# December 19, 2018

	December 19, 2018	Rev U
SAMPLE ISSUE R	SIR Number:SIR19-0311Rev. Number:0Date Initiated:12/17/2018	
SAMPLE EVENT INFORM	ATION	
SAF NUM(S):	X19-002	
LABORATORY:	TADN	
SAMPLING INFORMATIO	N	
NUMBER OF SAMPLES:	1	
SAMPLE NUMBERS:	B3L6C2	
SAMPLE MATRIX:	WATER	
SDG NUM(S):	DN118319-1	
ISSUE BACKGROUND		
CLASS:	Sample Management Issues	
ТҮРЕ:	Turnaround Time and Due Date Modificat	ion
DESCRIPTION:	The TAT (Priority) on COC X19-002-069 be changed to 15 days to meet project repo	incorrectly indicates 30 days. The TAT will orting deadlines.
RESOLUTION		
PROPOSED RESOLUTION:	Document and close.	
FINAL RESOLUTION:	Document and close.	
SUBMITTED BY:		
HEY, BE	12/17	7/2018
ACCEPTED BY:		
TURNER, SHELBY	12/17	//2018

# December 19, 2018

	December 19, 2018	Rev U
SAMPLE ISSUE R	SIR Number:SIR19-0328Rev. Number:0Date Initiated:12/19/2018	
SAMPLE EVENT INFORM	ATION	
SAF NUM(S):	X19-002	
LABORATORY:	TADN	
SAMPLING INFORMATIO	<u>DN</u>	
NUMBER OF SAMPLES:	1	
SAMPLE NUMBERS:	B3L6C2	
SAMPLE MATRIX:	WATER	
SDG NUM(S):	DN118319-1	
ISSUE BACKGROUND		
CLASS:	General Sample Management Direction	
TYPE:	Other General Sample Management Direction	n (Sample Diversion)
DESCRIPTION:	ew more samples for VOCs 8260B. Please	
	SDG DN118319-1 B3L6C2, collected 12/14/2018, SAF X19-00	)2 - 8260_VOA_GCMS: COMMON
<b>RESOLUTION</b>		
PROPOSED RESOLUTION:	<ul> <li>Divert these samples to ALS-Fort Collins:</li> <li>1. Make a photocopy of the affected COCs a <ul> <li>a. Line out the non-VOC analyses.</li> <li>b. For the samples requesting VOC analyse</li> </ul> </li> <li>COC and the container) with "A".</li> <li>2. Ship the amended COCs and containers to <ul> <li>Katie M. OBrien, Project Manager</li> <li>c/o ALS Environmental</li> <li>225 Commerce Drive</li> <li>Fort Collins, CO 80524</li> </ul> </li> </ul>	es, append the sample number (on the
FINAL RESOLUTION:	Please see the Proposed Resolution.	
SUBMITTED BY:		
BANDY, DF	12/19/2	018
ACCEPTED BY:		
HEY, BE	12/19/2	018

## December 19, 2018 Sample Login Acknowledgement



Client Job Descriptio	n: X19-002	Report To:	CH2M Hill Platea	au Remediation Company				
Purchase Order #:	54784		Scot Fitzgerald	Scot Fitzgerald				
Work Order #:			PO BOX 1600, N					
Project Manager:	Darlene F Bandy		Richland, WA 99	0352				
Job Due Date:	12/31/2018							
Job TAT:	16 Days							
Max Deliverable Leve	I: IV	Bill To:	CH2M Hill Platea	au Remediation Company				
			Jordan Warren					
Earliest Deliverable D	Due: 12/31/2018		PO BOX 1600, N					
			Richland, WA 99	0352				
Login 280-118319	9							
Sample Receipt:	12/15/2018 9:05:00 AM	Number of Coolers:	1					
Method of Delivery:	FedEx Saturday Delivery	Cooler Temperature(s) (C	° <b>):</b> 0.6;					
Lab Sample # 0	Client Sample ID	Date Sampled M	atrix					
Method	Method Description / Work Location		Rpt Basis	Dry / Wet **				
280-118319-1 E	B3L6C2	12/14/2018 8:33:00 AM W	ater					
8260B	8260_VOA_GCMS: COMMON / In-Lab		Total	Wet				
280-118319-1 MS	B3L6C2	12/14/2018 8:33:00 AM W	ater					
200 110010 11110 1								
8260B	8260_VOA_GCMS: COMMON / In-Lab		Total	Wet				
		12/14/2018 8:33:00 AM W	Total ater	Wet				

# December 19, 2018 Login Sample Receipt Checklist

Rev 0

Client: CH2M Hill Plateau Remediation Company

#### Login Number: 118319 List Number: 1 Creator: Paul, Amanda E

Radioactivity wasn't checked or is = background as measured by a survey<br/ meter.True80 CPMThe cooler's custody seal, if present, is intact.TrueSample custody seals, if present, are intact.TrueThe cooler or samples do not appear to have been compromised or tampered with.TrueSamples were received on ice.TrueCooler Temperature is acceptable.TrueCooler Temperature is recorded.TrueCoC is present.TrueCOC is filled out in ink and legible.TrueCOC is filled out with all pertinent information.TrueIs the Field Sampler's name present on COC?TrueThere are no discrepancies between the containers received and the COC.TrueSamples are received within Holding Time (excluding tests with immediateTrue	Question	Answer	Comment
Sample custody seals, if present, are intact.TrueThe cooler or samples do not appear to have been compromised or tampered with.TrueSamples were received on ice.TrueCooler Temperature is acceptable.TrueCooler Temperature is recorded.TrueCooler Temperature is recorded.TrueCOC is present.TrueCOC is filled out in ink and legible.TrueCOC is filled out with all pertinent information.TrueIs the Field Sampler's name present on COC?TrueThere are no discrepancies between the containers received and the COC.True		True	80 CPM
The cooler or samples do not appear to have been compromised or tampered with.TrueSamples were received on ice.TrueCooler Temperature is acceptable.TrueCooler Temperature is recorded.TrueCooler Temperature is recorded.TrueCOC is present.TrueCOC is filled out in ink and legible.TrueCOC is filled out with all pertinent information.TrueIs the Field Sampler's name present on COC?TrueThere are no discrepancies between the containers received and the COC.True	The cooler's custody seal, if present, is intact.	True	
tampered with.TrueSamples were received on ice.TrueCooler Temperature is acceptable.TrueCooler Temperature is recorded.TrueCOC is present.TrueCOC is filled out in ink and legible.TrueCOC is filled out with all pertinent information.TrueIs the Field Sampler's name present on COC?TrueThere are no discrepancies between the containers received and the COC.True	Sample custody seals, if present, are intact.	True	
Cooler Temperature is acceptable.TrueCooler Temperature is recorded.TrueCOC is present.TrueCOC is filled out in ink and legible.TrueCOC is filled out with all pertinent information.TrueIs the Field Sampler's name present on COC?TrueThere are no discrepancies between the containers received and the COC.True		True	
Cooler Temperature is recorded.True0.60 CCOC is present.TrueCOC is filled out in ink and legible.TrueCOC is filled out with all pertinent information.TrueIs the Field Sampler's name present on COC?TrueThere are no discrepancies between the containers received and the COC.True	Samples were received on ice.	True	
COC is present.TrueCOC is filled out in ink and legible.TrueCOC is filled out with all pertinent information.TrueIs the Field Sampler's name present on COC?TrueThere are no discrepancies between the containers received and the COC.True	Cooler Temperature is acceptable.	True	
COC is filled out in ink and legible.TrueCOC is filled out with all pertinent information.TrueIs the Field Sampler's name present on COC?TrueThere are no discrepancies between the containers received and the COC.True	Cooler Temperature is recorded.	True	0.60 C
COC is filled out with all pertinent information.TrueIs the Field Sampler's name present on COC?TrueThere are no discrepancies between the containers received and the COC.True	COC is present.	True	
Is the Field Sampler's name present on COC? True There are no discrepancies between the containers received and the COC. True	COC is filled out in ink and legible.	True	
There are no discrepancies between the containers received and the COC. True	COC is filled out with all pertinent information.	True	
	Is the Field Sampler's name present on COC?	True	
Samples are received within Holding Time (excluding tests with immediate True	There are no discrepancies between the containers received and the COC.	True	
HTs)		True	
Sample containers have legible labels. True	Sample containers have legible labels.	True	
Containers are not broken or leaking. True	Containers are not broken or leaking.	True	
Sample collection date/times are provided. True	Sample collection date/times are provided.	True	
Appropriate sample containers are used. True	Appropriate sample containers are used.	True	
Sample bottles are completely filled. True	Sample bottles are completely filled.	True	
Sample Preservation Verified. True	Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested True MS/MSDs		True	
Containers requiring zero headspace have no headspace or bubble is True <6mm (1/4").		True	
Multiphasic samples are not present. True	Multiphasic samples are not present.	True	
Samples do not require splitting or compositing. True	Samples do not require splitting or compositing.	True	
Residual Chlorine Checked. N/A	Residual Chlorine Checked.	N/A	

List Source: TestAmerica Denver



Client Job Description: Purchase Order #: Work Order #:		X19-002 54784		Report T	Scot F	1 Hill Plateau I <sup>-</sup> itzgerald OX 1600, MS	Remediation Company H8-41
Project Mana	iger:	Darlene F Bandy			Richla	and, WA 9935	2
Job Due Date	•	12/31/2018					
Job TAT:		16 Days					
Max Delivera	ble Level:	IV		Bill To:	CH2M	1 Hill Plateau I	Remediation Company
						n Warren	
Earliest Deliverable Due:		12/31/2018				OX 1600, MS and, WA 9935	
Login 280-	-118319						
Sample Rece	eipt:	12/15/2018 9:05:00 AM	Number o	f Coolers:	1		
Method of De	elivery:	FedEx Saturday Delivery	Cooler Te	mperature(s)	<b>(C°):</b> 0.6;		
Method	Method De	scription	Rpt Basis			Units	Sample #s Applicable
8260B	8260_VOA	_GCMS: COMMON	Total	MDL	RL		1,1MS,1MSD
		1,1,1-Trichloroethane		0.16	1	ug/L	
		1,1,2-Trichloroethane		0.27	1	ug/L	
		1,1-Dichloroethane		0.22	1	ug/L	
		1,1-Dichloroethene		0.23	1	ug/L	
		1,2-Dichloroethane		0.13	1	ug/L	
		2-Butanone (MEK)		2	6	ug/L	
		4-Methyl-2-pentanone (MIBK)		0.98	5	ug/L	
		Acetone		1.9	10	ug/L	
		Benzene		0.16	1	ug/L	
		Carbon disulfide		0.45	2	ug/L	
		Carbon tetrachloride		0.19	1	ug/L	
		Chlorobenzene		0.17	1	ug/L	
		Chloroform		0.16	1	ug/L	
		Ethylbenzene		0.16	1	ug/L	
		Methylene Chloride		0.32	2	ug/L	
						ug/L	
		Tentatively Identified Compound					
		•		0.2	1	ug/L	
		Tentatively Identified Compound		0.2 0.17	1 1	ug/L ug/L	
		Tentatively Identified Compound Tetrachloroethene				-	
		Tentatively Identified Compound Tetrachloroethene Toluene		0.17	1	ug/L	

## December 19, 2018 Sample Login Acknowledgement



Client Job Descriptio	n: X19-002	Report To:	CH2M Hill Platea	au Remediation Company
Purchase Order #:	54784		Scot Fitzgerald	
Work Order #:			PO BOX 1600, N	
Project Manager:	Darlene F Bandy		Richland, WA 99	0352
Job Due Date:	1/14/2019			
Job TAT:	30 Days			
Max Deliverable Leve	el: IV	Bill To:	CH2M Hill Platea	au Remediation Company
			Jordan Warren	
Earliest Deliverable	Due: 1/14/2019		PO BOX 1600, N	
			Richland, WA 99	0352
Login 280-11831	9			
Sample Receipt:	12/15/2018 9:05:00 AM	Number of Coolers:	1	
Method of Delivery:	FedEx Saturday Delivery	Cooler Temperature(s) (C	° <b>):</b> 0.6;	
Lab Sample #	Client Sample ID	Date Sampled Ma	atrix	
Method	Method Description / Work Location		Rpt Basis	Dry / Wet **
280-118319-1	B3L6C2	12/14/2018 8:33:00 AM W	ater	
8260B	8260_VOA_GCMS: COMMON / In-Lab		Total	Wet
280-118319-1 MS	B3L6C2	12/14/2018 8:33:00 AM W	ater	
200-110010-1100				
8260B	8260_VOA_GCMS: COMMON / In-Lab		Total	Wet
		12/14/2018 8:33:00 AM W	Total ater	Wet

# December 19, 2018 Login Sample Receipt Checklist

Rev 0

Client: CH2M Hill Plateau Remediation Company

#### Login Number: 118319 List Number: 1 Creator: Paul, Amanda E

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td>80 CPM</td>	True	80 CPM
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.60 C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

List Source: TestAmerica Denver

## December 19, 2018 Sample Login Analytes / Limits



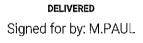
Client Job De	scription:	X19-002		Report To	: CH2M	1 Hill Plateau I	Remediation Company			
Purchase Order #: Work Order #: Project Manager:		54784			Scot F	itzgerald				
						OX 1600, MS				
		Darlene F Bandy			Richla	and, WA 9935	2			
Job Due Date	:	1/14/2019								
Job TAT:		30 Days								
Max Deliveral	ole Level:	IV		Bill To:	CH2M	1 Hill Plateau I	Remediation Company			
						n Warren				
Earliest Deliv	erable Due:	1/14/2019				OX 1600, MS and, WA 9935				
Login 280-	118319									
Sample Recei	ipt:	12/15/2018 9:05:00 AM	Number of	f Coolers:	1					
Method of De	livery:	FedEx Saturday Delivery	Cooler Ter	mperature(s) (	( <b>C</b> °): 0.6;					
Method	Method De	scription	Rpt Basis			Units	Sample #s Applicable			
8260B	8260_VOA	_GCMS: COMMON	Total	MDL	RL		1,1MS,1MSD			
		1,1,1-Trichloroethane		0.16	1	ug/L				
		1,1,2-Trichloroethane		0.27	1	ug/L				
		1,1-Dichloroethane		0.22	1	ug/L				
		1,1-Dichloroethene		0.23	1	ug/L				
		1,2-Dichloroethane		0.13	1	ug/L				
		2-Butanone (MEK)		2	6	ug/L				
		4-Methyl-2-pentanone (MIBK)		0.98	5	ug/L				
		Asstans								
		Acetone		1.9	10	ug/L				
		Benzene		1.9 0.16	10 1	ug/L ug/L				
						•				
		Benzene		0.16	1	ug/L				
		Benzene Carbon disulfide		0.16 0.45	1 2	ug/L ug/L				
		Benzene Carbon disulfide Carbon tetrachloride		0.16 0.45 0.19	1 2 1	ug/L ug/L ug/L				
		Benzene Carbon disulfide Carbon tetrachloride Chlorobenzene		0.16 0.45 0.19 0.17	1 2 1 1	ug/L ug/L ug/L ug/L				
		Benzene Carbon disulfide Carbon tetrachloride Chlorobenzene Chloroform		0.16 0.45 0.19 0.17 0.16	1 2 1 1 1	ug/L ug/L ug/L ug/L ug/L				
		Benzene Carbon disulfide Carbon tetrachloride Chlorobenzene Chloroform Ethylbenzene		0.16 0.45 0.19 0.17 0.16 0.16	1 2 1 1 1	ug/L ug/L ug/L ug/L ug/L ug/L				
		Benzene Carbon disulfide Carbon tetrachloride Chlorobenzene Chloroform Ethylbenzene Methylene Chloride		0.16 0.45 0.19 0.17 0.16 0.16	1 2 1 1 1	ug/L ug/L ug/L ug/L ug/L ug/L ug/L				
		Benzene Carbon disulfide Carbon tetrachloride Chlorobenzene Chloroform Ethylbenzene Methylene Chloride Tentatively Identified Compound		0.16 0.45 0.19 0.17 0.16 0.16 0.32	1 2 1 1 1 2	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L				
		Benzene Carbon disulfide Carbon tetrachloride Chlorobenzene Chloroform Ethylbenzene Methylene Chloride Tentatively Identified Compound Tetrachloroethene		0.16 0.45 0.19 0.17 0.16 0.16 0.32	1 2 1 1 1 1 2	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L				
		Benzene Carbon disulfide Carbon tetrachloride Chlorobenzene Chloroform Ethylbenzene Methylene Chloride Tentatively Identified Compound Tetrachloroethene Toluene		0.16 0.45 0.19 0.17 0.16 0.16 0.32 0.2 0.17	1 2 1 1 1 1 2 1	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L				

-		r							De	cember 19, 2018					F	Rev	0		
	C.O.C.# X19-002-069 Page 1 of 1		TLOOC	2	39 SP30 7145	265		Preservative	HC1 OY H2SO4 to pH <2 / Cool <=6C	·		Matrix * DS = Drum Solids	nt DL = Drum Liquids T = Tissue	Wi = Wipe L = Liquid	= Vegetation = Other			Date/Time:	A-6004-842 (REV 3)
		376-4650	Purchase Order/Charge Code: 300071	Gws-SA3	Air Bill No.:	у No.: 105		Holding Time	14 Days		19/12/18	AIS = Soil	SE = SO =		9.8		me		
	rsis requesi	Telephone No.:	Purchase Orde	Ice Chest No.:	Bill of Lading/Air Bill No.:	Offsite Property No.:	and W SAFs.			280-118319 Chain of Custody 72/118319 Chain of Custody	5 +1,0 by AP 12/15/18	DEC 1 4 2018 CAV5			- IQ/IS/IS Of		e Date/Time	Disposed By:	~
	AMPLE ANAL)	), K			Carrier		ο NS ONS	Sample Analysis		DN280-11831	5 +10	royl'Brean	Signature	FEDEX Signature	Simeture Simeture	2	Signature	Disp	
	N OF CUSTODY/SAMPLE ANALYSIS REQUEST	Contact/Requester: WATERS-HUSTED,	Hanford Site	HNF-N-506 101		Xs	ed S	Sam	VOA_GCMS : COMMON		H'0 -	Troy Bacon ACHPRC	Print First and Last Name ceived By:	Print First and Last Name	Received By: da Parl	d By:	Print First and Last Name	used in process):	FSR ID = FSR66351
	CHAIN O	Contact/Request	Sampling Origin:	Logbook No.: H	Method of Shipment:Commercial	Priority: 30 Days	ns that are not angerous Goods er 458.1.	iner	aGs* 8260_VOA_(			1 4 2018 05 Received By:	Re			Re Re	Date/Time Print	Disposal Method (e.g., Return to customer, per lab procedure, used in process):	
- 10 million -				tound Study,			t concentrations that 49 CFR/IATA Dangerou 1e per DOE Order 458.	No/Type Container	5×40-mL		(	DEC 1 4	ature	ature UCU I	Circonde uno		Signature L	eturn to customer,	
	Plateau on Company	non	-002	Groundwater Background	Shipped To (Lab): TestAmerica Denver		POSSIBLE SAMPLE HAZARDS/REMARK *Contains Radioactive Material at concentrations that a regulated for transportation per 49 CFR/IATA Dangerous Regulations but are not releasable per DOE Order 458.1	Date Time	DEC 1 4 2018					" Mode hav				sal Method (e.g., R	
	CH2MHill P Remediation	DIT: Kevin Patterson CHPRC	X19-002		l To (Lab); <sup>Test</sup>	SURV	<b>LE SAMPLE H</b> ins Radioact ted for tran tions but ar	Filter *	M N			Relinquished By: Kenin Fatterso	2	1	elinquished BVC FV	hed By:	Print First and Last Name		8/29/2018
		Collector:	SAF No.:	Project Title:	Shipped	Protocol:	POSSIB *Conta: regulat Regulat	Sample No.	B3L6C2			Relinquis	<i>Print First ano</i> Relinguished Bv	Print F	Relinquished By	Reinquished By:	Print F	FINAL SAMPLE DISPOSITION	rinted On

Page 1 of 2

773980937145

# Delivered Saturday 12/15/2018 at 8:59 am



#### GET STATUS UPDATES OBTAIN PROOF OF DELIVERY

FROM

Richland, WA US

TO ARVADA, CO US

Multiple-piece Shipment

## 2 Piece shipment

TRACKING NUMBER	SHIPPER CITY, STATE	SHIP DATE	STATUS		DELIVERY DATE	DESTINATION/RECIPIENT CITY, STATE
773980937145 (master )	PASCO, WA	12/14/2018	-	•	12/15/2018 *	ARVADA, CO
773980937980	PASCO, WA	12/14/2018	, , 	-	12/15/2018	ARVADA, CO

Shipment Facts

**TRACKING NUMBER** 773980937145

WEIGHT 72 lbs / 32 66 kgs

TOTAL PIECES

SERVICE FedEx Priority Overnight

SIGNATURE SERVICES Direct signature required

TOTAL SHIPMENT WEIGHT 167 lbs / 75 75 kgs MASTER TRACKING NUMBER 773980937145

DELIVERED TO Shipping/Receiving

**TERMS** Third Party