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Date Submitted: 04-Dec-14
Invoice No.: A14-09550
Invoice Date: 09-Jan-15
Your Reference: Dundonald

Kevin Cool
190 Quartz Ave
Timmins ON P4N 4L7
Canada

ATTN: Kevin Cool

CERTIFICATE OF ANALYSIS

43 Soil samples were submitted for analysis.

The following analytical package was requested:

Code 1E3-Timmins Aqua Regia ICP(AQUAGEO)

REPORT **A14-09550**

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Notes:

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

A handwritten signature in black ink, appearing to read "Emmanuel Esemé". The signature is written over a horizontal line.

Emmanuel Esemé , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.

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Results

Analyte Symbol	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La	Mg
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	%
Lower Limit	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
1	< 0.2	< 0.5	6	106	< 1	18	19	35	1.13	< 2	< 10	24	< 0.5	< 2	0.07	5	44	1.66	< 10	< 1	0.02	< 10	0.15
2	< 0.2	< 0.5	3	54	< 1	1	6	7	0.25	< 2	< 10	14	< 0.5	< 2	0.05	< 1	13	0.63	< 10	< 1	0.02	13	0.03
3	< 0.2	< 0.5	4	76	< 1	13	7	21	1.09	< 2	< 10	20	< 0.5	< 2	0.09	4	34	1.79	< 10	< 1	0.02	11	0.11
4	< 0.2	< 0.5	8	79	1	17	7	24	1.33	2	< 10	25	< 0.5	< 2	0.06	4	39	1.41	< 10	< 1	0.03	< 10	0.19
5	< 0.2	< 0.5	21	334	< 1	42	7	25	0.91	< 2	< 10	43	< 0.5	< 2	0.20	9	50	2.18	< 10	< 1	0.07	27	0.38
6	< 0.2	< 0.5	6	156	< 1	24	15	37	1.24	< 2	< 10	28	< 0.5	< 2	0.09	5	38	1.65	< 10	< 1	0.03	11	0.18
7	< 0.2	< 0.5	3	38	< 1	9	3	8	1.00	< 2	< 10	21	< 0.5	< 2	0.07	3	19	0.86	< 10	< 1	0.02	< 10	0.10
8	< 0.2	< 0.5	8	105	< 1	13	7	27	1.89	< 2	< 10	37	< 0.5	< 2	0.07	4	59	1.75	< 10	< 1	0.02	< 10	0.16
9	< 0.2	< 0.5	6	62	< 1	16	4	23	1.30	< 2	< 10	30	< 0.5	< 2	0.06	4	30	1.48	< 10	< 1	0.02	< 10	0.14
10	< 0.2	< 0.5	24	110	< 1	55	5	23	1.51	< 2	< 10	37	< 0.5	< 2	0.10	10	37	1.27	< 10	< 1	0.03	13	0.28
11	< 0.2	< 0.5	14	184	< 1	50	5	49	2.18	2	< 10	33	< 0.5	< 2	0.14	11	65	2.64	< 10	< 1	0.03	17	0.27
12	< 0.2	< 0.5	10	108	< 1	26	7	30	1.86	< 2	< 10	31	< 0.5	< 2	0.09	7	47	1.72	< 10	< 1	0.02	< 10	0.25
13	< 0.2	< 0.5	36	181	< 1	64	16	58	1.41	< 2	< 10	39	< 0.5	< 2	0.13	10	59	1.96	< 10	< 1	0.04	< 10	0.40
14	< 0.2	< 0.5	9	83	< 1	11	8	24	1.75	< 2	< 10	33	< 0.5	< 2	0.06	4	30	1.49	< 10	< 1	0.02	< 10	0.12
15	< 0.2	< 0.5	9	92	1	16	7	29	1.99	< 2	< 10	28	< 0.5	< 2	0.07	4	39	1.76	< 10	< 1	0.02	13	0.18
16	< 0.2	< 0.5	3	47	< 1	9	3	16	0.78	< 2	< 10	20	< 0.5	< 2	0.07	3	16	0.73	< 10	< 1	0.01	< 10	0.09
17	< 0.2	< 0.5	5	55	< 1	11	5	23	1.19	< 2	< 10	27	< 0.5	< 2	0.06	3	25	1.10	< 10	< 1	0.01	< 10	0.12
18	0.3	< 0.5	5	96	< 1	8	6	21	1.67	< 2	< 10	27	< 0.5	< 2	0.06	4	31	1.51	< 10	< 1	0.02	11	0.11
19	< 0.2	< 0.5	5	53	< 1	7	7	20	1.50	< 2	< 10	25	< 0.5	< 2	0.04	2	25	1.29	< 10	< 1	0.02	< 10	0.09
20	< 0.2	< 0.5	6	139	< 1	13	9	25	0.86	< 2	< 10	27	< 0.5	< 2	0.07	3	24	1.14	< 10	< 1	0.02	< 10	0.11
21	< 0.2	< 0.5	2	80	< 1	11	4	27	1.36	< 2	< 10	21	< 0.5	< 2	0.11	4	28	1.46	< 10	< 1	0.01	13	0.09
22	< 0.2	< 0.5	12	178	< 1	80	6	46	2.21	2	< 10	41	< 0.5	< 2	0.15	12	70	2.80	< 10	< 1	0.05	< 10	0.48
23	< 0.2	< 0.5	3	47	< 1	6	5	14	1.18	< 2	< 10	17	< 0.5	< 2	0.04	2	21	1.03	< 10	< 1	0.01	< 10	0.08
24	< 0.2	< 0.5	3	63	< 1	4	5	16	1.03	< 2	< 10	26	< 0.5	< 2	0.04	1	16	0.87	< 10	< 1	0.01	< 10	0.05
25	< 0.2	< 0.5	5	76	< 1	6	6	19	1.37	< 2	< 10	20	< 0.5	< 2	0.06	2	24	1.19	< 10	< 1	0.01	13	0.09
26	< 0.2	< 0.5	8	162	< 1	20	7	29	1.49	< 2	< 10	22	< 0.5	< 2	0.11	6	47	2.26	< 10	< 1	0.02	13	0.21
27	< 0.2	< 0.5	13	122	< 1	10	12	30	1.05	< 2	< 10	27	< 0.5	< 2	0.09	3	32	1.70	< 10	< 1	0.02	< 10	0.12
28	< 0.2	< 0.5	4	32	< 1	3	7	12	0.24	< 2	< 10	15	< 0.5	< 2	0.05	< 1	12	0.36	< 10	< 1	0.02	< 10	0.04
29	< 0.2	< 0.5	2	20	< 1	< 1	7	6	0.22	< 2	< 10	12	< 0.5	< 2	0.02	< 1	6	0.33	< 10	< 1	< 0.01	< 10	0.02
30	< 0.2	< 0.5	3	27	< 1	2	5	11	0.57	< 2	< 10	14	< 0.5	< 2	0.04	< 1	12	0.59	< 10	< 1	0.01	< 10	0.05
31	< 0.2	< 0.5	4	34	< 1	5	6	15	1.40	< 2	< 10	20	< 0.5	< 2	0.04	2	20	0.92	< 10	< 1	0.01	< 10	0.07
32	< 0.2	< 0.5	4	51	< 1	5	6	15	1.06	< 2	< 10	27	< 0.5	< 2	0.05	2	17	0.86	< 10	< 1	0.02	< 10	0.07
33	< 0.2	< 0.5	6	102	< 1	9	3	11	0.33	< 2	< 10	18	< 0.5	< 2	0.16	3	14	0.55	< 10	< 1	0.02	< 10	0.14
34	< 0.2	< 0.5	4	158	< 1	11	6	33	0.63	< 2	< 10	25	< 0.5	< 2	0.09	3	23	1.11	< 10	< 1	0.02	10	0.11
35	< 0.2	< 0.5	2	30	< 1	4	3	5	0.42	< 2	< 10	21	< 0.5	< 2	0.06	1	11	0.49	< 10	< 1	0.01	< 10	0.07
36	< 0.2	< 0.5	6	211	< 1	14	6	22	1.15	< 2	< 10	21	< 0.5	< 2	0.07	4	27	1.15	< 10	< 1	0.02	12	0.16
37	< 0.2	< 0.5	5	55	< 1	5	6	81	0.38	< 2	< 10	16	< 0.5	< 2	0.14	1	13	0.69	< 10	< 1	0.01	< 10	0.07
38	< 0.2	< 0.5	3	47	< 1	4	5	14	0.89	< 2	< 10	21	< 0.5	< 2	0.06	2	19	0.99	< 10	< 1	0.01	< 10	0.06
39	< 0.2	< 0.5	1	18	< 1	1	2	6	0.52	< 2	< 10	11	< 0.5	< 2	0.03	< 1	8	0.42	< 10	< 1	< 0.01	< 10	0.02
40	< 0.2	< 0.5	3	49	< 1	6	5	12	1.19	< 2	< 10	15	< 0.5	< 2	0.06	2	26	1.22	< 10	< 1	0.01	< 10	0.09
41	< 0.2	< 0.5	2	38	< 1	5	3	10	0.48	< 2	< 10	16	< 0.5	< 2	0.03	1	17	0.78	< 10	< 1	0.01	10	0.07
42	< 0.2	< 0.5	3	38	< 1	7	5	11	1.17	< 2	< 10	19	< 0.5	< 2	0.03	2	19	0.85	< 10	< 1	0.01	< 10	0.07
43	< 0.2	< 0.5	2	31	< 1	2	3	7	0.52	< 2	< 10	10	< 0.5	< 2	0.03	< 1	12	0.62	< 10	< 1	< 0.01	< 10	0.03

Results

Analyte Symbol	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
1	0.012	0.055	0.01	< 2	1	4	0.05	< 1	< 2	< 10	42	< 10	1	1
2	0.012	0.023	< 0.01	< 2	< 1	4	0.03	< 1	< 2	< 10	19	< 10	1	< 1
3	0.011	0.051	0.02	< 2	1	4	0.04	< 1	< 2	< 10	45	< 10	2	2
4	0.012	0.039	0.01	< 2	1	4	0.06	< 1	< 2	< 10	41	< 10	2	1
5	0.014	0.055	< 0.01	< 2	2	8	0.06	< 1	< 2	< 10	54	< 10	5	2
6	0.012	0.071	0.01	< 2	< 1	5	0.05	1	< 2	< 10	36	< 10	2	< 1
7	0.011	0.032	< 0.01	< 2	1	4	0.04	< 1	< 2	< 10	18	< 10	2	1
8	0.013	0.065	0.02	2	2	5	0.05	< 1	< 2	< 10	45	< 10	2	2
9	0.012	0.038	0.01	< 2	1	5	0.05	2	< 2	< 10	39	< 10	1	< 1
10	0.014	0.039	0.01	< 2	2	6	0.06	< 1	< 2	< 10	25	< 10	3	2
11	0.013	0.089	0.02	< 2	2	6	0.07	< 1	< 2	< 10	55	< 10	3	2
12	0.014	0.057	0.03	< 2	2	5	0.06	< 1	< 2	< 10	39	< 10	2	2
13	0.014	0.056	0.02	< 2	2	7	0.08	< 1	< 2	< 10	43	< 10	2	2
14	0.012	0.055	0.02	< 2	2	5	0.04	< 1	< 2	< 10	37	< 10	2	1
15	0.013	0.064	0.02	< 2	2	4	0.05	< 1	< 2	< 10	43	< 10	2	2
16	0.011	0.036	< 0.01	< 2	< 1	4	0.03	< 1	< 2	< 10	15	< 10	1	< 1
17	0.012	0.048	0.01	< 2	1	3	0.03	< 1	< 2	< 10	26	< 10	1	1
18	0.013	0.053	0.02	< 2	1	4	0.04	< 1	< 2	< 10	38	< 10	2	1
19	0.012	0.056	0.01	< 2	1	3	0.03	< 1	< 2	< 10	36	< 10	1	< 1
20	0.013	0.042	0.01	< 2	< 1	5	0.03	< 1	< 2	< 10	30	< 10	1	< 1
21	0.012	0.067	0.01	< 2	1	5	0.04	< 1	< 2	< 10	35	< 10	3	1
22	0.015	0.062	0.02	< 2	3	7	0.10	< 1	< 2	< 10	61	< 10	2	3
23	0.011	0.043	0.02	< 2	< 1	3	0.03	< 1	< 2	< 10	27	< 10	1	< 1
24	0.012	0.043	< 0.01	< 2	< 1	3	0.03	< 1	< 2	< 10	23	< 10	< 1	< 1
25	0.011	0.047	0.01	< 2	< 1	3	0.04	< 1	< 2	< 10	31	< 10	2	< 1
26	0.011	0.088	0.01	< 2	1	5	0.05	< 1	< 2	< 10	55	< 10	2	2
27	0.011	0.043	0.01	< 2	< 1	5	0.05	< 1	< 2	< 10	52	< 10	1	1
28	0.014	0.019	< 0.01	< 2	< 1	5	0.01	< 1	< 2	< 10	11	< 10	< 1	< 1
29	0.010	0.014	< 0.01	< 2	< 1	2	0.01	< 1	< 2	< 10	9	< 10	< 1	< 1
30	0.012	0.027	< 0.01	< 2	< 1	3	0.02	< 1	< 2	< 10	17	< 10	< 1	< 1
31	0.011	0.038	0.03	< 2	< 1	3	0.02	< 1	< 2	< 10	22	< 10	1	1
32	0.012	0.037	0.01	< 2	< 1	3	0.02	< 1	< 2	< 10	20	< 10	1	1
33	0.011	0.035	< 0.01	< 2	< 1	5	0.03	< 1	< 2	< 10	13	< 10	3	< 1
34	0.010	0.046	< 0.01	< 2	< 1	4	0.04	< 1	< 2	< 10	27	< 10	2	< 1
35	0.011	0.019	< 0.01	< 2	< 1	4	0.02	< 1	< 2	< 10	12	< 10	2	< 1
36	0.011	0.043	0.01	< 2	1	4	0.04	< 1	< 2	< 10	29	< 10	2	1
37	0.011	0.024	< 0.01	< 2	< 1	4	0.02	< 1	< 2	< 10	15	< 10	1	< 1
38	0.010	0.040	< 0.01	< 2	< 1	4	0.02	< 1	< 2	< 10	26	< 10	1	< 1
39	0.010	0.017	< 0.01	< 2	< 1	2	0.02	< 1	< 2	< 10	11	< 10	< 1	< 1
40	0.010	0.027	0.01	< 2	1	4	0.05	< 1	< 2	< 10	35	< 10	2	1
41	0.011	0.020	< 0.01	< 2	< 1	4	0.02	< 1	< 2	< 10	23	< 10	1	< 1
42	0.010	0.038	0.02	< 2	< 1	2	0.03	< 1	< 2	< 10	20	< 10	1	1
43	0.009	0.030	< 0.01	< 2	< 1	2	0.02	1	< 2	< 10	17	< 10	1	< 1

QC

Analyte Symbol	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La	Mg
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	%
Lower Limit	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GXR-4 Meas	3.6	< 0.5	6440	139	332	35	39	67	2.70	100	< 10	30	1.4	15	0.88	13	53	2.85	< 10	< 1	1.63	53	1.60
GXR-4 Cert	4.0	0.860	6520	155	310	42.0	52.0	73.0	7.20	98.0	4.50	1640	1.90	19.0	1.01	14.6	64.0	3.09	20.0	0.110	4.01	64.5	1.66
GXR-6 Meas	0.4	< 0.5	67	968	2	18	81	113	6.57	217	< 10	1080	0.8	< 2	0.16	13	71	5.06	10	1	1.01	10	0.37
GXR-6 Cert	1.30	1.00	66.0	1010	2.40	27.0	101	118	17.7	330	9.80	1300	1.40	0.290	0.180	13.8	96.0	5.58	35.0	0.0680	1.87	13.9	0.609
SAR-M (U.S.G.S.) Meas	3.8	5.5	343	4630	14	39	1000	1010	1.03	36		201	1.0	< 2	0.30	11	90	2.71	< 10		0.24	50	0.35
SAR-M (U.S.G.S.) Cert	3.64	5.27	331.0000	5220	13.1	41.5	982	930.0	6.30	38.8		801	2.20	1.94	0.61	10.70	79.7	2.99	17		2.94	57.4	0.50
13 Orig	< 0.2	< 0.5	36	181	< 1	63	16	59	1.41	< 2	< 10	39	< 0.5	< 2	0.13	10	58	1.90	< 10	< 1	0.04	< 10	0.40
13 Dup	< 0.2	< 0.5	36	181	< 1	65	15	58	1.42	< 2	< 10	38	< 0.5	< 2	0.13	10	60	2.02	< 10	< 1	0.04	< 10	0.40
27 Orig	< 0.2	< 0.5	13	125	< 1	11	11	30	1.07	2	< 10	27	< 0.5	< 2	0.09	3	35	1.80	< 10	< 1	0.02	< 10	0.12
27 Dup	< 0.2	< 0.5	13	119	< 1	10	12	29	1.03	< 2	< 10	27	< 0.5	< 2	0.09	3	30	1.60	< 10	< 1	0.02	11	0.12
40 Orig	< 0.2	< 0.5	3	51	< 1	6	5	12	1.22	< 2	< 10	15	< 0.5	< 2	0.06	2	26	1.23	< 10	< 1	0.02	< 10	0.10
40 Dup	< 0.2	< 0.5	3	48	< 1	6	5	12	1.16	< 2	< 10	14	< 0.5	< 2	0.06	2	26	1.20	< 10	< 1	0.01	< 10	0.09
Method Blank	< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10	< 0.01

QC

Analyte Symbol	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GXR-4 Meas	0.135	0.123	1.55	3	7	70	0.13	1	< 2	< 10	79	12	11	10
GXR-4 Cert	0.564	0.120	1.77	4.80	7.70	221	0.29	0.970	3.20	6.20	87.0	30.8	14.0	186
GXR-6 Meas	0.085	0.031	0.01	3	21	32		< 1	< 2	< 10	162	< 10	5	12
GXR-6 Cert	0.104	0.0350	0.0160	3.60	27.6	35.0		0.0180	2.20	1.54	186	1.90	14.0	110
SAR-M (U.S.G.S.) Meas	0.037	0.065		5	3	28	0.05	1	< 2	< 10	33	< 10	18	
SAR-M (U.S.G.S.) Cert	1.140	0.07		6.0	7.83	151	0.38	0.96	2.7	3.57	67.2	9.78	28.00	
13 Orig	0.014	0.055	0.02	< 2	2	7	0.07	1	< 2	< 10	41	< 10	2	2
13 Dup	0.014	0.056	0.02	< 2	2	7	0.08	< 1	< 2	< 10	46	< 10	2	2
27 Orig	0.011	0.042	0.01	< 2	< 1	5	0.05	< 1	< 2	< 10	56	< 10	1	1
27 Dup	0.011	0.043	0.01	< 2	< 1	5	0.04	< 1	< 2	< 10	49	< 10	2	1
40 Orig	0.011	0.028	0.01	< 2	1	4	0.05	< 1	< 2	< 10	35	< 10	2	1
40 Dup	0.009	0.027	0.01	< 2	1	3	0.05	< 1	< 2	< 10	34	< 10	1	1
Method Blank	0.007	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1