Sampling Program

## $2 \cdot 49265$

## **Cleaver Property**

P



Prepared for: Larry Gervais

By:

True North Mineral Laboratories 68 Bruce Avenue South Porcupine, Ontario



True North Mineral Laboratories Inc.	
Table of Contents	
	Page no.
Table of Contents	1
Introduction	2
Property Description	2
Access	2
Work Program	4,6,7,8
Methods	9
Material Handling	10
Results/Analysis	10
Recommendations	
Appendix I, II, III, and IV Note	12
Appendix V	13,14
Appendix VI - Sample Location Table	15
Appendix VII cover page	
Appendix VII - Analytical Results from Actlabs	17 to 23
Author Qualifications and Experience	24,25
Report Completion Date	26
Lists of Figures and Tables	
Figure 1 - Location and Access	3
Figure 2 - Sample Locations	5
Map showing full property - contiguous claims	27

#### Introduction

In July, 2011 a sampling program was carried out on the Cleaver Property. True North Mineral Laboratories carried out field work on a contract basis for the claimholder, Larry Gervais.

#### **Property Description**

Cleaver property consists of 10 mining claims, 126 claim units, covering an area of 2,016ha.

Claim Numbers 4248662, 4248663, 4248664, 4259882, 4259883, 4259884, 4259885, 4254487, 4254490 and 4244919 are located in Cleaver Township, Larder Lake Mining Division, approximately 42 Km South-East of Timmins. Refer to *Figure 1* (Location and Access map) and *Figure 2* (Sample Location map) for more detailed claim locations.

#### Access

The claims were accessed from Timmins by traveling East on HWY101 to South Porcupine, then South on Langmuir / Stringers Road for a total of 56km from Timmins to the campsite on Cleaver Property. Refer to *Figure 1* (Location and Access map) for more detailed access information.



Campsite – Cleaver Property, July 2011



#### Work Program

In July, 2011 True North Mineral Laboratories was hired on a contract basis by the claimholder (Mr. Gervais), to arrange field and laboratory work for Cleaver Property.

A two-phase program was requested by Mr. Gervais;

- 1. Surface (rock) sampling at sites proximal to EM conductors.
- 2. SGH (Soil Gas Hydrocarbon) sampling to cover the same EM conductors using a regular grid pattern and the SGH method.

Although field work has been completed for both phases, only the analysis of rock samples is available at report time. Therefore the current report covers phase 1 and the included Statement of Costs is limited to costs related to phase 1.

Field Work was carried out between July 10, 2011 and July 14, 2011. A camp was established on July 10<sup>th</sup>, in an open clear-cut within claim # 4244919. Camp location is shown on *Figure 2* (Sample Location map).



Setting up camp – July 10<sup>th</sup>, 2011



#### Work Program....continued

The temporary camp consisted of a lightweight R-pod camper with stove, refrigerator, running water, shower, toilet, heat and air conditioning – with appliances powered by a Honda 2000 watt generator.

#### Surface – Rock samples

8 rock samples were retrieved from the property on July 13<sup>th</sup> and 14<sup>th</sup>, 2011. Sample locations were based on an airborne EM map, supplied to the Author by Mr. Gervais.

As the Cleaver property had been previously optioned by Mr. Gervais to a junior company, the airborne EM map is a product of a previous work program. For the purpose of this report, only the EM conductors reasonably close to the sample area have been transcribed (digitized) onto *Figure 2* (Sample Location map).

#### Sample Locations – Rationale

Considerable work (stripping, trenching and sampling) was carried out in the past by Bill Flinsky, in areas close to the new EM conductors provided by Mr. Gervais.

Field notes, including GPS coordinates, access information and photos from a site visit (June 14, 2005), were obtained from Brian Atkinson (Resident Geologist, Porcupine Division). This greatly helped to identify all of the previous workings by Bill Flinsky.



Trench on Bill Flinsky Cleaver Township property Photo from Brian Atkinson field visit – June 14, 2005 Photo credit: Brian Atkinson field report

#### Work Program....continued

As a basis for sampling, the Author noted that one of the new EM conductors sits approx 50m to the north-east of the (closest), previous trenching by Mr. Flinsky. This was later confirmed during sampling, where outcrop directly at the conductor site remained undisturbed. It's unlikely that the new conductor site has been sampled in the past. A layer of moss and topsoil had to be removed in order to obtain samples. In the Authors opinion, this area has not been sampled during any of the past property work, including work prior to Mr. Flinsky.

The new airborne EM survey supplied by Mr. Gervais, was flown by Geotech, where differentially corrected GPS provides accurate flight-line and conductor locations. The Author believes the new conductor locations are superior to any of the airborne and/or ground-based surveys carried out in the past.

Regardless of survey accuracy – a difference of only 50m should be treated carefully. Therefore, 3 samples were retrieved from the nearest Flinsky trenches and 4 samples were retrieved from outcrop closer to the new EM conductor. One other sample was retrieved further North as shown on *Figure 2* (Sample Location map).

Analytical results for all samples are described later in the report. *Figure 2* (Sample Location map) identifies which samples are from existing Flinsky trenches...and which samples are from the new conductor site.



Sampling existing Flinsky trench – July, 2011

### Work Program....continued



Sampling and minor stripping at new conductor site - July, 2011



Undisturbed ground between Flinsky trench and new conductor site

#### Methods

Ì

#### Surface – Rock samples

Samples were gathered using a rock hammer. Photos below show some of the sample sites. Minor stripping was done with grub-hoe.



#### Material Handling

Samples were retrieved by True North Mineral Laboratories on a contract basis for the claimholder and sent to Actlabs (Activation Laboratories) in Ancaster, Ontario.

#### Results

#### Analysis

Actlabs (Activation Laboratories – Ancaster) employs inductively coupled plasma-mass spectrometry (ICP/MS) to provide trace element scans for virtually all types of economic mineralization. The 8 samples were submitted for analysis using the *Ultratrace1* package.

Results from Actlabs analysis can be found in Appendix VII

#### Background Reference

True North Mineral Laboratories maintains a database that contains multielement data for overburden and rock samples taken from across Northeastern Ontario.

The comments below use the database as a background reference.

For the purpose of this report, a sub-set of data was extracted from the main database. 105 samples were extracted, where the material / sample type reasonably matched the material sampled during the current field program.

#### Gold (Au)

Highest gold values were found in samples KC-756 and KC-762, at 26ppb and 20ppb respectively. Sample KC-756 was taken from an existing Flinsky trench and sample KC-762 was taken approx 1600m to the north, away from both the Flinsky trenches and the new EM conductor.

#### Zinc (Zn)

Highest and most significant result of the program is a Zinc value <10,000ppm from sample KC-761. Sample was retrieved from the existing Flinsky trench, within 50m of the new EM conductor.

Second highest Zinc sample was KC-755, retrieved from another Flinsky trench.

#### **Results...continued**

#### **New Conductor**

Samples KC-757/58/59 and 60, taken directly at the new conductor site, failed to show any new and positive results. However it should be noted that outcrop around the new conductor has not been stripped, trenched, or sampled in detail equivalent to past work by Flinsky.

#### Recommendations

Given the positive Zn result from existing Flinsky trench within 50m of the new conductor, the Author recommends stripping, trenching and channel sampling be carried out to the North-East of previous work by Flinsky.

Upcoming SGH results from Phase 2 may help to expand upon the Zn showing. It should be noted that the >10,000 Zn value found in KC-761, exceeded the reliable limits of Actlab's *Ultratrace1* analysis. The actual Zn value is unknown at this time, and could be much greater than 10,000ppm (1% Zn). Therefore the Author recommends that further analysis be carried out on the same sample, to determine the full Zn value.

Other anomalous values of Cu, As, Pb and Au can be found in *Appendix VII*. The upcoming SGH results may help to expand on those as well.

## Note:

# Appendix I, II, III and IV Used for other report-types

Appendix V - Sa	ample Field Logs
Sample # KC-759	Sample # KC-760
name: KC date: July 14, 2011	name: KC date: July 14, 2011
project: Larry Gervais - Cleaver Property	project: Larry Gervais - Cleaver Property
Location: (Nad 83, UTM, Zone 17) Northing: 5,333,704 Easting: 496,790 Location: (Local grid reference)	Location: (Nad 83, UTM, Zone 17) Northing: 5,333,703 Easting: 496,783 Location: (Local grid reference)
N/A	N/A
Sampling method: Surface - rock sample	Sampling method: Surface - rock sample
Depth:	Depth:
Comments:	Comments:
Outcrop close to new conductor	Outcrop close to new conductor
Sample # KC-761	Sample # KC-762
name: KC date: July 14, 2011	name: KC date: July 14, 2011
project: Larry Gervais - Cleaver Property	project: Larry Gervais - Cleaver Property
Location: (Nad 83, UTM, Zone 17) Northing: 5,333,664 Easting: 496,776	Location: (Nad 83, UTM, Zone 17) Northing: 5,335,042 Easting: 497,025
Location: (Local grid reference)	Location: (Local grid reference)
N/A	N/A
Sampling method: Surface - rock sample	Sampling method: Surface - rock sample
Depth:	Depth:
Comments:	Comments:
Outcrop close to new conductor	approx 1.6km North of other samples

Appendix V - Sa	ample Field Logs
Sample # KC-755	Sample # KC-756
name: KC date: July 13, 2011	name: KC date: July 13, 2011
project: Larry Gervais - Cleaver Property	project: Larry Gervais - Cleaver Property
Location: (Nad 83, UTM, Zone 17) Northing: 5,333,736 Easting: 496,685 Location: (Local grid reference) <u>N/A</u> Sampling method: Surface - rock sample Depth: Comments: Existing Flinsky Trench	Location: (Nad 83, UTM, Zone 17) Northing: 5,333,739 Easting: 496,686 Location: (Local grid reference) N/A Sampling method: Surface - rock sample Depth: Comments: Existing Flinsky Trench
Sample # KC-757	Sample # KC-758
name: KC date: July 13, 2011	name: KC date: July 13, 2011
project: Larry Gervais - Cleaver Property	project: Larry Gervais - Cleaver Property
Location: (Nad 83, UTM, Zone 17) Northing: 5,333,697 Easting: 496,787 Location: (Local grid reference) N/A	Location: (Nad 83, UTM, Zone 17) Northing: 5,333,699 Easting: 496,788 Location: (Local grid reference) N/A
Sampling method: Surface - rock sample	Sampling method: Surface - rock sample
Depth:	Depth:
Comments:	Comments:
Outcrop close to new conductor	Outcrop close to new conductor

		1	True North Mine	ral Laboratories i	Inc.										
			Арр	endix VI											
			Projec	ct: Cleaver											
			Client: L	arry Gervais											
		Sa	mple locations -	NAD83, UTM, Zo	one 17										
Township	Brojoet	Sample No	Local Grid	Local Grid	UTM NAD83, Zone 17	UTM NAD83, Zone 17									
rownsnip	Project	Sample No.	Easting	Northing	Easting	Northing									
Cleaver	Cleaver	KC-755			496685	5333736									
Cleaver	Cleaver	KC-756	· · · · · · · · ·		496686	5333739									
Cleaver	Cleaver	KC-757			496787	5333697									
Cleaver	Cleaver	KC-758			496788	5333699									
Cleaver	Cleaver	KC-759			496790	5333704									
Cleaver	Cleaver	KC-760			496783	5333703									
Cleaver	Cleaver	KC-761			496776	5333664									
Cleaver	Cleaver	KC-762			497025	5335042									

## Appendix VII

## Analytical Results - Actlabs

Quality Analysis ...



Innovative Technologies

Date Submitted:25-Jul-11Invoice No.:A11-7342Invoice Date:02-Aug-11Your Reference:CLEAVER-GEOCHEM

True North Mineral Laboratories 475 Railway Street Timmins Ontario P4N 2P5 Canada

ATTN: Kevin Cool

#### **CERTIFICATE OF ANALYSIS**

8 Rock samples were submitted for analysis.

The following analytical package was requested:

Code UT-1-0.5g Aqua Regia ICP/MS

REPORT A11-7342

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:

Assays are recommended for values >10,000 for Cu and Au. Due to matrix change used in AR-MS analysis, the detection limts for Au has been modified to 5ppb. The AU from AR-MS is only semi-quantitative. For accurate Au data, fire assay is recommended.

CERTIFIED BY :

Elitsa Hrischeva, Ph.D. Quality Control



ACTIVATION LABORATORIES LTD.

1336 Sandhill Drive, Ancaster, Ontario Canada L9G 4V5 TELEPHONE +1.905.648.9611 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: A11-7342																				
Analyte Symbol	Li	Be	В	Na	Mg	Ai	к	Bí	Ca	Sc	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Rb	Sr
Unit Symbol	ppm	ppm	ppm	%	%	%	%	ppm	%	ppm	ppm	ppm	ρpm	%	ρp <i>m</i>	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.1	0.1	1	0.001	0.01	0.01	0.01	0.02	0.01	0.1	1	0.5	1	0.01	0.1	0.1	0.01	0.1	0.02	0.1	0.1	0.1	0.1	0.5
Analysis Method	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS
KC-755	6.1	0.1	< 1	0.045	0.27	0.48	0.15	0.68	0.30	5.9	27	30.4	98	1.78	47.7	105	256	978	6.42	0.1	63.2	1.6	10.1	4.0
KC-756	7.0	0.1	< 1	0.064	0.41	0.50	0.07	1.06	0.23	4.0	32	72.7	139	12.3	53.5	125	456	49.5	8.10	0.3	468	15.6	4.2	3.9
KC-757	29.1	0.2	1	0.218	2.74	3.08	0.14	0.06	0.86	6.0	82	166	360	3.91	19.4	108	26.0	73.0	12.9	0.1	4.0	< 0.1	8.2	13.0
KC-758	11.3	< 0.1	< 1	0.145	1.16	1.39	0.07	0.07	0.80	3.2	37	124	221	2.08	15.7	89.8	34.0	41.0	5.59	0.1	3.1	< 0.1	4.4	10.5
KC-759	47.3	1.0	4	0.090	1.74	2.25	0.19	0.54	0.47	9.0	70	121	548	3.64	17.5	68.3	9.76	75.6	14.2	0.1	9.0	< 0.1	16.8	45.7
KC-760	5.2	0.1	2	0.080	0.44	1.37	0.11	0.06	1.29	2.1	25	122	130	0.93	7.5	47.1	15.5	26.4	5.02	< 0.1	2.9	< 0.1	6.9	42.0
KC-761	0.8	0.2	< 1	0.030	0.04	0.45	0.01	0.07	0.04	1.9	17	15.0	152	4.61	4.6	8.5	699	> 10000	5.15	0.1	548	1.5	0.5	3.3
KC-762	27.5	0.7	2	0.020	1.13	2.43	0.11	0.20	1.78	8.8	62	143	479	5.41	38.3	133	84.9	391	9.69	0.2	167	0.2	6.4	51.9

Activation Laboratories Ltd. Repor	t: A11-7342	
------------------------------------	-------------	--

Analyte Symbol	Y	Zr	Nb	Mo	Ag	Çđ	In	Sn	Sb	Te	Cs	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	ТЬ	Dy	Ho	Er	Τm
Unit Symbol	ppm	ppm	ppm	ρpm	рр/л	ppm	ppm	pom	mqq	ppm	ppm	¢pm	ppm	ppm	ppm	ppm	ppm	opm	րքո	ppm	pom	ррт	ppm	ppm
Detection Limit	0.01	0.1	0.1	0.01	0.002	0.01	0.02	0.05	0.02	0.02	0,02	0.5	0.5	0.01	Ď. 1	0.02	0, 1	0.1	0.1	0.1	0.001	0.1	0.1	0.1
Analysis Method	AR-MS	AR-MS	AR-MAS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS						
KC-755	13.7	62.7	8.0	11.5	2.13	4.25	0.38	3.16	0.84	0.10	0.33	25.6	4.5	12.2	1.5	5.74	1.5	1.3	1.9	0.3	2.25	0.5	1.4	0.2
KC-756	8.70	41.9	1.6	4.55	3.34	0,10	0,27	2.97	14.1	0.24	0.19	5.5	8.4	16.6	2.1	8.14	1.8	0.8	1.8	0.3	1.51	0.3	0.8	0,1
KC-757	8.84	28.0	ů,3	0.71	0.059	0.04	0.03	0.76	0.13	< 0.02	0.60	19. <b>B</b>	Đ.1	20.5	2.4	9.07	1.B	0.5	1.8	0.3	1.45	0.3	0.8	0.1
KC-758	5.65	16.8	0.3	0.82	0.071	0.05	< 0.02	0.47	0.11	< 0.02	0.42	14.0	9.4	19.8	2.3	8.19	1.5	0.4	1.4	0.2	1.05	0.2	0.5	< 0.1
KC-759	13.3	9.5	0.6	1.78	0.084	0.19	0.04	1.39	0.47	0.03	0.80	84.6	30.8	62.9	7.5	26.1	4.8	1.0	3.8	0.5	2.52	0.5	1.3	0.2
KC-760	5.09	9.9	0.4	0.79	0.040	0.11	< 0.02	0.36	0.25	< 0.02	0.25	24.5	7.0	15.6	1.8	6,55	1.2	0.5	1.2	0.2	0.908	0.2	0.5	< 0.1
KC-761	t.83	9.0	0.6	1.93	14.5	192	6.10	1.64	2.68	< 0.02	0.04	12.D	2.3	6.11	0.6	2.44	0.5	0.2	0.5	< 0.1	0.401	< 0.1	0.2	< 0.1
KC-762	12.5	28.6	1.2	2.31	1.15	1.15	0.06	1.60	2.25	0.07	0.85	24,8	19.0	38.4	4.5	16.1	2.9	1.2	2.9	0.4	2.18	0.4	1.2	0.2

Activation Laboratories Ltd.	Report:	A11-7342
	Report.	A11-7044

												•	
Analyte Symbol	YD	Łu	н	ĩa	W	Re	Au	π	Pb	Th	U		
Unit Symbol	ppm	ppm	ppm	ppm	<b>ур</b> т	ppm	ppb	ppm	ppm	ppm	ppm		
Detection Limit	0.1	0.1	0.1	0.05	0.1	0.001	5	0.02	0.01	0.1	0.1		
Analysis Method	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS		
KC-755	1.5	0.2	1.3	< 0.05	1.5	0.018	14	0.65	126	3.4	0.8		
KC-756	0.8	0.1	. 1,1	< 0.05	0.5	0.007	26	0.30	253	2.3	0.6		
KC-757	0.7	0.1	0.5	< 0.05	0,3	< 0.001	6	0.07	8.92	1.8	0.3		
KC-758	0.5	< 0.1	0.3	< 0.05	0.4	< 0.001	< 5	0.04	14.8	1.5	0.3		
KC-759	1.1	0.2	< Ŭ.1	< 0.05	0.4	0.002	5	0.10	19.0	15.0	6.0		
KC-760	0.4	< 0,1	0.2	< 0.05	0.3	< 0.001	< 5	0.04	9.57	1.4	0.3		
KC-761	0.2	< 0.1	0.2	< 0.05	0.3	< 0.001	6	< 0.02	4080	0.6	0.2		
KC-762	1.0	Ð.1	Û,B	< 0.05	0.4	0.002	20	0.46	107	2.1	0.4		

Activation Laboratories Ltd.	Report:	A11-7342	

Quality Contro	4																							
Analyte Symbol	Li	Be	В	Na	Mg	AI	к	Ві	Ca	Sc	v	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Rb	Sr
Unit Symbol	ppm	ppm	ppm	%	%	%	%	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.1	0.1	1	0.001	0.01	0.01	0.01	0.02	0.01	0.1	1	0.5	1	0.01	0.1	0.1	0.01	0.1	0.02	0.1	0.1	0.1	0.1	0.5
Analysis Method	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS
GXR-1 Meas	5.4	0.9	11	0.045	0.16	0.35	0.03	1410	0.80	1.2	76	11.4	769	22.5	8.6	43.6	1140	786	5.22		457	16.3	2.7	229
GXR-1 Cert	8.20	1.22	15.0	0.0520	0.217	3.52	0.0500	1380	0.960	1.58	80.0	12.0	852	23.6	8.20	41.0	1110	760	13.8		427	16.6	14.0	275
GXR-4 Meas	9.7	1.5	3	0.124	1.82	2.67	1.66	19.1	0.86	6.8	79	59.6	129	2.87	16.0	45.5	6320	92.6	12.4		118	4.9	118	87.1
GXR-4 Cert	11.1	1.90	4.50	0.564	1.66	7.20	4.01	19.0	1.01	7.70	87.0	64.0	155	3.09	14.6	42.0	6520	73.0	20.0		98.0	5.60	160	221
GXR-6 Meas	24.7	1.0	4	0.059	0.44	7.02	1.11	0.17	0.14	23.2	163	79.9	949	5.17	14.8	26.6	68.0	126	18.7		274	< 0.1	78.8	34.6
GXR-6 Cert	32.0	1.40	9.80	0.104	0.609	17.7	1.87	0.290	0.180	27.6	186	96.0	1010	5.58	13.8	27.0	66.0	118	35.0		330	0.940	90.0	35.0
OREAS 13b (4-Acid) Meas												426			58.1	2550	2410	66.3			71.7			
OREAS 13b (4-Acid) Cert												8650			75	2247	2300.000	133			57			
KC-761 Orig	0.8	0.1	< 1	0.032	0.04	0.44	0.01	0.07	0.04	2.0	17	14.6	150	4.54	4.5	8.6	697	> 10000	5.07	0.1	537	1.3	0.5	3.3
KC-761 Dup	0.8	0.2	< 1	0.028	0.04	0.46	0.01	0.07	0.04	1.9	17	15.3	155	4.68	4.6	8.5	701	> 10000	5.22	0.1	560	1.7	0.5	3.3
Method Blank Method	< 0.1	< 0.1	< 1	< 0.001	< 0.01	< 0.01	< 0.01	< 0.02	< 0.01	< 0.1	< 1	< 0.5	< 1	< 0.01	< 0.1	< 0.1	< 0.01	< 0.1	< 0.02	< 0.1	< 0.1	< 0.1	< 0.1	< 0.5

							Activation Laboratories Ltd. Report: A11-7342																	
Quality Control																								
Analyte Symbol	Y	Zr	Nb	Мо	Ag	Cd	In	Sn	Sb	Тө	Cs	Ва	La	Ce	Pr	Nd	Sm	Eu	Gd	ть	Dy	Ho	Er	Tm
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.01	0.1	0.1	0.01	0.002	0.01	0.02	0.05	0.02	0.02	0.02	0.5	0.5	0.01	0.1	0.02	0.1	0.1	0.1	0.1	0.001	0.1	0.1	0.1
Analysis Method	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS
GXR-1 Meas	33.1	10.7	0.1	17.5	29.9	2.49	0.73	25.5	113	13.5	2.53	229	5.5	11.6		6.16	2.2	0.5	3.8	0.7	4.73			0.4
GXR-1 Cert	32.0	38.0	0.800	18.0	31.0	3.30	0.770	54.0	122	13.0	3.00	750	7.50	17.0		18.0	2.70	0.690	4.20	0.830	4.30			0.430
GXR-4 Meas	14.9	10.0	0.3	317	3.67	0.01	0.21	5.83	5.00	0.83	2.51	48.3	46.9	88.6		34.5	5.4	1.3	4.7	0.5	2.80			0.2
GXR-4 Cert	14.0	186	10.0	310	4.00	0.860	0.270	5.60	4.80	0.970	2.80	1640	64.5	102		45.0	6.60	1.63	5.25	0.360	2.60			0.210
GXR-6 Meas	8.25	14.0	< 0.1	1.74	0.295	0.10	0.06	0.98	2.83	0.05	3.79	888	11.3	32.5		11.2	2.3	0.6	2.2	0.3	1.64			0.1
GXR-6 Cert	14.0	110	7.50	2.40	1.30	1.00	0.260	1.70	3.60	0.0180	4.20	1300	13.9	36.0		13.0	2.67	0.760	2,97	0.415	2.80			0.0320
OREAS 13b (4-Acid) Meas				9.00	0.879																			
OREAS 13b (4-Acid) Cert				9.0	0.86																			
KC-761 Orig	1.80	8.9	0.5	1.88	14.6	193	6.07	1.82	2.86	< 0.02	0.04	11.6	2.4	6.07	0.6	2.46	0.5	0.2	0.5	< 0.1	0.407	< 0.1	0.2	< 0.1
KC-761 Dup	1.86	9.1	0.6	1.98	14.5	192	6.12	1.85	2.90	< 0.02	0.04	12.5	2.3	6.14	0.6	2.43	0.5	0.2	0.5	< 0.1	0.396	< 0.1	0.2	< 0.1
Method Blank Method	< 0.01	< 0.1	< 0.1	< 0.01	< 0.002	< 0.01	< 0.02	< 0.05	< 0.02	< 0.02	< 0.02	< 0.5	< 0.5	< 0.01	< 0.1	< 0.02	< 0.1	< 0.1	< 0.1	< 0.1	< 0.001	< 0.1	< 0.1	< 0.1

Activation Laboratories Ltd.

Report: A11-7342

Quality Contro	1										
Analyte Symbol	Yo	Lu	HM	Ta	w	Re	Au	π	Pb	Th	U
Unit Symbol	ρρπ	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ррт	ppm	ppm
Detection Limit	0.1	0.1	0.1	0.05	0.1	0.001	5	0.02	0.01	0.1	0.1
Analysis Method	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS
GXR-1 Meas	2.1	0.3	0.2	< 0.05	143		3240	0.36	736	2.2	31.2
GXR-1 Cert	1.90	0.280	0.960	0.175	184		3300	0.390	730	2.44	34.9
GXR-4 Maas	0.8	0.1	0.3	< 0.05	11.5		387	2.87	48.1	18.4	4.8
GXR-4 Cert	1.60	0.170	8.30	0.790	30.8		470	3.20	52.0	22.5	6.20
GXR-6 Meas	Q.8	0.1	0.2	< 0.05	< 0.1		35	1.89	106	4.2	0.9
GXR-6 Cert	2.40	0.330	4.30	0.485	1.90		95.0	2.20	101	5.30	1.54
OREAS 13b (4-Acki) Moas											
OREAS 13b (4-Acid) Cerl											
KC-761 Orig	0.2	< 0.1	0.2	< 0.05	0.3	< 0.001	6	< 0.02	4150	0.7	0.2
KC-761 Dup	0.2	< 0.1	0.2	< 0.05	0.3	< 0.001	5	< 0.02	4000	0.5	0.2
Method Blank Method Blank	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.001	< 5	< 0.02	< 0.01	< 0.1	< 0.1

Author: Kevin Cool Revised Sept, 2010 \*Date corrected from previous version: Rev1Dec28/2008

#### Qualifications and Experience

1982 Graduated from Timmins High and Vocational School

1983 Studied photography at Humber College, Toronto, Ontario

1984 to 1988 Worked for family owned transportation business in Moosonee, Ontario

1988 to 1990\* Studied Survey at Northern College, South Porcupine, Ontario

1990\* Graduated with Survey Engineering Technician Diploma

#### 1990\* to 2001

Owned and operated General Surveys and Exploration based in Timmins, Ontario. The company provided contract survey, computer and information management services to the exploration and mining industry. Software includes Acad, Gemcom and Surpac, with specialization in using computers for the mining and exploration industry.

Work included volumetric survey of land areas to be used as tailing basins, where computerized 3D models were utilized. Diamond drillhole, underground engineering and mechanical design/construction surveys were common contracts for mining and exploration companies. Significant accomplishments include the design and construction of the 110km winter road from Attawapiskat to the Victor Project.

Clients included;

DeBeers Canada Exploration (Monopros), Southernera Resources, Dome Exploration, Placer Dome Detour Lake, Musselwhite and Dome Mines, Exall Glimmer Mine, Claude Rundle Gold Mine, TVX Mines' projects in Northern Greece, Moneta Porcupine Mines, Black Pearl Minerals, St. Andrew Goldfields, Battle Mountain Gold, Pentland Firth, Kinross Gold, Band-Ore Resources, McKinnon Prospecting and many other companies and individual prospectors.

#### 2000 to 2005

Began collaborative work with Brian K. Polk (Polk Geological Services) and established a private exploration company called Big Red Diamond Company. This small company began to stake property near Attawapiskat and Coral Rapids. Eventually the survey business was put aside to focus full time on diamond exploration.

Big Red Diamond Company entered into a Joint Venture with a private company owned by Dr. Charles Fipke of Kelowona, B.C. on a group of properties near DeBeers' Victor Project in the Attawapiskat region. Dr. Fipke is the renowned geologist who found Canada's first diamond mine, the Ekati Mine in Northwest Territories.

continued

Since 2001 the author has been exposed to all aspects of diamond exploration including;

Claim staking, field work, camp construction, airborne and ground magnetometer survey, planning and management of large scale geophysical programs, planning, management and interpretation of regional and property scale sampling programs.

Exposure to the industry includes training and field work under the discretion of Dr. Fipke. Introduction to kimberlite mineral identification from Dr. Fipke was expanded by personal research and study, which continues to current and lead to the establishment of True North Mineral Laboratories in Timmins, Ontario.

Advanced analysis, beyond the stage of heavy mineral separation, or observation using binocular microscope, is handled by other certified analytical laboratories, such as *CF Minerals*, of Kelowona, B.C.

#### 2002

Big Red Diamond Company became a publicly traded corporation.

The author is one of the co-founders of Big Red Diamond Corporation, which trades on the TSX Venture Exchange under the symbol DIA.

The author continues to actively stake mining claims and process sample material for private and public companies.

#### 2005 to 2009

Established True North Mineral Laboratories, at 475 Railway Street, Timmins, Ontario and added Actlabs-Timmins in early 2006. Lab processes, equipment setup and procedures are now supervised by Actlabs, based in Ancaster, Ontario.

The management and employees of True North Mineral Laboratories / Actlabs-Timmins, receive ongoing support and training directly from Actlabs - Ancaster. The laboratory processes fall under Actlabs certification, providing analysis is carried out by the main facility in Ancaster. In this capacity, True North Mineral Laboratories acts as a preparation facility for Actlabs and is qualified to handle material preparation prior to direct analysis by Actlabs.

#### 2009 to current

Sold prep facility to Cattarello Assayers Inc., who now operate a gold fire assay facility at 475 Railway Street, Timmins. True North Mineral Laboratories opened a small, private facility at 68 Bruce Avenue, South Porcupine in early 2011.

True North Mineral Laboratories utilizes the services of Actlabs and CF Mineral Research, for projects where an accredited laboratory is required. True North Mineral Laboratories continues to offer a wide range of field services to the exploration Industry.

# TRUE NORTH MINERAL

68 Bruce Avenue South Porcupine ON Phone (705) 264-0812

## **Report Completion Date:**

August 21, 2011