



Jim Baker Wrangell St. Elias National Pa P. O. Box 439 Mile 106.8 Richardson Hwy. Copper Center, AK 99573

> Work Order: 1101090

> > 1010 East Bunkhouse

Client: Wrangell St. Elias National Park

Report Date: March 16, 2010 Deanna Crump

2010.03.16 16:52:26

-08'00'

Released by:

Alaska Division Project Manager

Enclosed are the analytical results associated with the above work order. If you have any questions regarding this report, or if we can be of any other assistance, please contact your SGS Project Manager at 907-562-2343. All work is provided under SGS general terms and conditions (http://www.sgs.com/terms and conditions.htm>), unless other written agreements have been accepted by both parties.

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 (DW Chemistry & Microbiology) & UST-005 (CS) for ADEC and AK100001 for NELAP (RCRA methods: 1020A, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035B, 6010B, 6020, 7470A, 7471B, 8021B, 8081B, 8082A, 8260B, 8270D, 8270D-SIM, 9040B, 9045C, 9056A, 9060A, AK101 and AK102/103). Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the SGS QAP and, when applicable, the National Environmental Laboratory Accreditation Program and other regulatory authorities. The following descriptors or qualifiers may be found in your report:

The analyte has exceeded allowable regulatory or control limits.

Surrogate out of control limits.

В Indicates the analyte is found in a blank associated with the sample.

CCV Continuing Calibration Verification

Control Limit CL

The analyte concentration is the result of a dilution. D

DF Dilution Factor

DL Detection Limit (i.e., maximum method detection limit)

Е The analyte result is above the calibrated range. F Indicates value that is greater than or equal to the DL

GTGreater Than

ICV Initial Calibration Verification The quantitation is an estimation.

JL. The analyte was positively identified, but the quantitation is a low estimation.

LCS(D) Laboratory Control Spike (Duplicate) LOD Limit of Detection (i.e., 2xDL)

LOO Limit of Quantitation (i.e., reporting or practical quantitation limit)

LT Less Than

M A matrix effect was present.

MBMethod Blank

Matrix Spike (Duplicate) MS(D)

ND Indicates the analyte is not detected. QC parameter out of acceptance range. Q

R Rejected

RPD Relative Percent Difference

Indicates the analyte was analyzed for but not detected.

Sample summaries which include a result for "Total Solids" have already been adjusted for moisture content. Note:

All DRO/RRO analyses are integrated per SOP.



SGS Ref.# Client Name 1101090001

Project Name/# Client Sample ID Wrangell St. Elias National Park

1010 East Bunkhouse East Bunkhouse

Matrix Solid/Soil (Wet Weight)

Printed Date/Time Collected Date/Time Received Date/Time

Technical Director

03/16/2010 16:50 03/11/2010 10:00 03/15/2010 16:54 **Stephen C. Ede**

Sample Remarks:

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Metals by ICP/MS									
Cadmium	1.36 U	1.36	mg/Kg	SW6020	A		03/16/10	0 03/16/10	KDC
Lead	1060	1.36	mg/Kg	SW6020	A		03/16/10	0 03/16/10	KDC

Analysis Requested 1101090 24 hour Muimbe Routine Rush QA37 Task order number# Conditions on Receipt (Name and Da Lab I.D. reservatives: Turn Around Time 3-H2SO4 C-HNO3 NaOH A-None Container³ | Volume | Preservative° Water (Liters) 24 hour turn around, results to be faxed (907) 822-7216, invoices to be paid by credit card Cd+ 16.54 OM AND AND SILETID Media Type² Samples Received Chilled? -Charcoal Time: _____ For Lab Use Only. Time: Sample Type¹ #SIO₄ Project # Due Date: Volume (Liters) 2-Water 3-Paint 5-Wipe 3-Bulk I-Soil -Àir ¥ Time (Min.) Date: 3-1/10 (LPM) Flow Date: Sunkhouse Sample Location WRST - Kennecott NHL Las/ 10:00 (At Kennecott NHL - Ken - 259-7226, Jim - 259-7228) Time Attn. Jim Baker, 907-822-7228, FAX - 907-822-7216 Collected Wrangell-St. Elias National Park and Preserve Date 3-11 COMMENTS(Instruction, sample hazards): Location White Environmental Consultants Inc. Type¹ Media² Copper Center, Alaska 99573 K 106.8 Richardson Hwy Anchorage, AK 99501 731 | Street, Ste 201 Phone - (907) 258-8661 Sample FAX - (907) 258-8662 Client Information: Relinquished by: P.O. Box 439 <u>.</u> Received by: Agency

1101090

SGS

SAMPLE RECEIPT FORM SGS WO#:



Yes N	No	NA		bab wom.				
VL	,		Are samples RUSH, priority or w/in 72 hrs of hold time?					
<u> </u>			If yes, have you done e-mail ALERT notification?	Received Date: 3/15/10				
<u></u>			Are samples within 24 hrs. of hold time or due date?	Received Tir	me: <u>17:00</u>			
1			If yes, have you also spoken with supervisor?	Cooler ID	<u>Temperature</u>	Measured w/		
			Archiving bottles: Are lids marked w/ red "X"?	~~~		(Therm #)		
			Were samples collected with proper preservative?	none	HWD .c			
			Any problems (ID, cond'n , HT, etc)? Explain:	***************************************	°C			
				****	°C			
					°C	***************************************		
				•	e readings include thermome			
			If this is for PWS, provide PWSID:	The state of the s	hod (circle all that ap			
			Payment received: \$ by Check or Credit Card	A STATE OF THE PARTY OF THE PAR	lert Courier / Lynd			
	or other transmitters		Will courier charges apply?		dEx / USPS / DHI			
			Data package required? (Level: 1 / 2 / 3 / 4) Notes:	AkAir Gold Other:	Istreak / NAC / E	RA / PenAir		
			Is this a DoD project? (USACE, Navy, AFCEE)		nple Remarks: $(\sqrt{i}f)$			
Th	is sec	ction	must be filled out for DoD projects (USACE, Navy, AFCEE):		ited Sample Volu			
Yes No Yes N/A				Multi-Incremental Samples?				
			Is received temperature <6°C? Was pH verified upon receipt?	Lab-filtered for dissolved				
			Were containers ice-free? Notify PM immediately of any ice in samples.	Ref Lab required for				
			If some cooler temperatures are non-compliant, see		eign Soil?			
			form FS-0029 (attached) for samples/analyses affected. Was there an airbill? (If "yes," see attached.)					
11 <u> </u>			Was cooler sealed with custody seals & were they intact?	This section	must be completed if pro	blems are noted.		
			# / where:					
			Was there a COC with cooler?	Was client n	otified of problems?	Yes / No		
			Was COC sealed in plastic bag & taped inside lid of cooler?	D (CCC DA	Λ.			
			Was the COC filled out properly? Did labels correspond?	By (SGS PN	M):			
			Did the COC indicate USACE / Navy / AFCEE project?	Individual c	ontacted:			
			Samples were packed to prevent breakage with (circle one):		e / Fax / E-mail ((circle one)		
			Bubble Wrap Vermiculite Other (specify):					
<u></u>			Were all samples sealed in separate plastic bags?	Reason for d	contact:			
			Were all VOCs free of headspace and/or MeOH preserved?		**************************************			
			Were correct container / sample sizes submitted?					
-			Was the PM notified of arrival so they can send					
			Sample Receipt Acknowledgement to client?					
Cooler I	2 - 2 - 2 - 2		Cooler Temp °C Cooler ID Cooler Temp °C Cooler Temp °C	AURAN				
Cooler I	D		Cooler Temp °C Cooler ID Cooler Temp °C	Change Ord	er Required? Yes	/ No		
			Duo Dala silla					
Notes:			154 pate 3/16/10			NATION AND ADMINISTRATION OF THE PARTY OF TH		
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$\overline{\mathcal{M}}$	14	101	sis is that and Cadmium in	PULIT	<u>uu</u>	-		
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Login pı	roof	:	Self-check completed Peer-reviewer's In itial	SAT				





*Notes Other: NH[†]CI Preservative Ascorbic Acid NaOH tOS7H * Note: Containers which require (additional) chemical preservation upon receipt must be documented per SOP#106 EONH **8GS WO#** HCI None Other: Container Type Septa Coli Nalgene SAMPLE RECEIPT FORM - Bottle Tracking **HDbE** Đ ĐĄ Other: Ziplock Container Volume 7m0t **Jm09** 125mL or 40z 250mL or 80z Jm005 Π TB **Bottle Totals** σс Cadlum in Paint Matrix Container ID #

F042r02 Revised 9/8/2009

Date: 3/15/11()

Completed by: