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Nous tenons à améliorer <u>l'accessibilité des services à la clientèle</u>. Si vous avez besoin de formats accessibles ou d'aide à la communication, veuillez <u>nous contacter</u>. **Grass Roots Prospecting** 

Black Sturgeon Mine (Prospect) Haycock Township Kenora Mining Division

> George R. Zebruck BSc F Prospector Licence H10002 February 3, 2021

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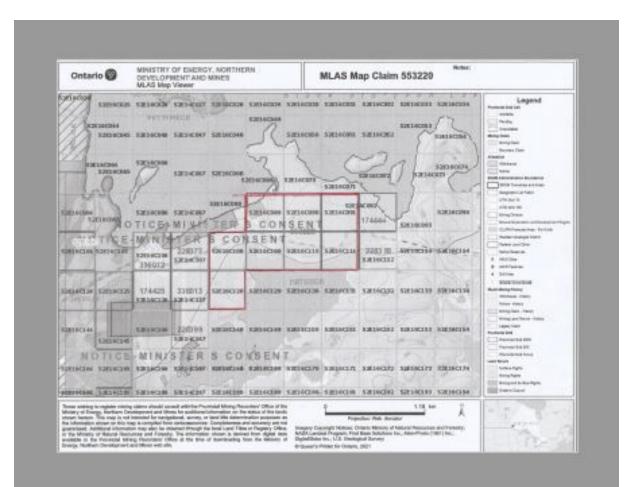
#### Introduction:

Grass roots prospecting was carried out on mining claim 553220 by George Zebruck of Kenora Ontario and Richard Zebruck of Watson Lake Yukon owners of the mining claim. The work was done on October 31, 2019 and on June 11, 2020.

#### **Description of the Property:**

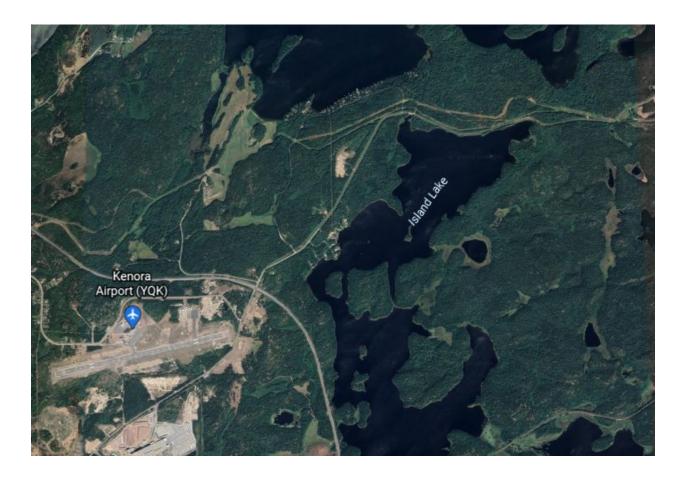
The property consists of one eight cell mining claim 553220 located in Haycock Township, Kenora Mining Division

Cell Numbers 52E16C089 52E16C090 52E16C091 52E16C108 52E16C109 52E16C110 52E16C111 52E16C128



#### **Location and Access:**

The claim is located approximately 3 kilometres northeast of the Kenora Airport on the north shore of Island Lake and lies between Island and Black Sturgeon Lakes. Good access is provided by Highway 671 which traverses through the property. Two natural gas pipelines and a hydro line also traverse the property.



#### Geology:

The property is underlain by mafic to intermediate volcanics in the northwest and the Island Lake quartz diorite stock in the southeast. The contact between the two lithologies is marked by a hybrid zone.

#### Work History:

- 1896 Two shafts, 42 and 36 feet deep, were sunk on gold bearing quartz veins at the Black Sturgeon
- 1897 1898 A new shaft was sunk at the Black Sturgeon location to a depth of 175 feet. Fifty-six and 82 feet of lateral development were done at the 90 foot and 170 foot levels.
- 1899 3 miners killed and 1 seriously injured due to failure of the hoist. Mine closed.
- 1960 Seven diamond drill holes totalling 608 feet, were drilled by American Yellowknife Mines Ltd.
- 1983 G. Zebruck stakes 12 claims covering the Princess and Black Sturgeon Prospects. Options property to Kennco Exploration (Canada) Inc. G. Pogson stakes adjoining claims to east.
- 1985 Kennco Exploration cut 25 kilometres of grid lines, geologically mapped and sampled the property and did 23 kilometres of magnetic and VLF-EM surveys.
- 1986 1987 G Pogson discovers 2 quartz veins carries out stripping, trenching and sampling.
  Zebruck samples quartz vein material spread along south pipeline during construction of Bell Canada fiber optics line. Assay returns .30 oz./ton. Compass traverse from Pogson trench is in alignment with this material and Black Sturgeon Shaft prompting the collection of humus samples on closest Kennco grid line to their common claim boundary.
- 1987 Zebruck options property to Kenora Gold Occurrences Inc.G. Pogson options his property to J. P. Sheridan
- 1988 Work done by Kenora Gold Occurrences Inc. includes the assaying of the humus samples leading to discovery of the East Zone; stripping and sampling; ground

magnetic and VLF-EM surveys; diamond drilling East Zone (9 holes, 1,211 ft.), Shaft Zone (10 holes, 1,440 ft. J.P. Sheridan drills 3 holes, 299 metres on the Pogson Claims

- 1989 1990 G Pogson carries out mechanical stripping, trenching and sampling
- 1990 1991 Sampling of East zone by Placer Dome and Gold Fields Canadian Mining Limited during property visits.
   C. Zahruck compliant and mini bulk complete from East Zone

G. Zebruck sampling and mini bulk sample from East Zone.

2014 - 2015 Canstar Resources - SGH soil survey indicates 3 deep gold anomalies in or proximal to zones of high strain.

#### **Mineralization:**

Gold occurs in quartz veins and in the sheared quartz diorite and sheared granodiorite that host them.

#### East Zone

Assays up to 13.06 oz./ton = 448 g/t were obtained in grab samples by Kenora Gold Occurrences Inc. at the Black Sturgeon East Zone. Placer Dome Exploration took 4 chip samples across the shear at 10 metre intervals. These samples include both quartz vein material as well as sheared granodiorite.

		oz./ton /	Au			
Sample No.	Interval	Assay	Rerun	Reject	Avg Assay	g/t
E19983	60 cm	0.04			0.04	1.4
E19984	90 cm	1.86	1.50	1.56	1.64	56.2
E19985	180 cm	.46	.46	.88	.60	20.6
E19986	200 cm	.12	.24	.58	.31	10.6

Gold Fields obtained similar results in their sampling of the East Zone

Zebruck took a 20 kg. composite mini bulk sample of vein material across and along the vein. This was sent to Casmyn Research and Engineering for initial metallurgical testing to get a better understanding of the potential grade of the deposit (eliminate bias of the nugget effect).

Four cyanide leach tests (bottle roll) gave a recovery of 98.65% of the gold in 24 hours at a grade of .30 oz./ton Au. There was little solution loss indicating a relative free milling gold situation.

#### Shaft Zone:

There is a large muck pile surrounding the collar of the shaft. Presumably this is mostly waste material with the ore being either milled on site or sent to the Reduction Works in Kenora. Sampling of this material returned erratic gold values mostly low but some samples returned as high as .52 oz/ton or 18 grams. The vein was exposed by mechanical stripping over a distance of 350 feet. Chip samples along the vein gave trace to 2 g/t.

Eight diamond drill holes from 4 set ups were drilled at this location. Only 3 of the holes Intersected the vein. At least some of the remaining 5 holes appear to have been terminated short of the targeted vein. Best intersection was .22 oz./ton or 7.5 g/t. These holes were collared approximately 75 feet south of the shaft. Of interest is that at three of the four set ups the holes collared into quartz diorite or sheared quartz diorite that carried gold values as high as .09 oz/ton or 3 g/ton. The holes caught the edge of a new untested mineralized zone of undetermined width. Past exploration concentrated on the high-grade quartz veins while little attention until recently was paid to the exploration for low grade high tonnage gold deposits. There was no follow up to test this new mineralized zone so it remains an exploration target.

#### **Pogson Claims:**

G. Pogson held claims and explored the area east of the East Zone. He discovered at least 2 parallel veins striking about 75 degrees about 180 metres apart one of which we believe to be the extension of the Black Sturgeon vein. Both veins carried gold values with the best assay of the north vein being .98 oz/ton or 34 g/ton across 1 metre while the south vein had a best assay of .26 oz/ton or 9 g/ton over a 76-centimetre sample interval. If the north vein is proven to be the extension of the Black Sturgeon vein then the strike length would be at least 1.7 kilometres. The Black Sturgeon Mine, the East Zone and the Pogson discoveries are all located on the 8-cell mining claim 553220.

#### **Grass Roots Prospecting 2019**

#### Field Notes:

October 31, 2019 – The purpose of our visit to the recently acquired Black Sturgeon Property was to examine the condition of the old workings and the trenching done more than 30 years ago and to GPS the locations of these workings. We also wanted to familiarize ourselves with the rock types and take samples to determine what types of rocks carried gold values. Samples were sent to Actlabs for 35 element Instrumental Neutron Activation Analysis.

The Black Sturgeon Shaft is located at UTM: 0404482 mE and 5518331 mN Zone 15 and trenching on the vein extends to UTM: 0404550 mE and 5518350 mN. The area around the shaft is covered in clay boulder till to a minimum depth of 2 metres. There is no outcrop here except for the trenches excavated on the vein in 1988. What is exposed is a quartz vein in sheared quartz diorite and or sheared granodiorite. Forest cover consists of Boreal Species, poplar, white birch, black ash the predominate hardwoods along with black spruce and balsam fir.

Two grab samples were taken from material at the mine waste pile and one sample on the quartz vein east of the shaft.

We located the East Zone at UTM: 0404882 mE and 5516401 mN Zone 15. There is no outcrop here except for what is exposed in the trenches (quartz vein in sheared granodiorite). The area is covered by a clay boulder till to a minimum depth of 1 metre. Forest cover consists of poplar, white birch, balsam fir and the odd large white and red pine in a tangle of moose maple, alder and hazel brush. Four grab samples were taken here.

The south pipeline was examined to try to locate the quartz vein that was the source of the gold bearing rock fragments found spread along this pipeline during construction activities. We also were looking for the location of any sheared host rocks. We found no exposed outcrop other than the broken rock that covers the pipeline pipe. Quartz vein material and sheared host rocks were found scattered about at UTM: 0405003 mE and 5518433 mN Zone 15. Two grab samples were taken.

#### **Grass Roots Prospecting 2020**

#### Field Notes:

June 11, 2020 – The purpose of this visit to the Black Sturgeon was to locate as much as possible the old workings (stripping and trenching) by G. Pogson and to record their UTM: coordinates. We also wanted to prospect along the north pipeline for rock exposures as the overburden along this line was not as deep. In some places the pipeline roadbed was exposed by erosion but in most part the clay bolder till leaves little to look at. Forest cover is typical Boreal Forest but on the shallower rocky sites there is more of a jack-pine component.

The Pogson trenches were difficult to find because they were for the most part shallow and in difficult thick bush. There was no available reference coordinates only his hand drawn maps. We did find some of his trenches north of the north pipeline but took no samples as they were overgrown and partially water filled. The GPS coordinates for this trench location is UTM: 0405532 mE and 5518647 mN Zone 15.

Prospecting along the north pipeline revealed some interesting rock outcrops and the broken rubble covering the pipeline gave clues to the presence of quartz veining, shearing and alteration. At the junction of the south boundary of the north pipeline with a hydro power line a 30-centimeter wide quartz vein in a narrow rusty shear was observed. The location of this vein is UTM: 0405205 mE and 5518481mN Zone 15. It is in close proximity to pipeline infrastructure and blocks of rusty sheared quartz vein rubble can be found along a short stretch of the excavation. The vein crosses the pipeline but its exact location cannot be determined as it is covered by a layer of shallow debris and the pipeline road. Permission from Trans Canada Pipeline would be required to undertake any work to locate the vein on the pipeline right-of-way. Two aplite dikes were observed where erosion of the pipeline road exposed the bedrock over short distances. The location of these two dikes are UTM: 0405542 mE and 5518432 mN Zone 15 and 0405564 mE and 5518430 mN Zone 15. A small 15-centimeter wide shear was observed at UTM: 0405388 mE and 5518474 mN.

The brocken rubble that covers the pipe can provide clues to the proximity of quartz veins, shearing and alteration but not the actual location. It provides a place to start looking. Following are a number of observations, their description and corresponding GPS locations.

		Zone 15	
Description	Easting		Northing
Quartz Vein Rubble	0405540 mE		5518614 mN
Quartz Vein in large, blasted boulder 2 ton	0405147 mE		5518517 mN
Quartz Diorite w/ Pyrite Rubble	0495184 mE		5518513 mN
Sample No.1035337			
Glassy Grey to Smokey Black Quartz			
In Sericite Shear w/ 10-15 % Pyrite	0405215 mE		5518483 mN

## Black Sturgeon Prospect

### October 31, 2019 Traverse



## Black Sturgeon Prospect

June 11, 2020 Traverse



### Sampling Record - 2019

Property:Black SturgeonOwnership:George Zebruck 50%Richard Zebruck 50%Date:October 31, 2019

Eight grab samples were taken on the Black Sturgeon main vein. Two samples from the mine dump east of the Black Sturgeon mine shaft, one sample on the vein near the shaft, four samples from the "east zone" and two samples of float found on the southernmost natural gas pipeline on strike with Black Sturgeon main vein.

#### Sample No. 1035319

- Location Black Sturgeon Mine Dump UTM: 0404488 mE Zone 15 5518330 mN
- Description Grey quartz vein (banded) with disseminated fine pyrite cubes. Black inclusions have the majority of pyrite.
- Assay Results: Au 258 ppb = 0.258 grams/tonne

- Location Black Sturgeon Mine Dump UTM: 0404488 mE Zone 15 5518330 mN
- Description Sheared quartz diorite with up to 10% fine pyrite
- Assay Results: Au 1130 ppb = 1.130 grams/tonne

Sample No. 1035321

- Location Float on pipeline
   UTM: 0405003 mE Zone 15
   5518433 mN
- Description Grey to black quartz in sheared quartz diorite with up to 10% fine disseminated pyrite. Possible vg.
- Assay results: Au 1410 ppb = 1.410 grams/tonne

#### Sample No. 1035322

- Location Float on pipeline
   UTM: 0405003 mE Zone15
   5518433 mN
- Description Sheared quartz diorite with up to 10% disseminated fine pyrite
- Assay Results: Au 586 ppb = 0.586 grams/tonne

- Location Black Sturgeon vein UTM: 0404508 mE Zone 15 5518346 mN
- Description Grey medium grained glassy laminated quartz vein with fine pyrite cubes
- Assay Results: Au 612 ppb = 0.612 grams/tonne

Sample No. 1035324

- Location East Zone
   UTM: 0404864 mE Zone 15
   5518399 mN
- Description Sheared quartz diorite with grey to black sugary quartz inclusions with up to 10% fine pyrite
- Assay results: Au 12500 ppb = 12.5 grams/tonne

#### Sample No. 1035325

- Location East Zone
   UTM: 0404882 mE Zone 15
   5516401 mN
- Description Fine grained grey glassy quartz vein material with fine pyrite
- Assay Results: Au 23500 ppb = 23.5 grams/tonne

- Location East Zone
   UTM: 0404882 mE Zone 15
   5516401 mN
- Description Rusty crumbly fault gouge between quartz vein and granodiorite host rock
- Assay Results: Au 3340 ppb = 3.34 grams/tonne

#### Sample No. 1035327

- Location East Zone UTM: 0404882 mE Zone 15 5516401 mN
- Description White to smoky sugary textured quartz vein material rare cubes of pyrite
- Assay Results: Au 2760 ppb = 2.760 grams/tonne

### Sampling Record – 2020

- Location North Pipeline UTM: 0405215 mE Zone 15 5518483 mN
- Description Glassy grey to smoky black quartz in sericite shear with 10 15% pyrite
- Assay Results: Au 1250 ppb = 1.250 grams/tonne

### **Observations:**

- Gold is widespread across the property with high grade values in the quartz veins.
- Diorite, sheared quartz diorite and sheared granodiorite carry lower grade gold values.
- The Black Sturgeon Shear is a long structure believed to be over a 1.7 kilometre in length.
- All samples assayed in the 2019, 2020 Grass Roots Prospecting Program contained gold values varying from 0.258 g/t to 23.5 g/t.
- There are at least 2 more parallel vein structures uncovered by G. Pogson.
- There is an untested gold structure 23 metres to the south of the Black Sturgeon Shear containing gold values up to 3 g/t in sheared quartz diorite.
- Canstar Resources SGH survey identified 3 deep gold structures corresponding to the N.E. trending shear zone in the quartz diorite (Black Sturgeon Shear).

### **Conclusions:**

- The Black Sturgeon Property requires much more work but it has the potential to host a minable deposit.
- The property has great infrastructure already in place with hydro electric power lines, natural gas pipelines, a paved highway crossing it. The Trans Canada Highway is within 2 kilometres of the property and an airport capable of handling jet aircraft within 3 kilometres.

### **Recommendations: (for future work)**

The property needs serious work that can only be done and financed by a junior, intermediate size, or major mining company. The work that they would do would be up to them.

The following recommendations for future work is based on what we can do as individual prospectors with limited financing.

- Grass roots prospecting including obtaining GPS locations of all known old workings.
- Cutting 2 base lines one on the Black Sturgeon Shear and the other on the Pogson vein. Cutting short cross lines for mapping and humus geochem sampling.
- Cleaning and sampling old trenches.
- Blasting trenches across Black Sturgeon vein near the shaft to get fresh samples.
- Mechanical stripping and sampling of the untested showing south of the shaft.
- Re-examine the available drill core from 1988 and assay some sections of sheared quartz diorite and sheared granodiorite to determine possibility of low-grade high tonnage potential on the property.

**APPENDIX 1** 

Actlabs

Certificate of Analysis and Assay Results

Jan 23, 2020

Quality Analysis ...



Innovative Technologies

Report No.:A19-17436Report Date:23-Jan-20Date Submitted:19-Dec-19Your Reference:19-Dec-19

George Zebruck 1349 Airport Road Kenora Ontario Canada

ATTN: George Zebruck

# CERTIFICATE OF ANALYSIS

11 Core samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
1D	QOP INAAGEO (INAA)	2020-01-22 10:06:14

#### REPORT A19-17436

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:

For values exceeding the upper limits we recommend assays.

CERTIFIED BY:

Emmanuel Eseme , Ph.D. Quality Control Coordinator

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 Results

Activation Laboratories Ltd.

Analyte Symbol	Au	Ag	As	Ва	Br	Ca	Co	Cr	Cs	Fe	Hf	Hg	lr	Мо	Na	Ni	Rb	Sb	Sc	Se	Sn	Sr	Та
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	%	%	ppm
Lower Limit	5	5	2	100	1	1	5	10	2	0.02	1	1	5	5	0.05	50	30	0.2	0.1	5	0.05	0.1	1
Method Code	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
1035319	258	< 5	< 2	200	1	< 1	6	140	< 2	2.15	< 1	< 1	< 5	< 5	0.22	< 50	< 30	< 0.2	2.0	< 5	< 0.05	< 0.1	< 1
1035320	1130	< 5	< 2	700	< 1	8	31	80	8	6.77	< 1	< 1	< 5	13	1.68	< 50	160	< 0.2	22.6	< 5	< 0.05	< 0.1	< 1
1035321	1410	< 5	< 2	800	< 1	< 1	15	110	< 2	3.49	3	< 1	< 5	< 5	1.48	< 50	150	< 0.2	6.4	< 5	< 0.05	< 0.1	< 1
1035322	586	< 5	< 2	600	< 1	< 1	20	80	< 2	4.41	2	< 1	< 5	19	1.17	< 50	150	< 0.2	6.2	< 5	< 0.05	< 0.1	< 1
1035323	612	< 5	< 2	700	< 1	< 1	16	200	< 2	3.82	2	< 1	< 5	< 5	1.29	< 50	180	< 0.2	9.5	< 5	< 0.05	< 0.1	< 1
1035324	12500	< 5	< 2	< 100	< 1	< 1	< 5	90	< 2	1.35	< 1	< 1	< 5	< 5	0.10	< 50	< 30	< 0.2	0.8	< 5	< 0.05	< 0.1	< 1
1035325	23500	< 5	< 2	< 100	< 1	< 1	< 5	130	< 2	1.24	< 1	< 1	< 5	< 5	< 0.05	< 50	< 30	< 0.2	0.2	< 5	< 0.05	< 0.1	< 1
1035326	3340	< 5	< 2	1000	< 1	< 1	< 5	50	2	3.39	5	< 1	< 5	< 5	2.74	< 50	240	< 0.2	8.2	< 5	< 0.05	< 0.1	< 1
1035327	2760	< 5	< 2	200	< 1	< 1	< 5	130	< 2	1.19	< 1	< 1	< 5	< 5	0.67	< 50	50	< 0.2	1.8	< 5	< 0.05	< 0.1	< 1
1035328	52	< 5	< 2	< 100	< 1	12	38	220	< 2	7.88	2	< 1	< 5	< 5	0.32	< 50	< 30	0.6	32.9	< 5	< 0.05	< 0.1	< 1
1035329	< 5	< 5	8	< 100	< 1	8	31	180	< 2	5.28	1	< 1	< 5	< 5	0.78	< 50	< 30	0.3	24.8	< 5	< 0.05	< 0.1	< 1

Results

Activation Laboratories Ltd.

Analyte Symbol	Th	U	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Yb	Lu	Mass
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g
Lower Limit	0.5	0.5	4	50	1	3	5	0.1	0.2	0.5	0.2	0.05	
Method Code	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
1035319	2.4	< 0.5	< 4	100	27	48	15	2.7	0.4	< 0.5	< 0.2	< 0.05	18.4
1035320	10.7	4.4	113	< 50	46	86	26	5.6	0.9	< 0.5	1.4	< 0.05	29.2
1035321	9.4	2.0	14	< 50	28	49	13	2.6	0.3	< 0.5	0.8	< 0.05	26.0
1035322	6.4	0.9	15	< 50	8	23	< 5	1.4	0.4	< 0.5	0.8	< 0.05	21.0
1035323	8.2	0.8	15	< 50	3	15	< 5	1.1	0.5	< 0.5	0.6	< 0.05	25.5
1035324	1.1	< 0.5	< 4	< 50	4	16	7	1.0	< 0.2	< 0.5	< 0.2	< 0.05	27.0
1035325	< 0.5	< 0.5	< 4	< 50	< 1	< 3	< 5	0.2	< 0.2	< 0.5	< 0.2	< 0.05	21.9
1035326	11.0	< 0.5	27	< 50	25	44	13	3.1	0.4	< 0.5	1.2	0.05	20.5
1035327	4.1	< 0.5	5	< 50	3	12	< 5	0.7	< 0.2	< 0.5	< 0.2	< 0.05	26.7
1035328	< 0.5	< 0.5	< 4	< 50	2	12	< 5	2.7	1.0	< 0.5	2.7	< 0.05	22.5
1035329	< 0.5	< 0.5	< 4	< 50	3	7	< 5	2.0	0.4	< 0.5	2.0	0.05	20.6

QC

Activation Laboratories Ltd.

Analyte Symbol	Au	Ag	As	Ва	Br	Ca	Co	Cr	Cs	Fe	Hf	Hg	lr	Мо	Na	Ni	Rb	Sb	Sc	Se	Sn	Sr	Та
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	%	%	ppm
Lower Limit	5	5	2	100	1	1	5	10	2	0.02	1	1	5	5	0.05	50	30	0.2	0.1	5	0.05	0.1	1
Method Code	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
DMMAS 122b Meas	770		1670	800			42	150		3.34					2.00			6.5	6.1				
DMMAS 122b Cert	715		1540	1260			40.2	136		3.42					1.92			6.41	5.95				
Method Blank	< 5	< 5	< 2	< 100	< 1	< 1	< 5	< 10	< 2	< 0.02	< 1	< 1	< 5	< 5	< 0.05	< 50	< 30	< 0.2	1.2	< 5	< 0.05	< 0.1	< 1
Method Blank	< 5	< 5	< 2	< 100	< 1	< 1	< 5	< 10	< 2	< 0.02	< 1	< 1	< 5	< 5	< 0.05	< 50	< 30	< 0.2	< 0.1	< 5	< 0.05	< 0.1	< 1

QC

#### Activation Laboratories Ltd.

Analyte Symbol	Th	U	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Yb	Lu	Mass
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g
Lower Limit	0.5	0.5	4	50	1	3	5	0.1	0.2	0.5	0.2	0.05	
Method Code	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
DMMAS 122b Meas		13.2			17	33		2.5					
DMMAS 122b Cert		11.6			16.5	33.0		2.71					
Method Blank	< 0.5	< 0.5	< 4	< 50	< 1	< 3	< 5	0.3	< 0.2	< 0.5	< 0.2	< 0.05	1.00
Method Blank	< 0.5	< 0.5	< 4	< 50	< 1	< 3	< 5	< 0.1	< 0.2	< 0.5	< 0.2	< 0.05	30.0

**APPENDIX 2** 

Actlabs

Certificate of Analysis sand Assay Results

July 24, 2020

Quality Analysis ...



### Innovative Technologies

Report No.:A20-06740Report Date:24-Jul-20Date Submitted:25-Jun-20Your Reference:25-Jun-20

George Zebruck 1349 Airport Road Kenora Ontario Canada

ATTN: George Zebruck

# **CERTIFICATE OF ANALYSIS**

8 Rock samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
1D	QOP INAAGEO (INAA)	2020-07-22 11:04:46

#### REPORT A20-06740

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Notes:

For values exceeding the upper limits we recommend assays.

Footnote: INAA data may be suppressed due to high concentrations of some analytes.

CERTIFIED BY:

Emmanuel Eseme , Ph.D. Quality Control Coordinator

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Activation Laboratories Ltd.

Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hf	Hg	lr	Мо	Na	Ni	Rb	Sb	Sc	Se	Sn	Sr	Та
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	%	%	ppm
Lower Limit	5	5	2	100	1	1	5	10	2	0.02	1	1	5	5	0.05	50	30	0.2	0.1	5	0.05	0.1	1
Method Code	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
1035330	< 5	< 5	< 2	200	17	2	6	10	< 2	2.23	< 1	< 1	< 5	< 5	0.60	< 50	< 30	0.4	4.6	< 5	< 0.05	< 0.1	< 1
1035331	80	< 5	< 2	300	< 1	< 1	< 5	< 10	< 2	2.94	6	< 1	< 5	< 5	7.72	< 50	< 30	0.9	1.2	< 5	< 0.05	< 0.1	< 1
1035332	244	< 5	< 2	400	< 1	< 1	< 5	< 10	< 2	3.73	5	< 1	< 5	< 5	7.35	< 50	< 30	0.7	1.5	< 5	< 0.05	< 0.1	< 1
1035333	8930	< 5	< 2	< 100	< 1	< 1	7	20	< 2	5.09	3	< 1	< 5	6	5.29	< 50	< 30	4.7	4.0	< 5	< 0.05	< 0.1	< 1
1035334	36	< 5	3	600	< 1	< 1	< 5	< 10	< 2	1.63	6	< 1	< 5	< 5	6.45	< 50	< 30	0.8	0.6	< 5	< 0.05	< 0.1	< 1
1035335	760	< 5	< 2	< 100	< 1	< 1	7	< 10	< 2	3.34	9	3	< 5	8	7.48	< 50	< 30	0.5	2.3	< 5	< 0.05	< 0.1	< 1
1035336	11	< 5	< 2	< 100	< 1	3	28	30	< 2	7.04	< 1	< 1	< 5	< 5	0.12	< 50	< 30	0.3	10.1	< 5	< 0.05	< 0.1	< 1
1035337	1250	< 5	11	600	< 1	1	8	30	< 2	2.82	2	< 1	< 5	< 5	0.93	< 50	80	0.8	6.3	< 5	< 0.05	< 0.1	< 1

Results

Activation Laboratories Ltd.

Analyte Symbol	Th	U	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Yb	Lu	Mass
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g
Lower Limit	0.5	0.5	4	50	1	3	5	0.1	0.2	0.5	0.2	0.05	
Method Code	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
1035330	1.0	< 0.5	< 4	< 50	6	13	< 5	1.2	0.4	< 0.5	0.6	< 0.05	36.3
1035331	20.5	3.0	< 4	< 50	77	156	18	5.3	0.9	< 0.5	1.1	0.07	31.1
1035332	18.1	4.0	< 4	< 50	51	95	17	4.3	0.4	< 0.5	1.1	0.09	32.2
1035333	26.8	2.0	13	920	72	136	39	6.4	1.3	< 0.5	1.1	0.05	33.6
1035334	13.8	1.2	< 4	< 50	31	58	8	2.9	0.4	< 0.5	0.9	0.06	30.3
1035335	49.1	3.8	8	< 50	210	479	85	14.1	2.7	< 0.5	0.8	0.10	32.2
1035336	< 0.5	< 0.5	< 4	110	< 1	< 3	< 5	0.2	< 0.2	< 0.5	0.4	< 0.05	30.5
1035337	7.2	1.3	63	< 50	6	14	7	1.0	< 0.2	< 0.5	0.5	< 0.05	29.8

QC

Activation Laboratories Ltd.

Analyte Symbol	Au	Ag	As	Ва	Br	Ca	Co	Cr	Cs	Fe	Hf	Hg	lr	Мо	Na	Ni	Rb	Sb	Sc	Se	Sn	Sr	Та
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	%	%	ppm
Lower Limit	5	5	2	100	1	1	5	10	2	0.02	1	1	5	5	0.05	50	30	0.2	0.1	5	0.05	0.1	1
Method Code	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
DMMAS 122b Meas	761		1580	1000			44	130		3.43					2.10			6.1	6.2				
DMMAS 122b Cert	715		1540	1260			40.2	136		3.42					1.92			6.41	5.95				
Method Blank	< 5	< 5	< 2	< 100	< 1	< 1	< 5	< 10	< 2	< 0.02	< 1	< 1	< 5	< 5	< 0.05	< 50	< 30	< 0.2	< 0.1	< 5	< 0.05	< 0.1	< 1

QC

#### Activation Laboratories Ltd.

Analyte Symbol	Th	U	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Yb	Lu	Mass
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g
Lower Limit	0.5	0.5	4	50	1	3	5	0.1	0.2	0.5	0.2	0.05	
Method Code	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
DMMAS 122b Meas		11.2			17	32		2.6					
DMMAS 122b Cert		11.6			16.5	33.0		2.71					
Method Blank	< 0.5	< 0.5	< 4	< 50	< 1	< 3	< 5	< 0.1	< 0.2	< 0.5	< 0.2	< 0.05	30.0

### Grass Roots Prospecting – Black Sturgeon Property 2019 & 2020

## Statement of Expenditures

<u>Date</u>	Prospector	Activity Details	<u>Amount</u>			
31/10/2019	G. Zebruck	Prospecting – Inspect, GPS location of old workings				
		sampling 1 day @ \$ 400/day	\$ 400			
	R. Zebruck	Prospecting – Inspect, GPS location of old workings				
		Sampling 1 day @ \$ 400/day	\$ 400			
17/11/2019	G. Zebruck	Sample prep – examine, create sample record, package				
		½ day @ \$ 200	\$ 200			
19/12/2019	G. Zebruck	Deliver samples to Actlabs in Dryden				
		½ day @ \$ 200	\$ 200			
24/01/2020	Actlabs	Invoice A19-17436 \$462.40 8 of 11 samples =	\$ 336			
11/06/2020	G. Zebruck	Prospecting north pipeline area & Pogson vein				
		1 day @ \$ 400/day	\$ 400			
	R. Zebruck	Prospecting north pipeline area & Pogson vein				
		1 day @ \$ 400/day	\$ 400			
17/06/2020	R. Zebruck	One Call dig request to Trans Canada Pipelines,				
		Bell Canada and Hydro one 🛛 ½ day @ \$ 200/day	\$ 200			
11/07/2020	R. Zebruck	Set out locate stakes and marked sampling locations				
		on north pipeline ½ day @ \$ 200/day	\$ 200			
24/07/2020	Actlabs	Invoice A20-06740 \$336.29 1 of 8 samples =	\$ 42			
20/08/2020	G. Zebruck	Visit sampling site w/Trans Canada Pipeline Rep.				
		For permission to dig ½ day @ \$ 200/day	\$ 200			
28/01/2021 to 03/02/2021		G. Zebruck Report 4 days @ \$ 400/day	\$1,600			

Mileage

4 trips to the property 4 x 15 km =	60 km.	
1 trip to Actlabs Dryden	<u>285 km.</u>	
Total	345 km. @ \$.50/km.	<u>\$ 173</u>

Total \$4,751

**Note:** Expenditures for Grass Roots Prospecting above have not been doubled