUND
SAMPLING LOCATION C9581, I-001	PROJECT DESIGNATION 300-FF-5 Post ROD Field Investigation - Soils		SAF NO. F15-014	AIR QUALITY ☐	3 Days / 3 Days
ICE CHEST NO. GWS-447	FIELD LOGBOOK NO. HNF-N-507-33/Pg 25	ACTUAL SAMPLE DEPTH 20.50' - 21.00'	COA 303492	METHOD OF SHIPMENT FEDERAL EXPRESS	ORIGINAL
SHIPPED TO ALS Environmental Ft. Collins	OFFSITE PROPERTY NO. 62667		BILL OF LADING/AIR BILL NO. 7753 8545 5241		

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS		
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	*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. N/A	PRESERVATION	None
		HOLDING TIME	6 Months
		TYPE OF CONTAINER	G/P
		NO. OF CONTAINER(S)	1
		VOLUME	60mL
	SPECIAL HANDLING AND/OR STORAGE	SAMPLE ANALYSIS	6020_METALS_ICPMS: COMMON (Add-on) (Uranium);

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B347J9 (2)	SOIL	01-07-16	1140	—

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CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM J.R. Aguilar/CHPRC	DATE/TIME JAN 07 2016 01-7-16 1330	RECEIVED BY/STORED IN Kevin Patterson CHPRC	DATE/TIME JAN 07 2016 01-7-16 1330	PORTION B
RELINQUISHED BY/REMOVED FROM Kevin Patterson CHPRC	DATE/TIME JAN 07 2016 1415	RECEIVED BY/STORED IN SSU-1	DATE/TIME JAN 07 2016 1415	
RELINQUISHED BY/REMOVED FROM SSU-1	DATE/TIME JAN 11 2016 0840	RECEIVED BY/STORED IN L.D. Wall CHPRC	DATE/TIME JAN 11 2016 0840	
RELINQUISHED BY/REMOVED FROM L.D. Wall CHPRC	DATE/TIME JAN 11 2016 1400	RECEIVED BY/STORED IN FEDEX	DATE/TIME	
RELINQUISHED BY/REMOVED FROM FED EX	DATE/TIME	RECEIVED BY/STORED IN CTrimble	DATE/TIME 1-13-16 0950	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

REV. 1

PRINTED ON 12/29/2015 FSR ID = FSR15657 TRVL NUM = TRVL-16-055 A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST 160118		F15-014-407	PAGE 1 OF 1
COLLECTOR J.R. Aguilar/CHPRC	COMPANY CONTACT TODAK, D	TELEPHONE NO. 376-6427	PROJECT COORDINATOR TODAK, D	PRICE CODE C13 / DATA TURNAROUND
SAMPLING LOCATION C9581, I-004	PROJECT DESIGNATION 300-FF-5 Post ROD Field Investigation - Soils		SAF NO. F15-014	AIR QUALITY ☐ / 3 Days / 3 Days
ICE CHEST NO. GUS-447	FIELD LOGBOOK NO. HNF-N-507-33 / Pg 25	ACTUAL SAMPLE DEPTH 28.00' - 28.50'	COA 303492	METHOD OF SHIPMENT FEDERAL EXPRESS
SHIPPED TO ALS Environmental Ft. Collins	OFFSITE PROPERTY NO. 6267		BILL OF LADING/AIR BILL NO. 7753 8545 5241	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. N/A

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	60mL
SAMPLE ANALYSIS	6020_METALS_ICPMS: COMMON (Add-on) (Uranium);

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B347L5 (3)	SOIL	01-07-16	1313	✓

June 10, 2016
ALS1601118

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J.R. Aguilar/CHPRC	JAN 07 2016 1330	Kevin Patterson CHPRC	JAN 07 2016 1330
Kevin Patterson CHPRC	JAN 07 2016 1415	SSU-1	JAN 07 2016 1415
SSU-1	JAN 11 2016 0840	L.D. Wall CHPRC	JAN 11 2016 0840
L.D. Wall CHPRC	JAN 11 2016 1400	FEDEX	
FED EX		CTrimble	1-13-16 0950

SPECIAL INSTRUCTIONS
PORTION B

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

REV. 1

PRINTED ON 12/29/2015 FSR ID = FSR15660 TRVL NUM = TRVL-16-055 A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST 1601118		F15-014-408	PAGE 1 OF 1
COLLECTOR: J.R. Aguilar/CHPRC	COMPANY CONTACT: TODAK, D	TELEPHONE NO.: 376-6427	PROJECT COORDINATOR: TODAK, D	PRICE CODE: C13 / DATA TURNAROUND
SAMPLING LOCATION: C9581, I-004B DUP	PROJECT DESIGNATION: 300-FF-5 Post ROD Field Investigation - Soils		SAF NO.: F15-014	AIR QUALITY ☐ / 3 Days / 3 Days
ICE CHEST NO.: GWS-447	FIELD LOGBOOK NO.: HNF-N-507-33 / Pg 25	ACTUAL SAMPLE DEPTH: 28.00' - 28.50'	COA: 303492	METHOD OF SHIPMENT: FEDERAL EXPRESS
SHIPPED TO: ALS Environmental Ft. Collins	OFFSITE PROPERTY NO.: 6267		BILL OF LADING/AIR BILL NO.: 7753 8545 5241	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. N/A

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	60mL
SAMPLE ANALYSIS	6020_METALS_ICPMS: COMMON (Add-on) (Uranium);

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B347L6 (4)	SOIL	01-07-16	1313	✓

June 10, 2016
ALS1601118

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J.R. Aguilar/CHPRC	JAN 07 2016 1330 (1-7-16)	Kevin Patterson CHPRC	JAN 07 2016 1330 (1-7-16)
Kevin Patterson CHPRC	JAN 07 2016 1445	SSU-1	JAN 07 2016 1445
SSU-1	JAN 11 2016 0840	L.D. Wall CHPRC	JAN 11 2016 0840
L.D. Wall CHPRC	JAN 11 2016 1400	FEDEX	
FED EX		Trimble Coumbe	1-13-16 0550

SPECIAL INSTRUCTIONS
PORTION B

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

REV. 1

PRINTED ON 12/29/2015 PR FSR ID = FSR15612 TRVL NUM = TRVL-16-055 TRVL A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST 1601118			F15-014-413	PAGE 1 OF 1
COLLECTOR J.R. Aguilar/CHPRC	COMPANY CONTACT TODAK, D	TELEPHONE NO. 376-6427	PROJECT COORDINATOR TODAK, D	PRICE CODE C13	DATA TURNAROUND
SAMPLING LOCATION C9581, I-005	PROJECT DESIGNATION 300-FF-5 Post ROD Field Investigation - Soils		SAF NO. F15-014	AIR QUALITY ☐	3 Days / 3 Days
ICE CHEST NO. GWS-447	FIELD LOGBOOK NO. HNF-N-507-33 / Pg 25	ACTUAL SAMPLE DEPTH 32.00' - 32.50	COA 303492	METHOD OF SHIPMENT FEDERAL EXPRESS	ORIGINAL
SHIPPED TO ALS Environmental Ft. Collins	OFFSITE PROPERTY NO. 6267		BILL OF LADING/AIR BILL NO. 7753 8545 5241		

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS		
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	*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. N/A	PRESERVATION	None
		HOLDING TIME	6 Months
		TYPE OF CONTAINER	G/P
		NO. OF CONTAINER(S)	1
		VOLUME	60mL
	SPECIAL HANDLING AND/OR STORAGE	SAMPLE ANALYSIS	6020_METALS_ICPMS: COMMON (Add-on) (Uranium);

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B347M1 (5)	SOIL	01-07-16	1335	✓

Sample from Shoe
CA
01-07-16

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM J.R. Aguilar/CHPRC	DATE/TIME JAN 0 7 2016 1505 CA 1-7-16	RECEIVED BY/STORED IN SSU #1	DATE/TIME JAN 0 7 2016 1505 CA 1-7-16	PORTION B
RELINQUISHED BY/REMOVED FROM SSU-1	DATE/TIME JAN 1 1 2016 0840	RECEIVED BY/STORED IN L.D. Wall CHPRC	DATE/TIME JAN 1 1 2016 0840	
RELINQUISHED BY/REMOVED FROM L.D. Wall CHPRC	DATE/TIME JAN 1 1 2016 1400	RECEIVED BY/STORED IN FEDEX	DATE/TIME	
RELINQUISHED BY/REMOVED FROM FED EX	DATE/TIME	RECEIVED BY/STORED IN CTrimble	DATE/TIME 1-13-16 0950	
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	

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

PRINTED ON 12/29/2015 FSR ID = FSR15661 TRVL NUM = TRVL-16-055 A-6003-618 (REV 2)

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CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST 160118			F15-014-397	PAGE 1 OF 1
COLLECTOR J.R. Aguilar/CHPRC	COMPANY CONTACT TODAK, D	TELEPHONE NO. 376-6427	PROJECT COORDINATOR TODAK, D	PRICE CODE C13	DATA TURNAROUND
SAMPLING LOCATION C9581, I-002	PROJECT DESIGNATION 300-FF-5 Post ROD Field Investigation - Soils		SAF NO. F15-014	AIR QUALITY ☐	3 Days / 3 Days
ICE CHEST NO. GWS-447	FIELD LOGBOOK NO. HNF-N-502-33 / Pg 25	ACTUAL SAMPLE DEPTH 23.00' - 23.50	COA 303492	METHOD OF SHIPMENT FEDERAL EXPRESS	ORIGINAL
SHIPPED TO ALS Environmental Ft. Collins	OFFSITE PROPERTY NO. 60267		BILL OF LADING/AIR BILL NO. 7753 8545 5241		

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. N/A

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	60mL
SAMPLE ANALYSIS	6020_METALS_ICPMS: COMMON (Add-on) (Uranium);

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B347K5 (6)	SOIL	01-07-16	1202	✓

June 10, 2016
ALS1601118

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM J.R. Aguilar/CHPRC	DATE/TIME JAN 07 2016 1330	RECEIVED BY/STORED IN Kevin Patterson CHPRC	DATE/TIME JAN 07 2016 1330	PORTION B
RELINQUISHED BY/REMOVED FROM Kevin Patterson CHPRC	DATE/TIME JAN 07 2016 1415	RECEIVED BY/STORED IN SSU-1	DATE/TIME JAN 07 2016 1415	
RELINQUISHED BY/REMOVED FROM SSU-1	DATE/TIME JAN 11 2016 0840	RECEIVED BY/STORED IN L.D. Wall CHPRC	DATE/TIME JAN 11 2016 0840	
RELINQUISHED BY/REMOVED FROM L.D. Wall CHPRC	DATE/TIME JAN 11 2016 1400	RECEIVED BY/STORED IN FEDEX	DATE/TIME	
RELINQUISHED BY/REMOVED FROM FED EX	DATE/TIME	RECEIVED BY/STORED IN Cittrinble Crumbl	DATE/TIME 1-13-16 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	

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

REV. 1

PRINTED ON 12/29/2015 FSR ID = FSR15658 TRVL NUM = TRVL-16-055 TR. A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST 1601118 B1b5			F15-014-392	PAGE 1 OF 1
COLLECTOR: J.R. Aguilar/CHPRC	COMPANY CONTACT: TODAK, D	TELEPHONE NO.: 376-6427	PROJECT COORDINATOR: TODAK, D	PRICE CODE: C13	DATA TURNAROUND
SAMPLING LOCATION: C9581, I-001B EB	PROJECT DESIGNATION: 300-FF-5 Post ROD Field Investigation - Soils		SAF NO.: F15-014	AIR QUALITY: ☐	3 Days / 3 Days
ICE CHEST NO.: GWS-447	FIELD LOGBOOK NO.: HNF-N-507-33 / Pg 25	ACTUAL SAMPLE DEPTH: N/A	COA: 303492	METHOD OF SHIPMENT: FEDERAL EXPRESS	ORIGINAL
SHIPPED TO: ALS Environmental Ft. Collins	OFFSITE PROPERTY NO.: 6267		BILL OF LADING/AIR BILL NO.: 7753 8545 5241		

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. N/A

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	60mL
SAMPLE ANALYSIS	6020_METALS_ICPMS: COMMON (Add-on) (Uranium);

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B347K0 (1)	SOIL	01-07-16	0925	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J.R. Aguilar/CHPRC	JAN 07 2016 1330	Kevin Patterson CHPRC	JAN 07 2016 1330
Kevin Patterson CHPRC	JAN 07 2016 1415	SSU-1	JAN 07 2016 1415
SSU-1	JAN 11 2016 0840	L.D. Wall CHPRC	JAN 11 2016 0840
L.D. Wall CHPRC	JAN 11 2016 1400	FEDEX	
FED EX		C Trimble	1-13-16 0950

SPECIAL INSTRUCTIONS
PORTION B

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

PRINTED ON 12/29/2015 FSR ID = FSR15611 TRVL NUM = TRVL-16-055 A-6003-618 (REV 2)

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CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST 1601118		F15-014-445	PAGE 1 OF 1
COLLECTOR J.R. Aguilar/CHPRC	COMPANY CONTACT TODAK, D	TELEPHONE NO. 376-6427	PROJECT COORDINATOR TODAK, D	PRICE CODE C13 / DATA TURNAROUND
SAMPLING LOCATION C9582, I-003B DUP	PROJECT DESIGNATION 300-FF-5 Post ROD Field Investigation - Soils		SAF NO. F15-014	AIR QUALITY ☐ / 3 Days / 3 Days
ICE CHEST NO. GWS-449	FIELD LOGBOOK NO. HNF-N-507-33/Pg 24	ACTUAL SAMPLE DEPTH 25.5" - 26:00"	COA 303492	METHOD OF SHIPMENT FEDERAL EXPRESS
SHIPPED TO ALS Environmental Ft. Collins	OFFSITE PROPERTY NO. 6271		BILL OF LADING/AIR BILL NO. 7753 9680 6620	ORIGINAL

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS		
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	*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. N/A	PRESERVATION	None
		HOLDING TIME	6 Months
		TYPE OF CONTAINER	G/P
		NO. OF CONTAINER(S)	1
		VOLUME	60mL
	SPECIAL HANDLING AND/OR STORAGE	SAMPLE ANALYSIS	6020_METALS_ICPMS: COMMON (Add-on) (Uranium);

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B347R3 (8)	SOIL	01-11-16	1255	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM J.R. Aguilar/CHPRC	DATE/TIME JAN 1 1 2016 1505	RECEIVED BY/STORED IN SSU#1	DATE/TIME JAN 1 1 2016 1505	PORTION B
RELINQUISHED BY/REMOVED FROM SSU#1	DATE/TIME JAN 1 2 2016 0925	RECEIVED BY/STORED IN L.D. Wall	DATE/TIME JAN 1 2 2016 0925	
RELINQUISHED BY/REMOVED FROM L.D. Wall	DATE/TIME JAN 1 2 2016 1400	RECEIVED BY/STORED IN CHPRC FEDEX	DATE/TIME	
RELINQUISHED BY/REMOVED FROM CHPRC FED EX	DATE/TIME	RECEIVED BY/STORED IN C Trimble C Trimble	DATE/TIME 1-13-16 0950	
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	

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

PRINTED ON 12/29/2015 FSR ID = FSR15625 TRVL NUM = TRVL-16-056 A-6003-618 (REV 2)

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CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST 1601118		F15-014-450	PAGE 1 OF 1
COLLECTOR: J.R. Aguilar/CHPRC	COMPANY CONTACT: TODAK, D	TELEPHONE NO.: 376-6427	PROJECT COORDINATOR: TODAK, D	PRICE CODE: C13 / DATA TURNAROUND
SAMPLING LOCATION: C9582, I-004	PROJECT DESIGNATION: 300-FF-5 Post ROD Field Investigation - Soils		SAF NO.: F15-014	AIR QUALITY ☐ / 3 Days / 3 Days
ICE CHEST NO.: GWS-449	FIELD LOGBOOK NO.: HNF-N-507-33 / Pg 24	ACTUAL SAMPLE DEPTH: 29.50'-30.00'	COA: 303492	METHOD OF SHIPMENT: FEDERAL EXPRESS
SHIPPED TO: ALS Environmental Ft. Collins	OFFSITE PROPERTY NO.: 6271		BILL OF LADING/AIR BILL NO.: 77539680 6620	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. N/A

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	60mL
SAMPLE ANALYSIS	6020_METALS_ICPMS: COMMON (Add-on) (Uranium);

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B347R8 (9)	SOIL	01-11-16	1318	✓

June 10, 2016
ALS1601118

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J.R. Aguilar/CHPRC	JAN 11 2016 1505	SSuth	JAN 11 2016 1505
SSuth	JAN 12 2016 0925	L.D. Wall CHPRC	JAN 12 2016 0925
L.D. Wall CHPRC	JAN 12 2016 1400	FEDEX	
FED EX		C. Trimble C. Trimble	1-13-16 0950

SPECIAL INSTRUCTIONS
PORTION

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

REV. 1

PRINTED ON 12/29/2015 FSR ID = FSR15668 TRVL NUM = TRVL-16-056 A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST 1601118			F15-014-460	PAGE 1 OF 1
COLLECTOR: J.R. Aguilar/CHPRC	COMPANY CONTACT: TODAK, D	TELEPHONE NO.: 376-6427	PROJECT COORDINATOR: TODAK, D	PRICE CODE: C13	DATA TURNAROUND
SAMPLING LOCATION: C9582, I-006	PROJECT DESIGNATION: 300-FF-5 Post ROD Field Investigation - Soils		SAF NO.: F15-014	AIR QUALITY: ☐	3 Days / 3 Days
ICE CHEST NO.: GLOS-449	FIELD LOGBOOK NO.: HNF-N-507-33 / Pg 24	ACTUAL SAMPLE DEPTH: 33.00'- 33.50'	COA: 303492	METHOD OF SHIPMENT: FEDERAL EXPRESS	ORIGINAL
SHIPPED TO: ALS Environmental Ft. Collins	OFFSITE PROPERTY NO.: 6271		BILL OF LADING/AIR BILL NO.: 7753 9680 6620		

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. N/A

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	60mL
SAMPLE ANALYSIS	6020_METALS_ICPMS: COMMON (Add on) (Uranium);

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B347T8 (10)	SOIL	01-11-16	1400	✓

June 10, 2016
ALS1601118

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J.R. Aguilar/CHPRC	JAN 11 2016 1505	SSU #1	JAN 11 2016 1505
SSU #1	JAN 12 2016 0925	L.D. Wall CHPRC	JAN 12 2016 0925
L.D. Wall	JAN 12 2016 1400	FEDEX	
FED EX		C Trimble C Trimble	1-13-16 0950

SPECIAL INSTRUCTIONS
PORTION B

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

REV. 1

PRINTED ON 12/29/2015 FSR ID = FSR15670 TRVL NUM = TRVL-16-056 A-6003-618 (REV 3)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST 1601118		F15-014-439	PAGE 1 OF 1
COLLECTOR: J.R. Aguilar/CHPRC	COMPANY CONTACT: TODAK, D	TELEPHONE NO.: 376-6427	PROJECT COORDINATOR: TODAK, D	PRICE CODE: C13 / DATA TURNAROUND
SAMPLING LOCATION: C9582, I-002B EB	PROJECT DESIGNATION: 300-FF-5 Post ROD Field Investigation - Soils		SAF NO.: F15-014	AIR QUALITY ☐ / 3 Days / 3 Days
ICE CHEST NO.: GW5-449	FIELD LOGBOOK NO.: HNF-N-507-33 / Pg 26	ACTUAL SAMPLE DEPTH: N/A	COA: 303492	METHOD OF SHIPMENT: FEDERAL EXPRESS
SHIPPED TO: ALS Environmental Ft. Collins	OFFSITE PROPERTY NO.: 6271		BILL OF LADING/AIR BILL NO.: 7753 9680 6620	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. N/A

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	60mL
SAMPLE ANALYSIS	6020_METALS_ICPMS: COMMON (Add-on) (Uranium);

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B347P7 (11)	SOIL	01-11-16	0900	✓

June 10, 2016
ALS1601118

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J.R. Aguilar/CHPRC	JAN 11 2016 1505	SSU #1	JAN 11 2016 1505
SSU #1	JAN 12 2016 0925	L.D. Wall	JAN 12 2016 0925
L.D. Wall CHPRC	JAN 12 2016 1400	SHIPPING FEDEX	
FED EX		C Trimble	1-13-16 0950

SPECIAL INSTRUCTIONS
PORTION B

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

REV. 1

PRINTED ON 12/29/2015 FSR ID = FSR15620 TRVL NUM = TRVL-16-056 A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST 1601118			F15-014-433	PAGE 1 OF 1
COLLECTOR J.R. Aguilar/CHPRC	COMPANY CONTACT TODAK, D	TELEPHONE NO. 376-6427	PROJECT COORDINATOR TODAK, D	PRICE CODE C13	DATA TURNAROUND
SAMPLING LOCATION C9582, I-001	PROJECT DESIGNATION 300-FF-5 Post ROD Field Investigation - Soils		SAF NO. F15-014	AIR QUALITY ☐	3 Days / 3 Days
ICE CHEST NO. GWS-449	FIELD LOGBOOK NO. HNF-N-507-33 / Pg 26	ACTUAL SAMPLE DEPTH 20.50'-21.00'	COA 303492	METHOD OF SHIPMENT FEDERAL EXPRESS	ORIGINAL
SHIPPED TO ALS Environmental Ft. Collins	OFFSITE PROPERTY NO. 6271		BILL OF LADING/AIR BILL NO. 7753 9680 6620		

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS		
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	*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. N/A	PRESERVATION	None
		HOLDING TIME	6 Months
		TYPE OF CONTAINER	G/P
		NO. OF CONTAINER(S)	1
		VOLUME	60mL
	SPECIAL HANDLING AND/OR STORAGE	SAMPLE ANALYSIS	6020_METALS_ICPMS: COMMON (Add-on) (Uranium);

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B347P1 (12)	SOIL	01-11-16	1210	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM J.R. Aguilar/CHPRC	DATE/TIME JAN 1 1 2016 1505	RECEIVED BY/STORED IN SSU #1	DATE/TIME JAN 1 1 2016 1505	PORTION B
RELINQUISHED BY/REMOVED FROM SSU #1	DATE/TIME JAN 1 2 2016 0925	RECEIVED BY/STORED IN L.D. Wall CHPRC	DATE/TIME JAN 1 2 2016 0925	
RELINQUISHED BY/REMOVED FROM L.D. Wall CHPRC	DATE/TIME JAN 1 2 2016 1400	RECEIVED BY/STORED IN FEDEX	DATE/TIME	
RELINQUISHED BY/REMOVED FROM FED EX	DATE/TIME	RECEIVED BY/STORED IN CTrimble Crumble	DATE/TIME 1-13-16 0950	
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	

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

PRINTED ON 12/29/2015 FSR ID = FSR15665 TRVL NUM = TRVL-16-056 A-6003-618 (REV 2)

June 10, 2016
ALS1601118

REV. 1

1/ 06

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST 160111			F15-014-438	PAGE 1 OF 1
COLLECTOR J.R. Aguilar/CHPRC	COMPANY CONTACT TODAK, D	TELEPHONE NO. 376-6427	PROJECT COORDINATOR TODAK, D	PRICE CODE C13	DATA TURNAROUND
SAMPLING LOCATION C9582, I-002	PROJECT DESIGNATION 300-FF-5 Post ROD Field Investigation - Soils		SAF NO. F15-014	AIR QUALITY ☐	3 Days / 3 Days
ICE CHEST NO. GWS-449	FIELD LOGBOOK NO. HNF-N-507-33 / Pg 26	ACTUAL SAMPLE DEPTH 23.00' - 23.50'	COA 303492	METHOD OF SHIPMENT FEDERAL EXPRESS	ORIGINAL
SHIPPED TO ALS Environmental Ft. Collins	OFFSITE PROPERTY NO. 6271		BILL OF LADING/AIR BILL NO. 775396806620		

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS		
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	*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. N/A	PRESERVATION	None
		HOLDING TIME	6 Months
		TYPE OF CONTAINER	G/P
		NO. OF CONTAINER(S)	1
		VOLUME	60mL
	SPECIAL HANDLING AND/OR STORAGE	SAMPLE ANALYSIS	6020_METALS_ICPMS: COMMON (Add-on) (Uranium);

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B347P6 (13)	SOIL	01-11-16	1232	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM J.R. Aguilar/CHPRC	DATE/TIME JAN 11 2016 1505	RECEIVED BY/STORED IN SSU #1	DATE/TIME JAN 11 2016 1505	PORTION B
RELINQUISHED BY/REMOVED FROM SSU #1	DATE/TIME JAN 12 2016 0925	RECEIVED BY/STORED IN L.D. Wall CHPRC	DATE/TIME 0925	
RELINQUISHED BY/REMOVED FROM L.D. Wall CHPRC	DATE/TIME JAN 12 2016 1400	RECEIVED BY/STORED IN FEDEX	DATE/TIME JAN 12 2016	
RELINQUISHED BY/REMOVED FROM FED EX	DATE/TIME	RECEIVED BY/STORED IN Trimble Trimble 1-13-16	DATE/TIME 0820	
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	

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

PRINTED ON 12/29/2015 FSR ID = FSR15666 TRVL NUM = TRVL16-056 A-6003-618 (REV 2)

June 10, 2016
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REV. 1

LB 06-06

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST 160118		F15-014-444	PAGE 1 OF 1
COLLECTOR: J.R. Aguilar/CHPRC	COMPANY CONTACT: TODAK, D	TELEPHONE NO.: 376-6427	PROJECT COORDINATOR: TODAK, D	PRICE CODE: C13 / DATA TURNAROUND
SAMPLING LOCATION: C9582, I-003	PROJECT DESIGNATION: 300-FF-5 Post ROD Field Investigation - Soils		SAF NO.: F15-014	AIR QUALITY ☐ / 3 Days / 3 Days
ICE CHEST NO.: GWS-449	FIELD LOGBOOK NO.: HNF-N-507-33/Pg 26	ACTUAL SAMPLE DEPTH: 25.50'-26.00'	COA: 303492	METHOD OF SHIPMENT: FEDERAL EXPRESS
SHIPPED TO: ALS Environmental Ft. Collins	OFFSITE PROPERTY NO.: 6271		BILL OF LADING/AIR BILL NO.: 7753 9680 6620	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. N/A

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	60mL
SAMPLE ANALYSIS	6020_METALS_ICPMS: COMMON (Add-on) (Uranium):

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B347R2 (14)	SOIL	01-11-16	1255	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J.R. Aguilar/CHPRC	JAN 11 2016 1505	SSU #1	JAN 11 2016 1505
SSU #1	JAN 12 2016 0925	L.D. Wall CHPRC	JAN 12 2016 0925
L.D. Wall CHPRC	JAN 12 2016 1400	FEDEX	
FED Ex		C Trimble	1-13-16 0950

SPECIAL INSTRUCTIONS
PORTION B

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

PRINTED ON 12/29/2015 FSR ID = FSR15667 TRVL NUM = TRVL-16-056 A-6003-618 (REV 2)

June 10, 2016
ALS1601118
REV. 1
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ALS Environmental - Fort Collins
CONDITION OF SAMPLE UPON RECEIPT FORM

Client: CHPRC Workorder No: 1601118

Project Manager: JE Initials: CDT Date: 1-13-16

1. Does this project require any special handling in addition to standard ALS procedures?		YES	NO
2. Are custody seals on shipping containers intact?	NONE	YES	NO
3. Are Custody seals on sample containers intact?	NONE	YES	NO
4. Is there a COC (Chain-of-Custody) present or other representative documents?		YES	NO
5. Are the COC and bottle labels complete and legible?		YES	NO
6. Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)		YES	NO
7. Were airbills / shipping documents present and/or removable?	DROP OFF	YES	NO
8. Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	N/A	YES	NO
9. Are all aqueous non-preserved samples pH 4-9?	N/A	YES	NO
10. Is there sufficient sample for the requested analyses?		YES	NO
11. Were all samples placed in the proper containers for the requested analyses?		YES	NO
12. Are all samples within holding times for the requested analyses?		YES	NO
13. Were all sample containers received intact? (not broken or leaking, etc.)		YES	NO
14. Are all samples requiring no headspace (VOC, GRO, RSK/MEE, Rx CN/S, radon) headspace free? Size of bubble: ____ < green pea ____ > green pea	N/A	YES	NO
15. Do any water samples contain sediment? Amount Amount of sediment: ____ dusting ____ moderate ____ heavy	N/A	YES	NO
16. Were the samples shipped on ice?		YES	NO
17. Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: #2 #4	RAD ONLY	YES	NO

Cooler #:	1	2
Temperature (°C):	4.0	11.4
No. of custody seals on cooler:	2	2
DOT Survey/ Acceptance Information — External µR/hr reading:	11	11
Background µR/hr reading:	12	1

Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? YES / NO / NA (If no, see Form 008.)

Additional Information: PROVIDE DETAILS BELOW FOR A NO RESPONSE TO ANY QUESTION ABOVE, EXCEPT #1 AND #16.

If applicable, was the client contacted? YES / NO / NA Contact: _____ Date/Time: _____

Project Manager Signature / Date: 1/13/16

*IR Gun #2: Oakton, SN 29922500201-0066
*IR Gun #4: Oakton, SN 2372220101-0002

Form 201r24.xls (06/04/2012)

ORIGIN ID:PSCA (509) 528-9426
LESLY WALL
CH2M
6267 LATAH ST
6269 LATAH ST
RICHLAND, WA 99354
UNITED STATES US

SHIP DATE: 11JAN16
ACTWGT: 8.00 LB
CAD: 107066051/NET3670

BILL THIRD PARTY

TO JULIE ELLINGSON
ALS GLOBAL
225 COMMERCE DRIVE

FORT COLLINS CO 80524
(970) 490-1511
KV
PO DEPT
REF PTR# 6267

539J1/0E61/31D0

160 1118

11

-2

6.0

FedEx Express

TUE - 12 JAN 10:30A
PRIORITY OVERNIGHT
DSR

TRK# 7753 8545 5241
0201

XH FTCA

80524
CO-US DEN

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

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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.

June 10, 2016
ALS1601118

REV. 1

ORIGIN ID:PSCA (509) 528-9426
LESLY WALL
CH-12M
6267 LATAH ST
6269 LATAH ST
RICHLAND, WA 99354
UNITED STATES US

SHIP DATE: 12JAN16
ACTWGT: 10.00 LB
CAD: 107068051/INET3870

BILL THIRD PARTY

TO JULIE ELLINGSON
ALS GLOBAL
225 COMMERCE DRIVE
FORT COLLINS CO 80524
(970) 490-1511
INV
PO
REF PTR# 6271
DEPT

1601118

11 - 2 11.6

539J1/0E61/31D0

FedEx Express

TRK# 0201 7753 9680 6620

XH FTCA

WED - 13 JAN 10:30A
PRIORITY OVERNIGHT
DSR
80524
CO-US DEN

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Warning Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
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

300-FF-5 Post ROD Field Investigation - Soils -- F15-014

Work Order Number: 1601118

1. This report consists of 14 soil samples.

2. The samples were received intact at temperatures ranging from 6.0°C to 11.6°C by ALS on 01/13/16.

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

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

4. Analysis by Trace ICP followed method 6010B and the current revision of SOP 834.

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

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 time.

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. Phosphorus had 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.
- All initial and continuing calibration verifications were within the acceptance criteria for the requested analytes.
- The interference check samples and high standard readbacks associated with Method 6010B were within acceptance criteria.
- The interference check samples associated with Method 6020A were analyzed.

8. Matrix specific quality control procedures.

   Sample 1601118-2 was designated as the quality control sample for the Trace ICP analysis. Sample 1601118-7 was designated as the quality control sample for the ICP-MS 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.
   - 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
Uranium	1601118-7D

     The native sample results are flagged for duplicate failure.
   - A serial dilution was analyzed with each 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. Sample 1601118-13 required a further dilution to bring uranium into the analytical range of the ICP-MS.

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 — 3/9/16
Jill Latelle
Inorganics Primary Data Reviewer
Date

Julie Ellison — 3/9/16
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 CALCIUM

Method SW6010B

Sample Results

Lab Name: **ALS Environmental -- FC**
Client Name: CH2M HILL Plateau Remediation Company
Client Project ID: 300-FF-5 Post ROD Field Investigation - Soils F15-014
Work Order Number: 1601118 **Final Volume:** 100 ml
Reporting Basis: Dry Weight **Matrix:** SOIL
Analyst: Steve Workman **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
B347L0	1601118-1	1/7/2016	3/7/2016	03/07/2016	7.875	1	5000000	100000	4600		1.041 g
B347J9	1601118-2	1/7/2016	3/7/2016	03/07/2016	5.653	1	5800000	100000	4500		1.027 g
B347L5	1601118-3	1/7/2016	3/7/2016	03/07/2016	6.66	1	5500000	110000	4700		1.006 g
B347L6	1601118-4	1/7/2016	3/7/2016	03/07/2016	6.597	1	5200000	99000	4300		1.085 g
B347M1	1601118-5	1/7/2016	3/7/2016	03/07/2016	7.374	1	5600000	100000	4400		1.078 g
B347K5	1601118-6	1/7/2016	3/7/2016	03/07/2016	6.021	1	5900000	98000	4300		1.081 g
B347K0	1601118-7	1/7/2016	3/7/2016	03/07/2016	0.02	1	270000	98000	4300		1.023 g
B347R3	1601118-8	1/11/2016	3/7/2016	03/07/2016	7.695	1	6200000	100000	4600		1.045 g
B347R8	1601118-9	1/11/2016	3/7/2016	03/07/2016	10.78	1	5500000	110000	4800		1.016 g
B347T8	1601118-10	1/11/2016	3/7/2016	03/07/2016	7.792	1	5700000	110000	4600		1.031 g
B347P7	1601118-11	1/11/2016	3/7/2016	03/07/2016	0.02	1	29000	99000	4300	B	1.014 g
B347P1	1601118-12	1/11/2016	3/7/2016	03/07/2016	7.322	1	6300000	100000	4500		1.064 g
B347P6	1601118-13	1/11/2016	3/7/2016	03/07/2016	8.625	1	7000000	110000	4700		1.028 g
B347R2	1601118-14	1/11/2016	3/7/2016	03/07/2016	8.010	1	6300000	100000	4500		1.062 g

Comments:

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

Data Package ID: *it1601118-1*

Total PHOSPHORUS

Method SW6010B

Sample Results

Lab Name: **ALS Environmental -- FC**
Client Name: CH2M HILL Plateau Remediation Company
Client Project ID: 300-FF-5 Post ROD Field Investigation - Soils F15-014
Work Order Number: 1601118 **Final Volume:** 100 ml
Reporting Basis: Dry Weight **Matrix:** SOIL
Analyst: Steve Workman **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
B347L0	1601118-1	1/7/2016	3/7/2016	03/07/2016	7.875	1	1100000	21000	1500		1.041 g
B347J9	1601118-2	1/7/2016	3/7/2016	03/07/2016	5.653	1	1400000	21000	1500		1.027 g
B347L5	1601118-3	1/7/2016	3/7/2016	03/07/2016	6.66	1	1700000	21000	1500		1.006 g
B347L6	1601118-4	1/7/2016	3/7/2016	03/07/2016	6.597	1	1800000	20000	1400		1.085 g
B347M1	1601118-5	1/7/2016	3/7/2016	03/07/2016	7.374	1	1700000	20000	1400		1.078 g
B347K5	1601118-6	1/7/2016	3/7/2016	03/07/2016	6.021	1	1300000	20000	1400		1.081 g
B347K0	1601118-7	1/7/2016	3/7/2016	03/07/2016	0.02	1	25000	20000	1400		1.023 g
B347R3	1601118-8	1/11/2016	3/7/2016	03/07/2016	7.695	1	1400000	21000	1500		1.045 g
B347R8	1601118-9	1/11/2016	3/7/2016	03/07/2016	10.78	1	2600000	22000	1600		1.016 g
B347T8	1601118-10	1/11/2016	3/7/2016	03/07/2016	7.792	1	1800000	21000	1500		1.031 g
B347P7	1601118-11	1/11/2016	3/7/2016	03/07/2016	0.02	1	15000	20000	1400	B	1.014 g
B347P1	1601118-12	1/11/2016	3/7/2016	03/07/2016	7.322	1	1400000	20000	1500		1.064 g
B347P6	1601118-13	1/11/2016	3/7/2016	03/07/2016	8.625	1	1000000	21000	1500		1.028 g
B347R2	1601118-14	1/11/2016	3/7/2016	03/07/2016	8.010	1	1400000	20000	1500		1.062 g

Comments:

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

Data Package ID: *it1601118-1*

Total URANIUM

Method SW6020A

Sample Results

Lab Name: **ALS Environmental -- FC**
Client Name: CH2M HILL Plateau Remediation Company
Client Project ID: 300-FF-5 Post ROD Field Investigation - Soils F15-014
Work Order Number: 1601118 **Final Volume:** 100 ml
Reporting Basis: Dry Weight **Matrix:** SOIL
Analyst: Brent A. Stanfield **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
B347L0	1601118-1	1/7/2016	1/14/2016	01/14/2016	7.875	10	5300	10	5.4		1.089 g
B347J9	1601118-2	1/7/2016	1/14/2016	01/14/2016	5.653	10	1200	10	5.5		1.043 g
B347L5	1601118-3	1/7/2016	1/14/2016	01/14/2016	6.66	10	4300	10	5.4		1.066 g
B347L6	1601118-4	1/7/2016	1/14/2016	01/14/2016	6.597	10	4400	9.9	5.3		1.085 g
B347M1	1601118-5	1/7/2016	1/14/2016	01/14/2016	7.374	10	2900	10	5.4		1.078 g
B347K5	1601118-6	1/7/2016	1/14/2016	01/14/2016	6.021	10	1600	10	5.5		1.047 g
B347K0	1601118-7	1/7/2016	1/14/2016	01/14/2016	0.02	10	94	9.7	5.3	*	1.028 g
B347R3	1601118-8	1/11/2016	1/14/2016	01/14/2016	7.695	10	31000	10	5.6		1.04 g
B347R8	1601118-9	1/11/2016	1/14/2016	01/14/2016	10.78	10	39000	11	5.9		1.025 g
B347T8	1601118-10	1/11/2016	1/14/2016	01/14/2016	7.792	10	19000	10	5.6		1.045 g
B347P7	1601118-11	1/11/2016	1/14/2016	01/14/2016	0.02	10	41	9.7	5.3		1.031 g
B347P1	1601118-12	1/11/2016	1/14/2016	01/14/2016	7.322	10	71000	10	5.4		1.083 g
B347P6	1601118-13	1/11/2016	1/14/2016	01/15/2016	8.625	100	100000	100	56	D	1.055 g
B347R2	1601118-14	1/11/2016	1/14/2016	01/14/2016	8.010	10	32000	10	5.6		1.05 g

Comments:

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

Data Package ID: *im1601118-1*

ICP Metals

Method SW6010B
Method Blank

Lab Name: ALS Environmental -- FC
Work Order Number: 1601118
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: 300-FF-5 Post ROD Field Investigation - Soils F15-014

Lab ID: IP160307-1MB

Sample Matrix: SOIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 07-Mar-16
Date Analyzed: 07-Mar-16

Prep Batch: IP160307-1
QCBatchID: IP160307-1-1
Run ID: IT160307-1A2
Cleanup: NONE
Basis: N/A
File Name: 160307A.

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
7440-70-2	CALCIUM	1	4400	100000	4400	U	
7723-14-0	PHOSPHORUS	1	1800	20000	1400	B	

Data Package ID: *it1601118-1*

ICP Metals

Method SW6010B

Laboratory Control Sample

Lab Name: ALS Environmental -- FC
Work Order Number: 1601118
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: 300-FF-5 Post ROD Field Investigation - Soils F15-014

Lab ID: IP160307-1LCS

Sample Matrix: SOIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 03/07/2016
Date Analyzed: 03/07/2016
Prep Method: SW3050B

Prep Batch: IP160307-1
QCBatchID: IP160307-1-1
Run ID: IT160307-1A2
Cleanup: NONE
Basis: N/A
File Name: 160307A.

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
7440-70-2	CALCIUM	4E+06	3910000	100000		98	80 - 120%
7723-14-0	PHOSPHORUS	1E+06	991000	20000		99	80 - 120%

Data Package ID: *it1601118-1*

ICP Metals

Method SW6010B

Matrix Spike And Matrix Spike Duplicate

Lab Name: ALS Environmental -- FC
Work Order Number: 1601118
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: 300-FF-5 Post ROD Field Investigation - Soils F15-014

Field ID: B347J9
LabID: 1601118-2MS

Sample Matrix: SOIL
% Moisture: 5.7
Date Collected: 07-Jan-16
Date Extracted: 07-Mar-16
Date Analyzed: 07-Mar-16
Prep Method: SW3050 Rev B

Prep Batch: IP160307-1
QCBatchID: IP160307-1-1
Run ID: IT160307-1A2
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1.029 g
Final Volume: 100 ml
Result Units: UG/KG
File Name: 160307A.

CASNO	Target Analyte	Sample Result	Samp Qual	MS Result	MS Qual	Reporting Limit	Spike Added	MS % Rec.	Control Limits
7440-70-2	CALCIUM	5800000		9770000		103000	4120000	97	80 - 120%
7723-14-0	PHOSPHORUS	1400000		2280000		20600	1030000	89	80 - 120%

Field ID: B347J9
LabID: 1601118-2MSD

Sample Matrix: SOIL
% Moisture: 5.7
Date Collected: 07-Jan-16
Date Extracted: 07-Mar-16
Date Analyzed: 07-Mar-16
Prep Method: SW3050 Rev B

Prep Batch: IP160307-1
QCBatchID: IP160307-1-1
Run ID: IT160307-1A2
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1.027 g
Final Volume: 100 ml
Result Units: UG/KG
File Name: 160307A.

CASNO	Target Analyte	MSD Result	MSD Qual	Spike Added	MSD % Rec.	Reporting Limit	RPD Limit	RPD
7440-70-2	CALCIUM	9720000		4130000	96	103000	20	0
7723-14-0	PHOSPHORUS	2230000		1030000	85	20600	20	2

Data Package ID: *it1601118-1*

ICPMS Metals

Method SW6020A
Method Blank

Lab Name: ALS Environmental -- FC
Work Order Number: 1601118
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: 300-FF-5 Post ROD Field Investigation - Soils F15-014

Lab ID: IP160114-1MB

Sample Matrix: SOIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 14-Jan-16
Date Analyzed: 14-Jan-16

Prep Batch: IP160114-1
QCBatchID: IP160114-1-2
Run ID: IM160114-13A5
Cleanup: NONE
Basis: N/A
File Name: 091SMPL_

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
7440-61-1	URANIUM	10	5.4	10	5.4	U	

Data Package ID: *im1601118-1*

ICPMS Metals

Method SW6020A

Laboratory Control Sample

Lab Name: ALS Environmental -- FC
Work Order Number: 1601118
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: 300-FF-5 Post ROD Field Investigation - Soils F15-014

Lab ID: IP160114-1LCS

Sample Matrix: SOIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 01/14/2016
Date Analyzed: 01/14/2016
Prep Method: SW3050B

Prep Batch: IP160114-1
QCBatchID: IP160114-1-2
Run ID: IM160114-13A5
Cleanup: NONE
Basis: N/A
File Name: 093SMPL_

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
7440-61-1	URANIUM	1000	928	10		93	80 - 120%

Data Package ID: *im1601118-1*

ICPMS Metals

Method SW6020A
Matrix Spike And Matrix Spike Duplicate

Lab Name: ALS Environmental -- FC
Work Order Number: 1601118
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: 300-FF-5 Post ROD Field Investigation - Soils F15-014

Field ID: B347K0
LabID: 1601118-7MS

Sample Matrix: SOIL
% Moisture: 0.0
Date Collected: 07-Jan-16
Date Extracted: 14-Jan-16
Date Analyzed: 14-Jan-16
Prep Method: SW3050 Rev B

Prep Batch: IP160114-1
QCBatchID: IP160114-1-2
Run ID: IM160114-13A5
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1.024 g
Final Volume: 100 ml
Result Units: UG/KG
File Name: 107SMPL_

CASNO	Target Analyte	Sample Result	Samp Qual	MS Result	MS Qual	Reporting Limit	Spike Added	MS % Rec.	Control Limits
7440-61-1	URANIUM	94		1160		9.77	977	109	75 - 125%

Field ID: B347K0
LabID: 1601118-7MSD

Sample Matrix: SOIL
% Moisture: 0.0
Date Collected: 07-Jan-16
Date Extracted: 14-Jan-16
Date Analyzed: 14-Jan-16
Prep Method: SW3050 Rev B

Prep Batch: IP160114-1
QCBatchID: IP160114-1-2
Run ID: IM160114-13A5
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1.027 g
Final Volume: 100 ml
Result Units: UG/KG
File Name: 108SMPL_

CASNO	Target Analyte	MSD Result	MSD Qual	Spike Added	MSD % Rec.	Reporting Limit	RPD Limit	RPD
7440-61-1	URANIUM	1260		974	119	9.74	20	8

Data Package ID: *im1601118-1*

Inorganics

Case Narrative

CH2M HILL Plateau Remediation Company

300-FF-5 Post ROD Field Investigation - Soils -- F15-014

Work Order Number: 1601118

1. This report consists of 14 soil samples.

2. The samples were received intact ranging from 6.0° Celsius to ambient temperature by ALS on 01/13/2016.

3. The samples were prepared for analysis based on Environmental Monitoring Systems Laboratory (EMSL) Rev 2.1 procedures.

4. The samples were analyzed following EMSL procedures for the current revision of the following SOP and method:

Analyte	Method	SOP #
Chloride	300.0 Revision 2.1	1113
Fluoride	300.0 Revision 2.1	1113
Nitrate as N	300.0 Revision 2.1	1113
Nitrite as N	300.0 Revision 2.1	1113
Orthophosphate as P	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 on 03/04/2016 and analyzed within 48 hours.

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

7. General quality control procedures.

   - A preparation (method) blank, laboratory control sample (LCS) and laboratory control sample duplicate were prepared and analyzed with the samples in this preparation batch.

- The method blank associated with this batch was below the reporting limit for the requested analytes. Orthophosphate had results above the MDL. Samples are flagged accordingly.

- All laboratory control sample criteria were met with the exception of orthophosphate as P. The calibration verifications were within acceptance criteria, so no further action was taken.

- 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 1601118-14 was designated as the quality control sample for this 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 this batch. All guidance criteria for precision and accuracy were met with the following exceptions:

Analyte	Sample ID
Fluoride	1601118-14MS & MSD
Orthophosphate as P	1601118-14MS & MSD

   The native sample results are flagged for fluoride and orthophosphate as P.

9. It was necessary to dilute samples 1601118-4 and -9 in order to bring the orthophosphate as P 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 — 3/9/16
Megan Johnstone — Date
Inorganics Primary Data Reviewer

Julie Ellzey — 3/9/16
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 “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 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.

Ion Chromatography

Method EPA300.0 Revision 2.1

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1601118
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: 300-FF-5 Post ROD Field Investigation - Soils F15-014

Field ID: B347L0
Lab ID: 1601118-1

Sample Matrix: SOIL
% Moisture: 7.9
Date Collected: 07-Jan-16
Date Extracted: 04-Mar-16
Date Analyzed: 04-Mar-16
Prep Method: METHOD

Prep Batch: IC160304-2
QCBatchID: IC160304-2-1
Run ID: IC160304-1A3
Cleanup: NONE
Basis: Dry Weight
File Name: 60304_042.dxd

Analyst: Steven D. White
Sample Aliquot: 4.58 g
Final Volume: 40 ml
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
16984-48-8	FLUORIDE AnalysisTime: 16:44	1	4.6	0.95	0.28		
16887-00-6	CHLORIDE AnalysisTime: 17:08	1	6.4	1.9	0.57		
14797-65-0	NITRITE AS N AnalysisTime: 16:44	1	0.28	0.95	0.28	U	
14797-55-8	NITRATE AS N AnalysisTime: 16:44	1	1.7	1.9	0.57	B	
14265-44-2	ORTHOPHOSPHATE AS P AnalysisTime:	1	2.3	4.7	0.57	BC	

Data Package ID: *ic1601118-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Sample Results

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1601118
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: 300-FF-5 Post ROD Field Investigation - Soils F15-014

Field ID: B347J9
Lab ID: 1601118-2

Sample Matrix: SOIL
% Moisture: 5.7
Date Collected: 07-Jan-16
Date Extracted: 04-Mar-16
Date Analyzed: 04-Mar-16
Prep Method: METHOD

Prep Batch: IC160304-2
QCBatchID: IC160304-2-1
Run ID: IC160304-1A3
Cleanup: NONE
Basis: Dry Weight
File Name: 60304_043.dxd

Analyst: Steven D. White
Sample Aliquot: 4.55 g
Final Volume: 40 ml
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
16984-48-8	FLUORIDE AnalysisTime: 16:59	1	1.2	0.93	0.28		
16887-00-6	CHLORIDE AnalysisTime: 17:23	1	4.5	1.9	0.56		
14797-65-0	NITRITE AS N AnalysisTime: 16:59	1	0.28	0.93	0.28	U	
14797-55-8	NITRATE AS N AnalysisTime: 16:59	1	0.56	1.9	0.56	U	
14265-44-2	ORTHOPHOSPHATE AS P AnalysisTime:	1	6.6	4.7	0.56	C	

Data Package ID: *ic1601118-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1601118
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: 300-FF-5 Post ROD Field Investigation - Soils F15-014

Field ID: B347L5
Lab ID: 1601118-3

Sample Matrix: SOIL
% Moisture: 6.7
Date Collected: 07-Jan-16
Date Extracted: 04-Mar-16
Date Analyzed: 04-Mar-16
Prep Method: METHOD

Prep Batch: IC160304-2
QCBatchID: IC160304-2-1
Run ID: IC160304-1A3
Cleanup: NONE
Basis: Dry Weight
File Name: 60304_044.dxd

Analyst: Steven D. White
Sample Aliquot: 4.13 g
Final Volume: 40 ml
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
16984-48-8	FLUORIDE AnalysisTime: 17:14	1	2.1	1	0.31		
16887-00-6	CHLORIDE AnalysisTime: 17:38	1	4.4	2.1	0.62		
14797-65-0	NITRITE AS N AnalysisTime: 17:14	1	0.31	1	0.31	U	
14797-55-8	NITRATE AS N AnalysisTime: 17:14	1	0.62	2.1	0.62	U	
14265-44-2	ORTHOPHOSPHATE AS P AnalysisTime:	1	99	5.2	0.62		

Data Package ID: *ic1601118-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1601118
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: 300-FF-5 Post ROD Field Investigation - Soils F15-014

Field ID: B347L6
Lab ID: 1601118-4

Sample Matrix: SOIL
% Moisture: 6.6
Date Collected: 07-Jan-16
Date Extracted: 04-Mar-16
Date Analyzed: 04-Mar-16
Prep Method: METHOD

Prep Batch: IC160304-2
QCBatchID: IC160304-2-1
Run ID: IC160304-1A3
Cleanup: NONE
Basis: Dry Weight
File Name: 60304_045.DXD

Analyst: Steven D. White
Sample Aliquot: 4.36 g
Final Volume: 40 ml
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
16984-48-8	FLUORIDE AnalysisTime: 17:29	1	1.4	0.98	0.29		
16887-00-6	CHLORIDE AnalysisTime: 17:53	1	3.9	2	0.59		
14797-65-0	NITRITE AS N AnalysisTime: 17:29	1	0.29	0.98	0.29	U	
14797-55-8	NITRATE AS N AnalysisTime: 17:29	1	0.59	2	0.59	U	
14265-44-2	ORTHOPHOSPHATE AS P AnalysisTime:	5	240	25	2.9	D	

Data Package ID: *ic1601118-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1601118
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: 300-FF-5 Post ROD Field Investigation - Soils F15-014

Field ID: B347M1
Lab ID: 1601118-5

Sample Matrix: SOIL
% Moisture: 7.4
Date Collected: 07-Jan-16
Date Extracted: 04-Mar-16
Date Analyzed: 04-Mar-16
Prep Method: METHOD

Prep Batch: IC160304-2
QCBatchID: IC160304-2-1
Run ID: IC160304-1A3
Cleanup: NONE
Basis: Dry Weight
File Name: 60304_046.DXD

Analyst: Steven D. White
Sample Aliquot: 4.71 g
Final Volume: 40 ml
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
16984-48-8	FLUORIDE AnalysisTime: 17:44	1	2.4	0.92	0.28		
16887-00-6	CHLORIDE AnalysisTime: 18:09	1	5.5	1.8	0.55		
14797-65-0	NITRITE AS N AnalysisTime: 17:44	1	0.28	0.92	0.28	U	
14797-55-8	NITRATE AS N AnalysisTime: 17:44	1	0.55	1.8	0.55	U	
14265-44-2	ORTHOPHOSPHATE AS P AnalysisTime:	1	130	4.6	0.55		

Data Package ID: *ic1601118-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1601118
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: 300-FF-5 Post ROD Field Investigation - Soils F15-014

Field ID: B347K5
Lab ID: 1601118-6

Sample Matrix: SOIL
% Moisture: 6.0
Date Collected: 07-Jan-16
Date Extracted: 04-Mar-16
Date Analyzed: 04-Mar-16
Prep Method: METHOD

Prep Batch: IC160304-2
QCBatchID: IC160304-2-1
Run ID: IC160304-1A3
Cleanup: NONE
Basis: Dry Weight
File Name: 60304_047.DXD

Analyst: Steven D. White
Sample Aliquot: 4.41 g
Final Volume: 40 ml
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
16984-48-8	FLUORIDE AnalysisTime: 18:00	1	1.4	0.97	0.29		
16887-00-6	CHLORIDE AnalysisTime: 19:39	1	5.7	1.9	0.58		
14797-65-0	NITRITE AS N AnalysisTime: 18:00	1	0.29	0.97	0.29	U	
14797-55-8	NITRATE AS N AnalysisTime: 18:00	1	0.58	1.9	0.58	U	
14265-44-2	ORTHOPHOSPHATE AS P AnalysisTime:	1	6.7	4.8	0.58	C	

Data Package ID: *ic1601118-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Sample Results

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1601118
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: 300-FF-5 Post ROD Field Investigation - Soils F15-014

Field ID: B347K0
Lab ID: 1601118-7

Sample Matrix: SOIL
% Moisture: 0.0
Date Collected: 07-Jan-16
Date Extracted: 04-Mar-16
Date Analyzed: 04-Mar-16
Prep Method: METHOD

Prep Batch: IC160304-2
QCBatchID: IC160304-2-1
Run ID: IC160304-1A3
Cleanup: NONE
Basis: Dry Weight
File Name: 60304_050.DXD

Analyst: Steven D. White
Sample Aliquot: 4.84 g
Final Volume: 40 ml
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
16984-48-8	FLUORIDE AnalysisTime: 18:45	1	0.25	0.83	0.25	U	
16887-00-6	CHLORIDE AnalysisTime: 19:54	1	1.6	1.7	0.5	B	
14797-65-0	NITRITE AS N AnalysisTime: 18:45	1	0.25	0.83	0.25	U	
14797-55-8	NITRATE AS N AnalysisTime: 18:45	1	0.59	1.7	0.5	B	
14265-44-2	ORTHOPHOSPHATE AS P AnalysisTime:	1	1.1	4.1	0.5	BC	

Data Package ID: *ic1601118-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1601118
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: 300-FF-5 Post ROD Field Investigation - Soils F15-014

Field ID: B347R3
Lab ID: 1601118-8

Sample Matrix: SOIL
% Moisture: 7.7
Date Collected: 11-Jan-16
Date Extracted: 04-Mar-16
Date Analyzed: 04-Mar-16
Prep Method: METHOD

Prep Batch: IC160304-2
QCBatchID: IC160304-2-1
Run ID: IC160304-1A3
Cleanup: NONE
Basis: Dry Weight
File Name: 60304_051.DXD

Analyst: Steven D. White
Sample Aliquot: 4.46 g
Final Volume: 40 ml
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
16984-48-8	FLUORIDE AnalysisTime: 19:00	1	11	0.97	0.29		
16887-00-6	CHLORIDE AnalysisTime: 20:09	1	5.2	1.9	0.58		
14797-65-0	NITRITE AS N AnalysisTime: 19:00	1	0.29	0.97	0.29	U	
14797-55-8	NITRATE AS N AnalysisTime: 19:00	1	0.72	1.9	0.58	B	
14265-44-2	ORTHOPHOSPHATE AS P AnalysisTime:	1	3.2	4.9	0.58	BC	

Data Package ID: *ic1601118-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Sample Results

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1601118
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: 300-FF-5 Post ROD Field Investigation - Soils F15-014

Field ID: B347R8
Lab ID: 1601118-9

Sample Matrix: SOIL
% Moisture: 10.8
Date Collected: 11-Jan-16
Date Extracted: 04-Mar-16
Date Analyzed: 04-Mar-16
Prep Method: METHOD

Prep Batch: IC160304-2
QCBatchID: IC160304-2-1
Run ID: IC160304-1A3
Cleanup: NONE
Basis: Dry Weight
File Name: 60304_052.DXD

Analyst: Steven D. White
Sample Aliquot: 4.07 g
Final Volume: 40 ml
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
16984-48-8	FLUORIDE AnalysisTime: 19:15	1	34	1.1	0.33		
16887-00-6	CHLORIDE AnalysisTime: 20:24	1	3.9	2.2	0.66		
14797-65-0	NITRITE AS N AnalysisTime: 19:15	1	0.33	1.1	0.33	U	
14797-55-8	NITRATE AS N AnalysisTime: 19:15	1	1.1	2.2	0.66	B	
14265-44-2	ORTHOPHOSPHATE AS P AnalysisTime:	5	400	28	3.3	D	

Data Package ID: *ic1601118-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1601118
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: 300-FF-5 Post ROD Field Investigation - Soils F15-014

Field ID: B347T8
Lab ID: 1601118-10

Sample Matrix: SOIL
% Moisture: 7.8
Date Collected: 11-Jan-16
Date Extracted: 04-Mar-16
Date Analyzed: 04-Mar-16
Prep Method: METHOD

Prep Batch: IC160304-2
QCBatchID: IC160304-2-1
Run ID: IC160304-1A3
Cleanup: NONE
Basis: Dry Weight
File Name: 60304_053.DXD

Analyst: Steven D. White
Sample Aliquot: 4.42 g
Final Volume: 40 ml
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
16984-48-8	FLUORIDE AnalysisTime: 19:30	1	8.5	0.98	0.29		
16887-00-6	CHLORIDE AnalysisTime: 20:39	1	2.7	2	0.59		
14797-65-0	NITRITE AS N AnalysisTime: 19:30	1	0.29	0.98	0.29	U	
14797-55-8	NITRATE AS N AnalysisTime: 19:30	1	0.94	2	0.59	B	
14265-44-2	ORTHOPHOSPHATE AS P AnalysisTime:	1	72	4.9	0.59		

Data Package ID: *ic1601118-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1601118
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: 300-FF-5 Post ROD Field Investigation - Soils F15-014

Field ID: B347P7
Lab ID: 1601118-11

Sample Matrix: SOIL
% Moisture: 0.0
Date Collected: 11-Jan-16
Date Extracted: 04-Mar-16
Date Analyzed: 04-Mar-16
Prep Method: METHOD

Prep Batch: IC160304-2
QCBatchID: IC160304-2-1
Run ID: IC160304-1A3
Cleanup: NONE
Basis: Dry Weight
File Name: 60304_054.DXD

Analyst: Steven D. White
Sample Aliquot: 4.08 g
Final Volume: 40 ml
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
16984-48-8	FLUORIDE AnalysisTime: 19:45	1	0.29	0.98	0.29	U	
16887-00-6	CHLORIDE AnalysisTime: 20:55	1	1.5	2	0.59	B	
14797-65-0	NITRITE AS N AnalysisTime: 19:45	1	0.29	0.98	0.29	U	
14797-55-8	NITRATE AS N AnalysisTime: 19:45	1	0.67	2	0.59	B	
14265-44-2	ORTHOPHOSPHATE AS P AnalysisTime:	1	4	4.9	0.59	BC	

Data Package ID: *ic1601118-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1601118
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: 300-FF-5 Post ROD Field Investigation - Soils F15-014

Field ID: B347P1
Lab ID: 1601118-12

Sample Matrix: SOIL
% Moisture: 7.3
Date Collected: 11-Jan-16
Date Extracted: 04-Mar-16
Date Analyzed: 04-Mar-16
Prep Method: METHOD

Prep Batch: IC160304-2
QCBatchID: IC160304-2-1
Run ID: IC160304-1A3
Cleanup: NONE
Basis: Dry Weight
File Name: 60304_055.DXD

Analyst: Steven D. White
Sample Aliquot: 4.56 g
Final Volume: 40 ml
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
16984-48-8	FLUORIDE AnalysisTime: 20:00	1	3.4	0.95	0.28		
16887-00-6	CHLORIDE AnalysisTime: 21:10	1	7.3	1.9	0.57		
14797-65-0	NITRITE AS N AnalysisTime: 20:00	1	0.28	0.95	0.28	U	
14797-55-8	NITRATE AS N AnalysisTime: 20:00	1	0.76	1.9	0.57	B	
14265-44-2	ORTHOPHOSPHATE AS P AnalysisTime:	1	2.8	4.7	0.57	BC	

Data Package ID: *ic1601118-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1601118
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: 300-FF-5 Post ROD Field Investigation - Soils F15-014

Field ID: B347P6
Lab ID: 1601118-13

Sample Matrix: SOIL
% Moisture: 8.6
Date Collected: 11-Jan-16
Date Extracted: 04-Mar-16
Date Analyzed: 04-Mar-16
Prep Method: METHOD

Prep Batch: IC160304-2
QCBatchID: IC160304-2-1
Run ID: IC160304-1A3
Cleanup: NONE
Basis: Dry Weight
File Name: 60304_056.DXD

Analyst: Steven D. White
Sample Aliquot: 4.9 g
Final Volume: 40 ml
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
16984-48-8	FLUORIDE AnalysisTime: 20:16	1	19	0.89	0.27		
16887-00-6	CHLORIDE AnalysisTime: 22:10	1	4	1.8	0.54		
14797-65-0	NITRITE AS N AnalysisTime: 20:16	1	0.27	0.89	0.27	U	
14797-55-8	NITRATE AS N AnalysisTime: 20:16	1	0.74	1.8	0.54	B	
14265-44-2	ORTHOPHOSPHATE AS P AnalysisTime:	1	7.3	4.5	0.54	C	

Data Package ID: *ic1601118-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1601118
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: 300-FF-5 Post ROD Field Investigation - Soils F15-014

Field ID: B347R2
Lab ID: 1601118-14

Sample Matrix: SOIL
% Moisture: 8.0
Date Collected: 11-Jan-16
Date Extracted: 04-Mar-16
Date Analyzed: 04-Mar-16
Prep Method: METHOD

Prep Batch: IC160304-2
QCBatchID: IC160304-2-1
Run ID: IC160304-1A3
Cleanup: NONE
Basis: Dry Weight
File Name: 60304_057.DXD

Analyst: Steven D. White
Sample Aliquot: 4.01 g
Final Volume: 40 ml
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
16984-48-8	FLUORIDE AnalysisTime: 20:31	1	15	1.1	0.33		N
16887-00-6	CHLORIDE AnalysisTime: 22:25	1	6	2.2	0.65		
14797-65-0	NITRITE AS N AnalysisTime: 20:31	1	0.33	1.1	0.33	U	
14797-55-8	NITRATE AS N AnalysisTime: 20:31	1	0.84	2.2	0.65	B	
14265-44-2	ORTHOPHOSPHATE AS P AnalysisTime:	1	4.6	5.4	0.65	BC	N

Data Package ID: *ic1601118-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Method Blank

Lab Name: ALS Environmental -- FC
Work Order Number: 1601118
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: 300-FF-5 Post ROD Field Investigation - Soils F15-014

Lab ID: IC160304-2MB

Sample Matrix: SOIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 04-Mar-16
Date Analyzed: 04-Mar-16

Prep Batch: IC160304-2
QCBatchID: IC160304-2-1
Run ID: IC160304-1A3
Cleanup: NONE
Basis: N/A
File Name: 60304_038.dxd

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

CASNO	Target Analyte	DF	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
16984-48-8	FLUORIDE	1	0.3	1	0.3	U	
14797-65-0	NITRITE AS N	1	0.3	1	0.3	U	
14797-55-8	NITRATE AS N	1	0.6	2	0.6	U	
14265-44-2	ORTHOPHOSPHATE AS P	1	4.4	5	0.6	B	

Data Package ID: *ic1601118-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Method Blank

Lab Name: **ALS Environmental -- FC**
Work Order Number: 1601118
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: 300-FF-5 Post ROD Field Investigation - Soils F15-014

Lab ID: IC160304-2MB

Sample Matrix: SOIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 04-Mar-16
Date Analyzed: 07-Mar-16

Prep Batch: IC160304-2
QCBatchID: IC160304-2-1
Run ID: IC160307-1A2
Cleanup: NONE
Basis: N/A
File Name: 60307_038.dxd

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

CASNO	Target Analyte	DF	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
16887-00-6	CHLORIDE	1	0.6	2	0.6	U	

Data Package ID: *ic1601118-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Environmental -- FC
Work Order Number: 1601118
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: 300-FF-5 Post ROD Field Investigation - Soils F15-014

Lab ID: IC160304-2LCS

Sample Matrix: SOIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 03/04/2016
Date Analyzed: 03/04/2016
Prep Method: METHOD

Prep Batch: IC160304-2
QCBatchID: IC160304-2-1
Run ID: IC160304-1A3
Cleanup: NONE
Basis: N/A
File Name: 60304_039.dxd

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

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
16984-48-8	FLUORIDE	20	18.6	1		93	85 - 115%
14797-65-0	NITRITE AS N	20	19.6	1		98	85 - 115%
14797-55-8	NITRATE AS N	50	48.3	2		97	85 - 115%
14265-44-2	ORTHOPHOSPHATE AS P	20	31.6	5	N	158	85 - 115%

Lab ID: IC160304-2LCSD

Sample Matrix: SOIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 03/04/2016
Date Analyzed: 03/04/2016
Prep Method: METHOD

Prep Batch: IC160304-2
QCBatchID: IC160304-2-1
Run ID: IC160304-1A3
Cleanup: NONE
Basis: N/A
File Name: 60304_040.dxd

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

CASNO	Target Analyte	Spike Added	LCSD Result	Reporting Limit	Result Qualifier	LCSD % Rec.	RPD Limit	RPD
16984-48-8	FLUORIDE	20	19	1		95	30	2
14797-65-0	NITRITE AS N	20	19.7	1		99	30	1
14797-55-8	NITRATE AS N	50	48.5	2		97	30	0
14265-44-2	ORTHOPHOSPHATE AS P	20	33.5	5	N	168	30	6

Data Package ID: *ic1601118-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Environmental -- FC
Work Order Number: 1601118
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: 300-FF-5 Post ROD Field Investigation - Soils F15-014

Lab ID: IC160304-2LCS

Sample Matrix: SOIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 03/04/2016
Date Analyzed: 03/07/2016
Prep Method: METHOD

Prep Batch: IC160304-2
QCBatchID: IC160304-2-1
Run ID: IC160307-1A2
Cleanup: NONE
Basis: N/A
File Name: 60307_039.dxd

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

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
16887-00-6	CHLORIDE	50	50.8	2		102	85 - 115%

Lab ID: IC160304-2LCSD

Sample Matrix: SOIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 03/04/2016
Date Analyzed: 03/07/2016
Prep Method: METHOD

Prep Batch: IC160304-2
QCBatchID: IC160304-2-1
Run ID: IC160307-1A2
Cleanup: NONE
Basis: N/A
File Name: 60307_040.dxd

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

CASNO	Target Analyte	Spike Added	LCSD Result	Reporting Limit	Result Qualifier	LCSD % Rec.	RPD Limit	RPD
16887-00-6	CHLORIDE	50	50.6	2		101	30	0

Data Package ID: *ic1601118-1*

Ion Chromatography

Method EPA300.0 Revision 2.1
Matrix Spike And Matrix Spike Duplicate

Lab Name: ALS Environmental -- FC
Work Order Number: 1601118
Client Name: CH2M HILL Plateau Remediation Company
ClientProject ID: 300-FF-5 Post ROD Field Investigation - Soils F15-014

Field ID: B347R2
LabID: 1601118-14MS

Sample Matrix: SOIL
% Moisture: 8.0
Date Collected: 11-Jan-16
Date Extracted: 04-Mar-16
Date Analyzed: 04-Mar-16
Prep Method: METHOD

Prep Batch: IC160304-2
QCBatchID: IC160304-2-1
Run ID: IC160304-1A3
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 4.33 g
Final Volume: 40 ml
Result Units: MG/KG
File Name: 60304_058.DXD

CASNO	Target Analyte	Sample Result	Samp Qual	MS Result	MS Qual	Reporting Limit	Spike Added	MS % Rec.	Control Limits
16984-48-8	FLUORIDE	15		27.9	N	1	20.1	64	85 - 115%
16887-00-6	CHLORIDE	6		57.9		2.01	50.2	103	85 - 115%
14797-65-0	NITRITE AS N	0.301	U	19.8		1	20.1	98	85 - 115%
14797-55-8	NITRATE AS N	0.84	B	49.2		2.01	50.2	96	85 - 115%
14265-44-2	ORTHOPHOSPHATE AS P	4.6	BC	19.7	N	5.02	20.1	75	85 - 115%

Field ID: B347R2
LabID: 1601118-14MSD

Sample Matrix: SOIL
% Moisture: 8.0
Date Collected: 11-Jan-16
Date Extracted: 04-Mar-16
Date Analyzed: 04-Mar-16
Prep Method: METHOD

Prep Batch: IC160304-2
QCBatchID: IC160304-2-1
Run ID: IC160304-1A3
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 4.06 g
Final Volume: 40 ml
Result Units: MG/KG
File Name: 60304_059.DXD

CASNO	Target Analyte	MSD Result	MSD Qual	Spike Added	MSD % Rec.	Reporting Limit	RPD Limit	RPD
16984-48-8	FLUORIDE	32.1	N	21.4	79	1.07	30	14
16887-00-6	CHLORIDE	61		53.6	103	2.14	30	5
14797-65-0	NITRITE AS N	20.8		21.4	97	1.07	30	5
14797-55-8	NITRATE AS N	51.7		53.5	95	2.14	30	5
14265-44-2	ORTHOPHOSPHATE AS P	19.7	N	21.4	71	5.36	30	0

Data Package ID: *ic1601118-1*