

# APPENDIX 3

## Actlabs Results



**Date Submitted:** 28-Jan-15  
**Invoice No.:** A15-00562  
**Invoice Date:** 23-Feb-15  
**Your Reference:** DEVITT

Kevin Cool  
190 Quartz Ave  
Timmins ON P4N 4L7  
Canada

ATTN: Kevin Cool

## CERTIFICATE OF ANALYSIS

18 Soil samples were submitted for analysis.

The following analytical package was requested:

Code 1E3-Timmins Aqua Regia ICP(AQUAGEO)

REPORT      **A15-00562**

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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	Th	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	20	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
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
DE-1	< 20	< 0.2	< 0.5	22	888	< 1	40	11	66	2.89	3	21	171	1.0	< 2	2.29	15	64	3.51	10	< 1	0.53	38
DE-2	< 20	< 0.2	< 0.5	21	756	< 1	46	12	83	3.78	4	23	199	1.2	< 2	1.00	19	83	4.09	10	< 1	0.62	29
DE-3	< 20	< 0.2	< 0.5	23	746	< 1	40	12	72	3.33	6	21	193	1.1	< 2	0.95	17	72	3.62	10	< 1	0.56	33
DE-4	< 20	< 0.2	< 0.5	23	771	< 1	42	12	71	3.29	3	22	199	1.2	< 2	0.93	16	71	3.55	10	< 1	0.58	40
DE-5	< 20	< 0.2	< 0.5	20	440	< 1	31	8	55	2.63	3	18	135	0.9	< 2	3.74	11	54	2.98	< 10	< 1	0.40	33
DE-6	< 20	< 0.2	< 0.5	18	405	< 1	26	5	37	1.81	4	18	102	0.6	< 2	7.68	8	40	2.29	< 10	< 1	0.34	23
DE-7	< 20	< 0.2	< 0.5	26	539	< 1	35	8	55	2.63	4	24	152	0.9	< 2	7.76	12	57	3.27	10	< 1	0.57	30
DE-8	< 20	< 0.2	< 0.5	55	437	< 1	46	11	62	3.76	4	21	273	1.3	< 2	2.10	13	76	3.88	10	< 1	0.50	47
DE-9	< 20	< 0.2	< 0.5	18	670	< 1	37	11	72	3.19	4	21	185	1.1	< 2	0.94	15	71	3.52	10	< 1	0.53	36
DE-10	< 20	< 0.2	< 0.5	12	521	< 1	18	6	47	1.70	2	11	106	0.6	< 2	1.32	8	39	2.02	< 10	< 1	0.25	24
DE-11	< 20	< 0.2	< 0.5	21	545	< 1	33	9	57	2.80	3	18	159	0.9	< 2	0.99	13	61	3.24	< 10	< 1	0.46	33
DE-12	< 20	< 0.2	< 0.5	17	746	< 1	37	10	66	3.16	3	22	187	1.1	< 2	1.10	14	69	3.54	10	< 1	0.56	35
DE-13	< 20	< 0.2	< 0.5	31	555	< 1	48	11	87	3.85	3	29	239	1.3	< 2	1.52	18	85	4.31	10	< 1	0.76	39
DE-14	< 20	< 0.2	< 0.5	30	551	< 1	45	11	83	3.60	4	29	219	1.2	< 2	3.34	16	78	4.09	10	< 1	0.73	38
DE-15	< 20	< 0.2	< 0.5	31	723	< 1	50	12	90	4.10	3	31	252	1.4	< 2	2.92	18	87	4.51	20	< 1	0.81	39
DE-16	< 20	< 0.2	< 0.5	28	611	< 1	42	10	73	3.45	4	29	210	1.2	< 2	4.25	16	75	3.94	10	< 1	0.72	33
DE-17	< 20	< 0.2	< 0.5	20	544	< 1	28	8	57	2.76	4	13	174	1.0	< 2	1.37	11	57	2.97	< 10	< 1	0.30	41
DE-18	< 20	< 0.2	< 0.5	16	491	< 1	30	9	50	2.61	3	14	136	0.9	< 2	0.67	12	57	2.97	< 10	< 1	0.35	32

## Results

Analyte Symbol	Mg	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	0.01	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	AR-ICP
DE-1	1.66	0.057	0.050	0.01	2	7	46	0.19	< 1	< 2	< 10	68	< 10	13	10
DE-2	1.43	0.059	0.041	< 0.01	< 2	8	41	0.22	< 1	< 2	< 10	82	< 10	9	11
DE-3	1.24	0.058	0.048	0.01	< 2	7	43	0.22	1	< 2	< 10	75	< 10	11	11
DE-4	1.20	0.061	0.037	< 0.01	2	8	44	0.21	1	< 2	< 10	73	< 10	13	14
DE-5	1.63	0.048	0.039	0.02	< 2	6	46	0.14	1	< 2	< 10	55	< 10	12	7
DE-6	2.52	0.047	0.038	< 0.01	< 2	5	59	0.12	1	< 2	< 10	41	< 10	10	9
DE-7	2.60	0.062	0.045	< 0.01	3	6	68	0.16	2	< 2	< 10	59	< 10	10	7
DE-8	1.53	0.056	0.054	0.02	3	8	60	0.19	4	< 2	< 10	93	< 10	16	17
DE-9	1.22	0.053	0.047	0.01	2	8	41	0.21	1	< 2	< 10	71	< 10	12	8
DE-10	0.62	0.037	0.041	0.03	< 2	4	33	0.13	2	< 2	< 10	43	< 10	10	5
DE-11	1.04	0.048	0.038	0.02	< 2	7	38	0.19	< 1	< 2	< 10	66	< 10	11	8
DE-12	1.20	0.055	0.048	0.02	< 2	7	41	0.20	< 1	< 2	< 10	69	< 10	12	10
DE-13	1.71	0.064	0.046	0.01	< 2	8	43	0.20	< 1	< 2	< 10	81	< 10	13	15
DE-14	2.05	0.065	0.047	0.01	3	8	50	0.19	< 1	< 2	< 10	76	< 10	12	16
DE-15	1.91	0.065	0.049	0.02	3	8	51	0.21	1	< 2	< 10	83	< 10	12	15
DE-16	2.12	0.067	0.045	0.01	< 2	8	53	0.19	4	< 2	< 10	74	< 10	11	17
DE-17	0.90	0.042	0.032	0.02	< 2	6	34	0.15	3	< 2	< 10	59	< 10	15	7
DE-18	0.90	0.042	0.040	< 0.01	< 2	6	34	0.19	< 1	< 2	< 10	61	< 10	10	8

QC

Analyte Symbol	Th	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	20	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
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-1 Meas	< 20	29.4	1.8	1140	819	14	30	589	688	0.34	380	17	325	0.8	1420	0.78	5	7	21.4	< 10	3	0.03	< 10
GXR-1 Cert	2.44	31.0	3.30	1110	852	18.0	41.0	730	760	3.52	427	15.0	750	1.22	1380	0.960	8.20	12.0	23.6	13.8	3.90	0.050	7.50
GXR-1 Meas	< 20	29.0	1.9	1110	810	14	28	589	684	0.34	368	16	542	0.8	1390	0.78	5	7	21.2	< 10	3	0.03	< 10
GXR-1 Cert	2.44	31.0	3.30	1110	852	18.0	41.0	730	760	3.52	427	15.0	750	1.22	1380	0.960	8.20	12.0	23.6	13.8	3.90	0.050	7.50
GXR-4 Meas	< 20	3.8	< 0.5	6480	147	313	38	41	70	2.88	106	< 10	43	1.4	16	0.96	13	56	3.01	10	< 1	1.95	53
GXR-4 Cert	22.5	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
GXR-4 Meas	< 20	3.7	< 0.5	6220	142	307	37	40	69	2.75	102	< 10	47	1.4	15	0.94	13	54	2.91	10	< 1	1.85	51
GXR-4 Cert	22.5	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
GXR-6 Meas	< 20	0.3	< 0.5	71	1110	2	23	93	126	7.42	246	< 10	1120	0.9	< 2	0.14	13	82	5.54	20	2	1.31	< 10
GXR-6 Cert	5.30	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
GXR-6 Meas	< 20	0.3	< 0.5	71	1110	3	23	92	126	7.44	230	< 10	1120	0.9	< 2	0.14	13	82	5.55	20	2	1.32	< 10
GXR-6 Cert	5.30	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
SAR-M (U.S.G.S.) Meas	< 20	3.3	5.5	333	5150	13	41	1040	1020	1.26	42		255	1.1	< 2	0.32	11	94	2.80	< 10		0.33	51
SAR-M (U.S.G.S.) Cert	17.2	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
SAR-M (U.S.G.S.) Meas	< 20	3.3	5.6	334	5160	13	41	1040	1020	1.26	42		255	1.1	< 2	0.32	11	94	2.81	< 10		0.33	51
SAR-M (U.S.G.S.) Cert	17.2	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
DE-18 Orig	< 20	< 0.2	< 0.5	16	492	< 1	30	9	50	2.63	2	14	136	0.9	< 2	0.67	12	56	2.98	< 10	< 1	0.36	33
DE-18 Dup	< 20	< 0.2	< 0.5	16	491	< 1	29	9	50	2.59	4	14	135	0.9	< 2	0.67	12	57	2.96	< 10	< 1	0.35	31
Method Blank	< 20	< 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
Method Blank	< 20	< 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
Method Blank	< 20	< 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
Method Blank	< 20	< 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

QC

Analyte Symbol	Mg	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	0.01	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	AR-ICP
GXR-1 Meas	0.13	0.053	0.040	0.19	79	1	182	< 0.01	14	< 2	34	79	146	26	16
GXR-1 Cert	0.217	0.0520	0.0650	0.257	122	1.58	275	0.036	13.0	0.390	34.9	80.0	164	32.0	38.0
GXR-1 Meas	0.13	0.052	0.041	0.20	79	1	190	< 0.01	11	< 2	33	78	147	25	16
GXR-1 Cert	0.217	0.0520	0.0650	0.257	122	1.58	275	0.036	13.0	0.390	34.9	80.0	164	32.0	38.0
GXR-4 Meas	1.65	0.146	0.120	1.77	5	7	80	0.15	2	2	< 10	80	15	12	10
GXR-4 Cert	1.66	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-4 Meas	1.61	0.138	0.115	1.70	4	7	77	0.14	2	< 2	< 10	77	15	12	10
GXR-4 Cert	1.66	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	0.42	0.091	0.032	0.01	6	18	31		< 1	< 2	< 10	175	< 10	5	12
GXR-6 Cert	0.609	0.104	0.0350	0.0160	3.60	27.6	35.0		0.0180	2.20	1.54	186	1.90	14.0	110
GXR-6 Meas	0.42	0.091	0.031	0.01	4	18	31		< 1	< 2	< 10	175	< 10	5	11
GXR-6 Cert	0.609	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	0.35	0.038	0.060		5	4	34	0.06	3	< 2	< 10	38	< 10	22	
SAR-M (U.S.G.S.) Cert	0.50	1.140	0.07		6.0	7.83	151	0.38	0.96	2.7	3.57	67.2	9.78	28.00	
SAR-M (U.S.G.S.) Meas	0.35	0.038	0.060		5	4	34	0.06	3	< 2	< 10	38	< 10	22	

Analyte Symbol	Mg	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	0.01	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	AR-ICP
SAR-M (U.S.G.S.) Cert	0.50	1.140	0.07		6.0	7.83	151	0.38	0.96	2.7	3.57	67.2	9.78	28.00	
DE-18 Orig	0.90	0.042	0.040	< 0.01	< 2	6	34	0.19	3	< 2	< 10	61	< 10	10	8
DE-18 Dup	0.89	0.042	0.040	< 0.01	< 2	6	34	0.19	< 1	< 2	< 10	61	< 10	10	9
Method Blank	< 0.01	0.011	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.013	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.013	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.013	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1