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Acme Analytical Laboratories (Vancouver) Ltd.  
9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA  
PHONE (604) 253-3158

**Client:** **Richards, Gordon**  
6410 Holly Park Drive  
Delta BC V4K 4W6 Canada

Submitted By: Gordon Richards  
Receiving Lab: Canada-Vancouver  
Received: August 08, 2013  
Report Date: August 19, 2013  
Page: 1 of 2

## CERTIFICATE OF ANALYSIS

VAN13003080.1

### CLIENT JOB INFORMATION

Project: LAKE  
Shipment ID:  
P.O. Number  
Number of Samples: 21

### SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
PM1	21	Plant Maceration to 1mm			VAN
1VE1	21	Aqua Regia digestion ICP-MS analysis	1	Completed	VAN

### SAMPLE DISPOSAL

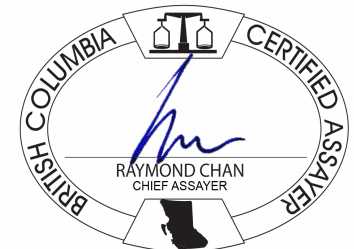
DISP-PLP Dispose of Pulp After 90 days

### 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: Richards, Gordon  
6410 Holly Park Drive  
Delta BC V4K 4W6  
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. Results apply to samples as submitted. \*\*\* 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 of 2

# CERTIFICATE OF ANALYSIS

VAN13003080.1

Method	Analyte	Unit	MDL	1VE Mo	1VE Cu	1VE Pb	1VE Zn	1VE Ag	1VE Ni	1VE Co	1VE Mn	1VE Fe	1VE As	1VE U	1VE Au	1VE Th	1VE Sr	1VE Cd	1VE Sb	1VE Bi	1VE V	1VE Ca	1VE P
				ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
B1	Vegetation			<0.01	1.63	0.22	45.0	16	0.3	0.08	260	0.012	0.2	<0.01	<0.2	<0.01	20.5	0.01	<0.02	<0.02	2	0.59	0.010
C132	Vegetation			0.02	1.93	0.25	48.0	21	0.2	0.08	215	0.013	0.1	0.01	<0.2	0.01	21.3	0.02	<0.02	<0.02	<2	0.49	0.010
C134	Vegetation			<0.01	2.27	0.20	44.5	20	0.3	0.07	398	0.011	0.1	<0.01	0.3	<0.01	13.9	0.08	<0.02	<0.02	<2	0.45	0.014
C135	Vegetation			<0.01	1.71	0.23	72.7	22	0.2	0.07	140	0.011	0.2	<0.01	<0.2	<0.01	17.4	0.03	<0.02	<0.02	<2	0.66	0.010
C145	Vegetation			<0.01	1.65	0.14	45.9	14	0.2	0.09	110	0.009	<0.1	<0.01	<0.2	<0.01	18.9	0.05	<0.02	<0.02	<2	0.60	0.009
C146	Vegetation			<0.01	1.91	0.09	61.7	7	0.2	0.05	70	0.008	0.2	<0.01	<0.2	<0.01	30.9	0.01	<0.02	<0.02	<2	0.79	0.009
C147	Vegetation			<0.01	1.59	0.07	56.6	18	0.3	0.07	100	0.012	0.1	<0.01	<0.2	<0.01	36.1	0.01	<0.02	<0.02	<2	1.27	0.007
C148	Vegetation			<0.01	1.72	0.10	49.7	14	0.2	0.04	200	0.008	<0.1	<0.01	<0.2	<0.01	18.3	0.01	<0.02	<0.02	<2	0.58	0.006
C149	Vegetation			<0.01	1.97	0.18	68.1	14	0.2	0.08	85	0.010	<0.1	<0.01	<0.2	<0.01	28.8	0.02	<0.02	<0.02	<2	0.82	0.009
C196	Vegetation			<0.01	2.73	0.07	99.0	6	0.3	0.06	306	0.009	0.1	<0.01	<0.2	<0.01	31.9	0.04	<0.02	<0.02	<2	0.97	0.043
C197	Vegetation			0.03	2.64	0.07	99.8	7	0.3	0.11	177	0.010	0.2	<0.01	<0.2	<0.01	34.3	0.04	<0.02	<0.02	<2	1.00	0.058
C198	Vegetation			<0.01	2.32	0.02	45.5	20	0.2	0.06	384	0.005	0.2	<0.01	<0.2	<0.01	14.8	0.06	<0.02	<0.02	<2	0.54	0.035
C199	Vegetation			0.01	2.51	0.12	45.6	10	0.2	0.04	110	0.008	<0.1	<0.01	<0.2	<0.01	19.0	<0.01	<0.02	<0.02	<2	0.53	0.014
C202	Vegetation			<0.01	2.66	0.04	37.6	13	0.2	0.05	145	0.006	0.1	<0.01	<0.2	<0.01	17.8	0.02	<0.02	<0.02	<2	0.64	0.024
C203	Vegetation			<0.01	2.09	0.08	33.3	9	<0.1	0.04	78	0.005	<0.1	<0.01	<0.2	<0.01	14.8	<0.01	<0.02	<0.02	<2	0.34	0.011
C204	Vegetation			<0.01	2.09	0.14	68.1	11	0.3	0.06	275	0.009	<0.1	<0.01	<0.2	<0.01	16.7	0.01	<0.02	<0.02	<2	0.74	0.007
C205	Vegetation			0.01	2.12	0.16	36.9	14	0.2	0.06	97	0.009	<0.1	<0.01	<0.2	<0.01	10.7	0.02	<0.02	<0.02	<2	0.33	0.013
C206	Vegetation			<0.01	1.67	0.11	53.8	13	0.2	0.08	280	0.009	<0.1	<0.01	<0.2	<0.01	13.9	0.04	<0.02	<0.02	<2	0.77	0.008
C207	Vegetation			<0.01	2.22	0.16	39.4	11	0.2	0.07	300	0.009	<0.1	<0.01	<0.2	<0.01	10.4	0.04	<0.02	<0.02	<2	0.39	0.011
C208	Vegetation			0.02	2.69	0.21	32.2	15	0.2	0.05	81	0.007	<0.1	<0.01	<0.2	<0.01	12.5	0.02	<0.02	<0.02	<2	0.32	0.012
C209	Vegetation			<0.01	1.91	0.16	36.1	13	<0.1	0.06	181	0.007	0.2	<0.01	<0.2	<0.01	9.4	0.03	<0.02	<0.02	<2	0.40	0.009

# CERTIFICATE OF ANALYSIS

VAN13003080.1

Method	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	
Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Ti	S	Hg	Se	Te	Ga	
Unit	ppm	ppm	%	ppm	ppm	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	
MDL	0.01	0.1	0.001	0.1	1	1	0.01	0.001	0.01	0.1	0.1	0.02	0.01	1	0.1	0.02	0.1	
B1	Vegetation	0.03	1.9	0.020	164.0	3	3	<0.01	<0.001	0.05	<0.1	0.2	<0.02	0.03	50	<0.1	<0.02	<0.1
C132	Vegetation	0.07	2.0	0.019	162.0	4	3	<0.01	<0.001	0.03	<0.1	0.2	<0.02	0.03	54	<0.1	<0.02	<0.1
C134	Vegetation	0.04	2.0	0.021	76.7	3	5	<0.01	0.001	0.05	<0.1	0.3	<0.02	0.06	60	<0.1	<0.02	<0.1
C135	Vegetation	0.04	2.0	0.016	85.3	3	3	<0.01	0.001	0.03	<0.1	0.3	<0.02	0.04	58	<0.1	<0.02	<0.1
C145	Vegetation	0.03	2.1	0.019	89.3	2	4	<0.01	0.001	0.04	<0.1	0.2	<0.02	0.04	30	<0.1	<0.02	<0.1
C146	Vegetation	0.02	1.9	0.021	237.4	1	3	<0.01	<0.001	0.07	<0.1	0.3	<0.02	0.04	25	<0.1	<0.02	<0.1
C147	Vegetation	0.02	1.9	0.019	182.7	2	4	<0.01	0.001	0.03	<0.1	0.2	<0.02	0.05	19	<0.1	<0.02	<0.1
C148	Vegetation	0.01	2.1	0.025	139.2	2	6	<0.01	<0.001	0.03	<0.1	0.3	<0.02	0.06	19	<0.1	<0.02	<0.1
C149	Vegetation	0.02	2.1	0.019	210.7	2	3	<0.01	<0.001	0.03	<0.1	0.3	<0.02	0.04	46	<0.1	<0.02	<0.1
C196	Vegetation	0.01	1.7	0.044	189.3	2	6	<0.01	0.004	0.18	<0.1	0.2	<0.02	0.04	20	<0.1	<0.02	<0.1
C197	Vegetation	0.03	1.9	0.060	348.5	2	6	<0.01	0.004	0.32	<0.1	0.3	<0.02	0.06	33	<0.1	<0.02	<0.1
C198	Vegetation	<0.01	1.8	0.047	118.9	1	5	<0.01	0.002	0.16	<0.1	0.2	<0.02	0.03	17	<0.1	<0.02	<0.1
C199	Vegetation	0.02	1.8	0.020	71.2	2	4	<0.01	0.001	0.06	<0.1	0.2	<0.02	0.05	47	<0.1	<0.02	<0.1
C202	Vegetation	<0.01	1.8	0.030	121.9	1	5	<0.01	0.001	0.10	<0.1	0.3	<0.02	0.05	17	<0.1	<0.02	<0.1
C203	Vegetation	0.01	2.0	0.020	92.0	1	3	<0.01	<0.001	0.07	<0.1	0.3	<0.02	0.04	36	<0.1	<0.02	<0.1
C204	Vegetation	0.02	1.9	0.016	78.8	2	4	<0.01	<0.001	0.04	<0.1	0.3	<0.02	0.05	30	<0.1	<0.02	<0.1
C205	Vegetation	0.03	1.9	0.020	84.7	3	3	<0.01	<0.001	0.05	<0.1	0.2	<0.02	0.06	59	<0.1	<0.02	<0.1
C206	Vegetation	0.02	1.9	0.019	80.7	2	4	<0.01	0.001	0.03	<0.1	0.2	<0.02	0.06	14	<0.1	<0.02	<0.1
C207	Vegetation	0.03	1.8	0.021	72.3	3	4	<0.01	<0.001	0.04	<0.1	0.3	<0.02	0.05	43	<0.1	<0.02	<0.1
C208	Vegetation	0.02	2.4	0.018	80.4	2	3	<0.01	0.002	0.05	<0.1	0.2	<0.02	<0.01	33	<0.1	<0.02	<0.1
C209	Vegetation	0.03	1.6	0.014	45.0	2	2	<0.01	0.002	0.05	<0.1	0.2	<0.02	<0.01	35	<0.1	<0.02	<0.1

## QUALITY CONTROL REPORT

VAN13003080.1

Method	Analyte	1VE Mo	1VE Cu	1VE Pb	1VE Zn	1VE Ag	1VE Ni	1VE Co	1VE Mn	1VE Fe	1VE As	1VE U	1VE Au	1VE Th	1VE Sr	1VE Cd	1VE Sb	1VE Bi	1VE V	1VE Ca	1VE 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	0.01	1	0.001	0.1	0.01	0.2	0.01	0.5	0.01	0.02	0.02	2	0.01	0.001
Pulp Duplicates																					
C149	Vegetation	<0.01	1.97	0.18	68.1	14	0.2	0.08	85	0.010	<0.1	<0.01	<0.2	<0.01	28.8	0.02	<0.02	<0.02	<2	0.82	0.009
REP C149	QC	<0.01	1.78	0.16	68.1	12	0.3	0.07	86	0.010	0.3	<0.01	<0.2	<0.01	29.3	0.02	<0.02	<0.02	<2	0.86	0.009
Reference Materials																					
STD CDV-1	Standard	0.17	8.22	0.89	22.4	14	6.1	1.79	353	0.214	1.3	0.15	2.7	0.62	107.9	0.03	0.03	<0.02	<2	1.66	0.035
STD V16	Standard	2.31	6.91	2.71	38.8	36	8.8	1.19	632	0.413	1.5	<0.01	1.1	<0.01	9.6	0.07	0.08	<0.02	<2	0.28	0.044
STD V16 Expected		1.6	6.69	3	39.2	32	7.4	1.11	720	0.4125	1.6		0.9		11.2	0.086	0.07			0.3	0.0488
STD CDV-1 Expected		0.2	8.61	1.33	23.3	9	6.4	2	413	0.256	1.3	0.17	2.3	0.61	122	0.04	0.03	0.02	4.2	1.94	0.04
BLK	Blank	<0.01	<0.01	<0.01	0.1	<2	<0.1	<0.01	<1	<0.001	<0.1	<0.01	<0.2	<0.01	<0.5	<0.01	<0.02	<0.02	<2	<0.01	<0.001
BLK	Blank	<0.01	<0.01	<0.01	0.1	<2	<0.1	<0.01	<1	<0.001	0.1	<0.01	<0.2	<0.01	<0.5	<0.01	<0.02	<0.02	<2	<0.01	<0.001
Prep Wash																					
RICE	Prep Blank	0.39	2.07	0.02	15.2	<2	0.2	0.01	6	<0.001	0.2	<0.01	<0.2	<0.01	<0.5	0.03	<0.02	<0.02	5	<0.01	0.066
RICE	Prep Blank	0.35	1.99	0.02	15.1	<2	0.3	0.01	6	<0.001	0.2	<0.01	<0.2	<0.01	<0.5	0.03	<0.02	<0.02	9	<0.01	0.071

## QUALITY CONTROL REPORT

VAN13003080.1

Method		1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE		
Analyte		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	
Unit		ppm	ppm	%	ppm	ppm	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	
MDL		0.01	0.1	0.001	0.1	1	1	0.01	0.001	0.01	0.1	0.1	0.02	0.01	1	0.1	0.02	0.1	
Pulp Duplicates																			
C149	Vegetation	0.02	2.1	0.019	210.7	2	3	<0.01	<0.001	0.03	<0.1	0.3	<0.02	0.04	46	<0.1	<0.02	<0.1	
REP C149	QC	0.03	2.1	0.019	215.6	2	3	<0.01	<0.001	0.03	<0.1	0.2	<0.02	0.07	41	<0.1	<0.02	<0.1	
Reference Materials																			
STD CDV-1	Standard	2.27	12.6	0.106	8.4	26	11	0.12	0.004	0.15	<0.1	0.8	<0.02	0.09	44	0.2	<0.02	0.5	
STD V16	Standard	0.05	393.9	0.046	1.9	10	4	0.04	0.001	0.19	<0.1	0.2	<0.02	0.05	54	<0.1	<0.02	0.1	
STD V16 Expected		0.05	323.1	0.0525	1.9	12	5	0.0454	0.0015	0.22			0.0177	41				0.2	
STD CDV-1 Expected		2.31	12.1	0.131	8.5	30	12	0.15	0.006	0.18		0.7	0.1	41	0.3	0.04	0.6		
BLK	Blank	<0.01	<0.1	<0.001	0.3	<1	<1	<0.01	<0.001	<0.01	<0.1	<0.1	<0.02	<0.01	<1	<0.1	<0.02	<0.1	
BLK	Blank	<0.01	<0.1	<0.001	0.2	<1	<1	<0.01	<0.001	<0.01	<0.1	<0.1	<0.02	<0.01	1	<0.1	<0.02	<0.1	
Prep Wash																			
RICE	Prep Blank	<0.01	2.1	0.011	0.2	1	<1	<0.01	<0.001	0.06	<0.1	0.3	<0.02	0.12	2	0.2	<0.02	<0.1	
RICE	Prep Blank	<0.01	2.3	0.013	0.2	1	<1	<0.01	<0.001	0.07	<0.1	0.3	<0.02	0.12	5	0.3	<0.02	<0.1	