



1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716

Acme Analytical Laboratories (Vancouver) Ltd.

www.acmelab.com

Client: Heberlein Geoconsulting
325 - 210 West 2nd St.
North Vancouver BC V7M 1C6 Canada

Submitted By: Dave Heberlein
Receiving Lab: Canada-Vancouver
Received: August 18, 2009
Report Date: October 14, 2009
Page: 1 of 4

CERTIFICATE OF ANALYSIS

VAN09003642.1

CLIENT JOB INFORMATION

Project: GBC-1

Shipment ID:

P.O. Number

Number of Samples: 61

SAMPLE DISPOSAL

STOR-PLP Store After 90 days Invoice for Storage

DISP-RJT Dispose of Reject After 90 days

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
Air Dry	61	Air Dry			VAN
SS60	61	Sieve to 60 mesh			VAN
RJSV	61	Saving all or part of Soil Reject			VAN
1F05	56	1:1:1 Aqua Regia digestion Ultratrace ICP-MS analysis	15	Completed	VAN
LOI	57	Loss on Ignition at 1000 C		Completed	VAN

ADDITIONAL COMMENTS

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: Heberlein Geoconsulting
325 - 210 West 2nd St.
North Vancouver BC V7M 1C6
Canada

CC:



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only. All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. ** asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.



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CERTIFICATE OF ANALYSIS

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Method	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15
Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P		
Unit	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%		
MDL	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.2	0.1	0.5	0.01	0.02	0.02	2	0.01	0.001		
725 ACM-LH	Soil	1.01	13.95	12.29	87.9	329	8.2	1.5	539	0.37	1.4	<0.1	<0.2	0.2	6.6	0.55	0.19	0.09	8	0.17	0.111	



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Project: GBC-1
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CERTIFICATE OF ANALYSIS

VAN09003642.1

Method	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	
Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	Cs	Ge	Hf							
Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm						
MDL	0.5	0.5	0.01	0.5	0.001	1	0.01	0.001	0.01	0.1	0.02	0.02	5	0.1	0.02	0.1	0.02	0.1	0.02	0.1	0.02	<0.1	<0.1	<0.1	<0.1	<0.02	
725 ACM-LH	Soil	2.3	6.9	0.06	160.7	0.010	2	0.38	0.003	0.08	<0.1	0.9	0.05	0.06	105	0.4	0.02	1.3	0.22	<0.1	<0.02						



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CERTIFICATE OF ANALYSIS

VAN09003642.1

Method	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	LOI
Analyte	Nb	Rb	Sn	Ta	Zr	Y	Ce	In	Re	Be	Li	Pd	Pt	LOI
Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppb	ppb	%
MDL	0.02	0.1	0.1	0.05	0.1	0.01	0.1	0.02	1	0.1	0.1	10	2	0.1
725 ACM-LH	Soil	0.12	1.8	0.2	<0.05	<0.1	0.59	4.3	<0.02	2	<0.1	1.0	<10	<2
														65.6



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QUALITY CONTROL REPORT

Method	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	LOI
Analyte	Nb	Rb	Sn	Ta	Zr	Y	Ce	In	Re	Be	Li	Pd	Pt	LOI
Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppb	ppb	%
MDL	0.02	0.1	0.1	0.05	0.1	0.01	0.1	0.02	1	0.1	0.1	10	2	0.1
Pulp Duplicates														
593 ACM-AH	Soil	0.26	4.0	0.3	<0.05	<0.1	5.63	24.2	<0.02	<1	0.4	2.4	<10	<2 47.9
REP 593 ACM-AH	QC	0.23	3.6	0.3	<0.05	<0.1	5.69	23.5	<0.02	<1	0.4	2.2	<10	<2
716 ACM-AH	Soil	0.97	9.6	0.6	<0.05	0.7	5.56	20.4	0.04	<1	0.5	10.8	<10	<2 41.1
REP 716 ACM-AH	QC	0.76	14.1	0.7	<0.05	0.7	6.08	22.5	0.03	<1	0.7	11.8	<10	<2
576 ACM-LH	Soil	0.22	4.7	0.4	<0.05	<0.1	0.80	6.6	<0.02	<1	<0.1	1.0	<10	<2 55.5
REP 576 ACM-LH	QC													55.4
596 ACM-LH	Soil	0.27	2.2	0.3	<0.05	0.4	3.20	21.7	<0.02	<1	0.2	1.6	<10	<2 45.9
REP 596 ACM-LH	QC	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.
599 ACM-LH	Soil	0.20	2.3	0.2	<0.05	<0.1	0.80	11.1	<0.02	<1	0.1	0.9	<10	<2 53.1
REP 599 ACM-LH	QC													53.3
715 ACM-LH	Soil	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	64.1
REP 715 ACM-LH	QC	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.
Reference Materials														
STD DOLOMITE-1	Standard													22.4
STD DOLOMITE-1	Standard													22.1
STD DS7	Standard	0.63	36.1	4.9	<0.05	5.9	4.96	33.4	1.55	2	1.5	28.7	64	40
STD DS7	Standard	0.72	36.3	4.7	<0.05	5.8	5.90	35.4	1.57	3	1.6	28.7	66	37
STD DS7	Standard	0.74	36.7	5.0	<0.05	6.0	6.10	36.7	1.52	3	1.7	29.1	73	37
STD DOLOMITE-1	Expected													22.34
STD DS7	Expected	0.71	35.8	4.61		5.4	5.18	36	1.57	4	1.6	29.3	58	37
BLK	Blank	<0.02	<0.1	<0.1	<0.05	<0.1	<0.01	<0.1	<0.02	<1	<0.1	<0.1	<10	<2
BLK	Blank	<0.02	<0.1	<0.1	<0.05	<0.1	<0.01	<0.1	<0.02	<1	<0.1	<0.1	<10	<2
BLK	Blank	<0.02	<0.1	<0.1	<0.05	<0.1	<0.01	<0.1	<0.02	<1	<0.1	<0.1	<10	<2