

APPENDIX B: Laboratory Certificates for Samples Collected

in August 2014

From Actlabs, Ancaster, ON

Quality Analysis ...



Innovative Technologies

Date Submitted: 22-Sep-14
Invoice No.: A14-06806
Invoice Date: 02-Oct-14
Your Reference: SHARPSAND RIVER

Jim Atkinson
#902-105 Sanford Ave. N
Hamilton ON
Canada

ATTN: Jim Atkinson

CERTIFICATE OF ANALYSIS

13 Rock samples were submitted for analysis.

The following analytical package was requested:

Code 1EX Total Digestion ICP/MS

REPORT **A14-06806**

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

Notes:

Any values for Au are for informational purposes and should be checked by fire assay code 1A2

CERTIFIED BY:

A handwritten signature in black ink, appearing to be "Emmanuel Esemé".

Emmanuel Esemé, Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
41 Bittern Street, Ancaster, Ontario, Canada, L9G 4V5
TELEPHONE +905 648-9611 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com



Activation Laboratories Ltd. Report: A14-06806

Results

Analyte Symbol	Cu	Al	Ag	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cs	Fe	Hf	K	La	Li	Na	Nb	Ni
Unit Symbol	%	%	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm
Detection Limit	0.001	0.01	0.1	1	100	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.1	0.01	0.1	0.01	0.1	0.1	0.001	0.1	0.1
Analysis Method	ICP-OES	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
9049	2.13	0.48	0.3	6	100	11	<1	2.8	0.22	<0.1	11	15.8	93	> 10000	0.1	4.14	0.2	0.09	4.5	11.8	0.034	0.7	54.9
9050		0.81	0.2	<1	<100	22	<1	0.4	2.03	<0.1	11	15.4	122	6290	0.2	2.64	0.3	0.44	4.5	7.2	0.158	1.2	70.7
9051	1.70	1.31	1.0	<1	<100	12	<1	0.9	0.23	<0.1	6	12.2	87	> 10000	0.2	3.33	0.6	0.18	2.7	14.1	0.604	1.0	57.4
9052		0.66	0.6	1	<100	18	<1	2.0	0.14	<0.1	57	10.9	136	8670	0.1	2.15	0.2	0.08	23.9	22.8	0.049	1.2	61.2
9053		1.33	1.16	1.3	100	9	<1	4.3	0.37	<0.1	74	15.0	64	> 10000	0.2	3.69	0.5	0.07	34.6	26.9	0.233	0.9	37.6
9054		1.43	1.2	1	<100	11	<1	3.5	0.50	<0.1	98	18.3	92	8720	0.2	3.74	0.7	0.09	46.2	28.2	0.314	1.3	44.1
9055	1.35	0.41	0.5	1	<100	6	<1	2.8	2.05	<0.1	49	5.0	97	> 10000	<0.1	2.21	0.1	0.05	22.6	19.2	0.040	0.4	13.5
9056		4.05	0.3	2	<100	15	1	0.5	0.43	<0.1	24	19.9	75	8510	0.3	7.03	2.3	0.09	10.5	28.6	2.44	3.5	62.1
9057		3.08	0.6	2	<100	13	<1	0.8	0.41	<0.1	33	95.2	83	8130	0.3	6.31	1.5	0.12	15.8	27.0	1.29	2.5	50.5
9058		0.83	0.6	3	<100	7	<1	3.6	0.09	<0.1	3	70.8	77	6060	<0.1	8.67	0.1	0.04	1.5	25.2	0.073	1.0	24.6
9059	1.85	0.42	2.4	4	<100	6	<1	16.1	0.04	<0.1	1	78.3	72	> 10000	<0.1	4.51	<0.1	0.04	0.6	14.5	0.035	0.8	17.9
9060		0.37	5.3	6	<100	5	<1	1.3	0.12	<0.1	3	27.8	70	5420	0.1	1.48	<0.1	0.05	1.1	15.4	0.112	0.4	9.6
9061	2.36	0.53	2.0	5	<100	6	<1	13.3	0.04	<0.1	2	104	59	> 10000	<0.1	8.17	<0.1	0.03	0.7	16.7	0.025	0.8	16.1

Results

Analyte Symbol	P	Rb	Pb	S	Mg	Mn	Mo	Sb	Sc	Sn	Sr	Ta	Th	Tl	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	%	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.001	0.1	0.1	0.01	0.01	1	0.1	0.1	1	0.1	1	0.1	0.1	0.001	0.05	0.1	4	0.1	0.1	1	0.1
Analysis Method	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
9049	0.010	3.7	1.3	0.67	0.26	125	1.6	0.6	3	0.8	6	<0.1	1.0	0.071	<0.05	2.4	26	0.8	8.9	8	10.8
9050	0.015	11.1	1.4	0.11	0.15	340	0.8	0.3	4	0.6	12	<0.1	1.0	0.109	0.06	2.8	37	1.2	18.8	5	16.0
9051	0.021	4.8	1.9	0.63	0.28	179	2.5	0.8	4	0.3	7	<0.1	1.3	0.146	<0.05	2.9	63	0.8	6.4	16	24.0
9052	0.014	3.1	2.7	0.20	0.14	130	4.5	2.4	3	0.4	7	<0.1	1.3	0.061	<0.05	8.8	29	0.5	29.5	42	11.8
9054	0.027	2.9	4.8	0.24	0.56	293	22.6	0.9	6	0.5	7	<0.1	1.6	0.174	<0.05	2.4	82	0.5	14.2	23	21.8
9055	0.009	1.7	1.2	0.53	0.15	266	7.7	0.7	3	0.2	11	<0.1	0.9	0.038	<0.05	1.6	25	0.4	13.2	9	6.4
9056	0.068	2.0	2.0	0.76	1.52	470	1.3	0.3	19	0.8	16	0.2	5.2	0.471	<0.05	2.5	222	2.4	16.0	63	98.7
9057	0.044	3.3	1.8	0.51	1.23	419	1.4	0.3	14	0.9	9	0.1	2.2	0.351	<0.05	1.7	171	1.3	11.9	52	64.1
9058	0.011	0.8	1.1	1.04	0.65	145	1.8	0.2	13	1.4	3	<0.1	0.7	0.060	<0.05	1.1	175	21.1	7.0	24	7.3
9059	0.012	1.1	1.8	1.24	0.38	90	1.8	0.5	6	0.7	3	<0.1	0.4	0.053	<0.05	0.6	50	3.6	7.0	13	5.7
9060	0.014	1.4	0.8	0.38	0.09	103	1.2	0.3	<1	0.3	5	<0.1	0.2	0.030	<0.05	0.5	12	0.8	1.8	13	4.5
9061	0.009	0.7	1.7	1.17	0.55	111	1.4	0.2	9	1.2	3	<0.1	0.5	0.044	<0.05	0.5	130	16.1	6.3	17	3.9

QC

Analyte Symbol	Cu	Al	Ag	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Cs	Fe	Hf	K	La	Li	Na	Nb	Ni
Unit Symbol	%	%	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm
Detection Limit	0.001	0.01	0.1	1	100	1	1	0.1	0.01	0.1	1	0.2	1	0.1	0.1	0.01	0.1	0.01	0.1	0.1	0.001	0.1	0.1
Analysis Method	ICP-OES	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
GXR-4 Meas		5.74	3.9	100	500	913	2	18.8	1.04	0.1	104	14.4	43	6250	2.6	2.95	1.1	2.03	58.1	10.8	0.540	9.2	44.3
GXR-4 Cert		7.20	4.0	98.0	500	1640	1.90	19.0	1.01	0.860	102	14.6	64.0	6520	2.80	3.09	6.30	4.01	64.5	11.1	0.564	10.0	42.0
SDC-1 Meas		7.47		1		721	3		1.12		88	19.2	50	36.5	4.0	4.87	1.1	1.42	42.2	34.6	1.60	11.2	41.2
SDC-1 Cert		8.34		0.220		630	3.00		1.00		93.00	18.0	64.00	30.000	4.00	4.82	8.30	2.72	42.00	34.00	1.52	21.00	38.0
GXR-6 Meas		10.7	0.4	296	< 100	1290	1	0.2	0.17	0.1	34	13.6	55	74.3	4.1	5.29	2.4	1.04	12.9	32.2	0.095	3.7	26.3
GXR-6 Cert		17.7	1.30	330	95.0	1300	1.40	0.290	0.180	1.00	36.0	13.8	96.0	66.0	4.20	5.58	4.30	1.87	13.9	32.0	0.104	7.50	27.0
MP-1b Meas	3.07																						
MP-1b Cert	3.069																						
SAR-M (U.S.G.S.) Meas		5.39	4.1	37		876	3	1.8	0.61	5.0	112	11.1	74	362		3.14		1.50	55.3	29.3	1.27	20.2	46.1
SAR-M (U.S.G.S.) Cert		6.30	3.64	38.8		801	2.20	1.94	0.61	5.27	122.0	10.70	79.7	331.0000		2.99		2.94	57.4	27.4	1.140	29.9	41.5
DNC-1a Meas						118						59.2	153	112					3.9	4.7			294
DNC-1a Cert						118						57.0	270	100.00					3.6	5.20			247
CCU-1d Meas	23.9																						
CCU-1d Cert	23.93																						
CPB-2 Meas	0.117																						
CPB-2 Cert	0.1213																						
CZN-4 Meas	0.398																						
CZN-4 Cert	0.403																						
PTC-1b Meas	7.89																						
PTC-1b Cert	7.97																						
Method Blank		< 0.01	< 0.1	< 1	< 100	< 1	< 1	< 0.1	< 0.01	< 0.1	< 1	< 0.2	< 1	< 0.1	< 0.1	< 0.01	< 0.1	< 0.01	< 0.1	< 0.1	< 0.001	< 0.1	< 0.1
Method Blank		< 0.01	< 0.1	< 1	< 100	< 1	< 1	< 0.1	< 0.01	< 0.1	< 1	< 0.2	< 1	< 0.1	< 0.1	< 0.01	< 0.1	< 0.01	< 0.1	< 0.1	< 0.001	< 0.1	< 0.1
Method Blank	< 0.001																						

QC

Analyte Symbol	P	Rb	Pb	S	Mg	Mn	Mo	Sb	Sc	Sn	Sr	Ta	Th	Ti	Tl	U	V	W	Y	Zn	Zr	
Unit Symbol	%	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Detection Limit	0.001	0.1	0.1	0.01	0.01	1	0.1	0.1	1	0.1	1	0.1	0.1	0.001	0.05	0.1	4	0.1	0.1	1	0.1	
Analysis Method	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	
GXR-4 Meas	0.154	107	50.5	1.34	1.68	156	313	4.1	7	6.8	206	0.5	19.2	0.287	3.39	5.4	87	34.0	14.9	72	44.6	
GXR-4 Cert	0.120	160	52.0	1.77	1.66	155	310	4.80	7.70	5.60	221	0.790	22.5	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186	
SDC-1 Meas	0.078	74.4	26.0		1.00	902		0.3	15	2.0	174	0.6	13.3	0.430	0.69	2.8	78	0.7		106	45.8	
SDC-1 Cert	0.0690	127.00	25.00		1.02	880.00		0.54	17.00	3.00	180.00	1.20	12.00	0.606	0.70	3.10	102.00	0.80		103.00	290.00	
GXR-6 Meas	0.047	60.8	103	0.58	0.56	989	1.5	2.1	24	0.9	35	0.2	6.2		2.30	2.6	161	1.4	13.1	128	99.4	
GXR-6 Cert	0.0350	90.0	101	0.0160	0.609	1010	2.40	3.60	27.6	1.70	35.0	0.485	5.30		2.20	1.54	186	1.90	14.0	118	110	
MP-1b Meas																						
MP-1b Cert																						
SAR-M (U.S.G.S.) Meas	0.083	82.5	930		0.49	5150	10.0	4.6	8	2.6	143		18.5	0.332	2.77	4.4	62	8.9	34.9	932		
SAR-M (U.S.G.S.) Cert	0.07	146	982		0.50	5220	13.1	6.0	7.83	2.76	151		17.2	0.38	2.7	3.57	67.2	9.78	28.00	930.0		
DNC-1a Meas								0.8	30		137				0.312		150		18.3	69	41.3	
DNC-1a Cert								0.96	31		144.0				0.29		148.00		18.0	70.0	38.000	
CCU-1d Meas																						
CCU-1d Cert																						
CPB-2 Meas																						
CPB-2 Cert																						

Activation Laboratories Ltd.

Report: A14-06806

Analyte Symbol	P	Rb	Pb	S	Mg	Mn	Mo	Sb	Sc	Sn	Sr	Ta	Th	Ti	Tl	U	V	W	Y	Zn	Zr	
Unit Symbol	%	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	
Detection Limit	0.001	0.1	0.1	0.01	0.01	1	0.1	0.1	1	0.1	1	0.1	0.1	0.001	0.05	0.1	4	0.1	0.1	1	0.1	
Analysis Method	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	
CZN-4 Meas																						
CZN-4 Cert																						
PTC-1b Meas																						
PTC-1b Cert																						
Method Blank	< 0.001	< 0.1	< 0.1	< 0.01	< 0.01	< 1	< 0.1	< 0.1	< 1	< 0.1	< 1	< 0.1	< 0.1	< 0.001	< 0.05	< 0.1	< 4	< 0.1	< 0.1	< 1	< 0.1	
Method Blank	< 0.001	< 0.1	< 0.1	< 0.01	< 0.01	< 1	< 0.1	< 0.1	< 1	< 0.1	< 1	< 0.1	< 0.1	< 0.001	< 0.05	< 0.1	< 4	< 0.1	< 0.1	< 1	< 0.1	
Method Blank																						