



1020 Cordova St. East Vancouver BC V6A 4A3 Canada

Acme Analytical Laboratories (Vancouver) Ltd.

www.acmelab.com

Client: Geological Survey of Canada
Room 659 - 601 Booth St.
Ottawa ON K1A 0E8 Canada

Submitted By: Alexandre Zagorevski
Receiving Lab: Canada-Vancouver
Received: March 03, 2011
Report Date: March 09, 2011
Page: 1 of 2

CERTIFICATE OF ANALYSIS

VAN11000940.1

CLIENT JOB INFORMATION

Project: Stikinia
Shipment ID:
P.O. Number: MGM063852W
Number of Samples: 8

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Table with 6 columns: Method Code, Number of Samples, Code Description, Test Wgt (g), Report Status, Lab. Contains two rows of sample preparation data.

SAMPLE DISPOSAL

RTRN-PLP Return
RTRN-RJT Return

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: Geological Survey of Canada - Invoice Receipt
615 Booth St.,
Mailbox SS0-1-A 1st Floor
Ottawa ON K1A 0E9
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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Page: 2 of 2 Part 1

CERTIFICATE OF ANALYSIS

VAN11000940.1

Method	WGHT	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B											
Analyte	Wgt	SiO2	Al2O3	Fe2O3	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO	Cr2O3	Ni	Sc	LOI	Sum	Ba	Be	Co	Cs	
Unit	kg	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	%	%	ppm	ppm	ppm	ppm	
MDL	0.01	0.01	0.01	0.04	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.002	20	1	-5.1	0.01	1	1	0.2	0.1	
MMI-10-17-13	Rock	0.45	64.81	16.37	3.45	1.48	2.06	6.08	2.64	0.38	0.17	0.06	0.002	<20	6	2.2	99.72	1326	<1	7.9	1.2
MMI-10-18-9	Rock	0.38	49.02	12.63	7.29	7.35	8.18	1.56	6.24	0.53	0.66	0.16	0.045	80	31	5.7	99.35	3234	<1	27.1	1.1
MMI-10-19-9	Rock	0.45	49.05	12.63	11.20	8.66	10.21	2.01	2.13	0.79	0.30	0.17	0.057	99	35	2.4	99.67	491	<1	42.1	0.2
MMI-10-21-6	Rock	0.22	52.90	17.33	9.24	4.60	7.66	3.39	1.68	1.16	0.35	0.17	0.006	<20	26	1.2	99.67	895	<1	22.6	0.8
MMI-10-22-7	Rock	0.39	86.76	0.79	8.36	0.50	1.74	0.02	0.10	<0.01	0.01	0.03	<0.002	<20	<1	1.7	100.03	36	<1	1.9	<0.1
MMI-10-23-14	Rock	0.23	76.76	11.81	1.03	0.21	1.87	3.91	1.64	0.16	0.03	0.04	<0.002	<20	8	2.5	99.93	494	<1	1.7	3.2
10-JLO-16-140	Rock	0.25	75.87	12.34	1.27	0.69	1.63	1.39	3.41	0.09	0.03	0.03	<0.002	<20	4	3.2	99.91	634	<1	0.6	1.4
10-JLO-18-182	Rock	0.30	43.99	13.04	9.36	2.20	10.75	1.33	7.76	0.83	0.62	0.13	0.011	<20	34	9.4	99.45	2897	1	19.8	2.6



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Page: 2 of 2 Part 2

CERTIFICATE OF ANALYSIS

VAN11000940.1

Method	Analyte	4A-4B																			
		Ga	Hf	Nb	Rb	Sn	Sr	Ta	Th	U	V	W	Zr	Y	La	Ce	Pr	Nd	Sm	Eu	Gd
Unit		ppm																			
MDL		0.5	0.1	0.1	0.1	1	0.5	0.1	0.2	0.1	8	0.5	0.1	0.1	0.1	0.1	0.02	0.3	0.05	0.02	0.05
MMI-10-17-13	Rock	16.7	2.7	3.5	35.1	<1	749.5	0.2	2.7	1.4	51	<0.5	83.5	8.8	12.0	24.4	2.94	12.5	2.47	0.75	2.09
MMI-10-18-9	Rock	12.2	1.8	10.0	103.1	<1	1011	0.7	3.9	1.4	187	<0.5	53.5	11.6	17.3	32.4	3.61	15.2	2.91	0.87	2.62
MMI-10-19-9	Rock	14.8	1.5	2.6	23.1	<1	497.0	0.2	1.1	0.6	270	<0.5	51.9	14.9	6.7	15.4	2.15	11.0	2.62	0.87	2.83
MMI-10-21-6	Rock	17.9	1.9	6.0	31.6	1	804.5	0.4	3.9	1.9	252	<0.5	59.7	18.4	14.5	32.5	4.29	18.8	4.43	1.31	4.20
MMI-10-22-7	Rock	1.8	<0.1	0.1	2.2	<1	19.4	<0.1	<0.2	0.7	20	1.2	1.6	2.0	1.1	1.9	0.25	1.3	0.26	0.10	0.33
MMI-10-23-14	Rock	12.3	3.8	3.4	28.9	5	57.8	0.2	3.9	2.0	<8	1.0	120.4	38.5	6.8	17.4	2.46	12.0	3.48	0.65	4.67
10-JLO-16-140	Rock	10.9	2.9	3.0	52.1	1	69.3	0.3	6.5	2.2	<8	0.5	73.5	25.0	16.4	34.3	3.86	15.1	3.33	0.34	3.40
10-JLO-18-182	Rock	13.3	2.0	11.5	111.7	1	1031	0.5	3.5	1.6	308	2.0	67.1	17.3	14.6	28.7	3.31	14.5	3.18	1.04	3.26



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Page: 2 of 2 Part 3

CERTIFICATE OF ANALYSIS

VAN11000940.1

Method	Analyte	4A-4B Tb	4A-4B Dy	4A-4B Ho	4A-4B Er	4A-4B Tm	4A-4B Yb	4A-4B 2A Lu	Leco 2A TOT/C	Leco TOT/S	1DX Mo	1DX Cu	1DX Pb	1DX Zn	1DX Ni	1DX As	1DX Cd	1DX Sb	1DX Bi	1DX Ag	1DX Au	
Unit		ppm	%	%	ppm	ppb																
MDL		0.01	0.05	0.02	0.03	0.01	0.05	0.01	0.02	0.02	0.1	0.1	0.1	1	0.1	0.5	0.1	0.1	0.1	0.1	0.1	0.5
MMI-10-17-13	Rock	0.30	1.48	0.28	0.82	0.13	0.83	0.13	0.26	<0.02	0.3	5.0	8.9	65	9.6	3.9	<0.1	0.3	<0.1	<0.1	<0.5	
MMI-10-18-9	Rock	0.38	1.97	0.42	1.15	0.18	1.16	0.18	1.00	<0.02	0.1	12.1	3.5	66	69.0	4.0	<0.1	0.2	<0.1	<0.1	<0.5	
MMI-10-19-9	Rock	0.48	2.75	0.55	1.58	0.24	1.40	0.22	0.08	<0.02	0.4	141.3	1.2	47	66.8	<0.5	<0.1	<0.1	<0.1	<0.1	<0.5	
MMI-10-21-6	Rock	0.65	3.62	0.70	1.88	0.27	1.62	0.24	0.06	<0.02	0.2	13.1	1.6	63	6.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.5	
MMI-10-22-7	Rock	0.06	0.32	0.06	0.17	0.02	0.18	0.03	0.42	0.03	1.3	14.3	0.7	11	3.6	7.7	<0.1	1.8	<0.1	<0.1	<0.5	
MMI-10-23-14	Rock	0.93	5.85	1.36	4.12	0.64	4.24	0.67	0.46	0.05	0.7	9.3	5.2	7	2.4	2.0	<0.1	0.4	0.1	0.2	1.1	
10-JLO-16-140	Rock	0.62	3.88	0.85	2.60	0.44	3.04	0.49	0.42	<0.02	0.1	1.1	1.4	7	1.2	2.0	<0.1	0.1	<0.1	<0.1	<0.5	
10-JLO-18-182	Rock	0.54	2.95	0.62	1.76	0.28	1.75	0.26	2.80	3.44	0.1	76.0	6.1	42	19.4	6.3	<0.1	0.7	0.1	0.3	156.4	



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Report Date: March 09, 2011

Page: 2 of 2 Part 4

CERTIFICATE OF ANALYSIS

VAN11000940.1

	Method	1DX	1DX	1DX
	Analyte	Hg	Tl	Se
	Unit	ppm	ppm	ppm
	MDL	0.01	0.1	0.5
MMI-10-17-13	Rock	0.04	<0.1	<0.5
MMI-10-18-9	Rock	<0.01	<0.1	<0.5
MMI-10-19-9	Rock	<0.01	<0.1	<0.5
MMI-10-21-6	Rock	<0.01	0.1	<0.5
MMI-10-22-7	Rock	0.01	<0.1	<0.5
MMI-10-23-14	Rock	0.02	<0.1	<0.5
10-JLO-16-140	Rock	0.01	<0.1	<0.5
10-JLO-18-182	Rock	0.57	<0.1	<0.5



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Page: 1 of 1 Part 1

QUALITY CONTROL REPORT

VAN11000940.1

Method	WGHT	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B											
Analyte	Wgt	SiO2	Al2O3	Fe2O3	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO	Cr2O3	Ni	Sc	LOI	Sum	Ba	Be	Co	Cs	
Unit	kg	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	%	%	ppm	ppm	ppm	ppm	
MDL	0.01	0.01	0.01	0.04	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.002	20	1	-5.1	0.01	1	1	0.2	0.1	
Reference Materials																					
STD CSC	Standard																				
STD DS8	Standard																				
STD OREAS45PA	Standard																				
STD OREAS45CA	Standard																				
STD OREAS76A	Standard																				
STD SO-18	Standard	58.31	13.97	7.58	3.35	6.33	3.69	2.16	0.70	0.83	0.39	0.554	40	26	1.9	99.76	491	<1	24.4	6.5	
STD SO-18	Standard	58.22	13.97	7.58	3.36	6.33	3.72	2.18	0.70	0.83	0.40	0.562	48	26	1.9	99.75	490	<1	24.7	6.6	
STD CSC Expected																					
STD OREAS76A Expected																					
STD DS8 Expected																					
STD OREAS45PA Expected																					
STD OREAS45CA Expected																					
STD SO-18 Expected		58.47	14.23	7.67	3.35	6.42	3.71	2.17	0.69	0.83	0.39	0.55	44	25			514		26.2	7.1	
BLK	Blank																				
BLK	Blank																				
BLK	Blank	<0.01	<0.01	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.002	<20	<1	0.0	<0.01	<1	<1	<0.2	<0.1	
Prep Wash																					
G1	Prep Blank	<0.01	67.01	15.68	3.51	1.15	3.59	3.53	3.60	0.40	0.19	0.10	<0.002	<20	6	1.0	99.77	911	2	4.3	4.4



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Page: 1 of 1 Part 2

QUALITY CONTROL REPORT

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Method	Analyte	4A-4B																			
Unit		Ga	Hf	Nb	Rb	Sn	Sr	Ta	Th	U	V	W	Zr	Y	La	Ce	Pr	Nd	Sm	Eu	Gd
MDL		ppm																			
Reference Materials		0.5	0.1	0.1	0.1	1	0.5	0.1	0.2	0.1	8	0.5	0.1	0.1	0.1	0.1	0.02	0.3	0.05	0.02	0.05
STD CSC	Standard																				
STD DS8	Standard																				
STD OREAS45PA	Standard																				
STD OREAS45CA	Standard																				
STD OREAS76A	Standard																				
STD SO-18	Standard	16.4	8.9	19.0	26.8	14	391.5	7.0	9.8	15.2	193	13.7	267.4	29.7	11.4	24.9	3.10	12.4	2.67	0.82	2.72
STD SO-18	Standard	16.5	8.8	19.2	27.1	14	389.9	6.9	9.9	15.6	194	13.8	269.6	29.6	11.2	24.7	3.09	12.7	2.66	0.81	2.73
STD CSC Expected																					
STD OREAS76A Expected																					
STD DS8 Expected																					
STD OREAS45PA Expected																					
STD OREAS45CA Expected																					
STD SO-18 Expected		17.6	9.8	21.3	28.7	15	407.4	7.4	9.9	16.4	200	14.8	280	31	12.3	27.1	3.45	14	3	0.89	2.93
BLK	Blank																				
BLK	Blank																				
BLK	Blank	<0.5	<0.1	<0.1	<0.1	<1	<0.5	<0.1	<0.2	<0.1	<8	<0.5	<0.1	<0.1	<0.1	<0.1	<0.02	<0.3	<0.05	<0.02	<0.05
Prep Wash																					
G1	Prep Blank	17.1	4.0	22.2	119.3	2	714.4	1.5	8.7	3.7	50	<0.5	128.3	16.3	27.1	54.7	6.08	22.7	3.99	1.04	3.13



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Page: 1 of 1 Part 3

QUALITY CONTROL REPORT

VAN11000940.1

Method	4A-4B 2A	Leco 2A	Leco	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX								
Analyte	Tb	Dy	Ho	Er	Tm	Yb	Lu	TOT/C	TOT/S	Mo	Cu	Pb	Zn	Ni	As	Cd	Sb	Bi	Ag	Au	
Unit	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb							
MDL	0.01	0.05	0.02	0.03	0.01	0.05	0.01	0.02	0.02	0.1	0.1	0.1	1	0.1	0.5	0.1	0.1	0.1	0.1	0.1	
Reference Materials																					
STD CSC Standard								3.10	4.08												
STD DS8 Standard										14.1	115.3	143.8	330	38.4	28.9	2.7	5.1	7.0	1.8	109.4	
STD OREAS45PA Standard										1.0	616.9	22.5	124	310.9	4.9	0.1	0.2	0.2	0.3	52.4	
STD OREAS45CA Standard										1.1	508.2	22.8	63	257.0	4.6	0.1	0.1	0.2	0.3	51.8	
STD OREAS76A Standard								0.16	18.49												
STD SO-18 Standard	0.47	2.73	0.57	1.66	0.26	1.63	0.25														
STD SO-18 Standard	0.47	2.75	0.57	1.69	0.25	1.62	0.25														
STD CSC Expected								2.94	4.25												
STD OREAS76A Expected								0.16	18												
STD DS8 Expected										13.44	110	123	312	38.1	26	2.38	4.8	6.67	1.69	107	
STD OREAS45PA Expected										0.9	600	19	119	281	4.2	0.09	0.13	0.18	0.3	43	
STD OREAS45CA Expected										0	552	20	67	250	3.8	0.09	0.38	0.18	0.26	45	
STD SO-18 Expected	0.53	3	0.62	1.84	0.27	1.79	0.27														
BLK Blank								<0.02	<0.02												
BLK Blank										<0.1	<0.1	<0.1	<1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.5	
BLK Blank	<0.01	<0.05	<0.02	<0.03	<0.01	<0.05	<0.01														
Prep Wash																					
G1 Prep Blank	0.48	2.62	0.53	1.55	0.27	1.74	0.29	0.02	<0.02	0.2	2.6	3.2	49	4.2	<0.5	<0.1	<0.1	<0.1	<0.1	<0.5	



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Page: 1 of 1 Part 4

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Method	1DX	1DX	1DX
Analyte	Hg	Tl	Se
Unit	ppm	ppm	ppm
MDL	0.01	0.1	0.5
Reference Materials			
STD CSC	Standard		
STD DS8	Standard	0.21	5.9
STD OREAS45PA	Standard	0.04	<0.1
STD OREAS45CA	Standard	0.04	<0.1
STD OREAS76A	Standard		
STD SO-18	Standard		
STD SO-18	Standard		
STD CSC Expected			
STD OREAS76A Expected			
STD DS8 Expected	0.192	5.4	5.23
STD OREAS45PA Expected	0.03	0.07	0.54
STD OREAS45CA Expected			
STD SO-18 Expected			
BLK	Blank		
BLK	Blank	<0.01	<0.1
BLK	Blank		
Prep Wash			
G1	Prep Blank	<0.01	0.3