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Technical Report on a 2017 Geological and Geochemical

Survey on the Hodgson

Swain Lake Gold / Base Metal Prospect

Shabumeni Lake Area (G-1881)

Red Lake Mining Division

North-western Ontario

NTS 52 N 7 SE

UTM Zone 15 530000 E 5683000 N



January 1, 2018

Rand Hodgson, B.Sc., B.Ed. Geologist

Table of Contents

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Page #

Work Done2
Summary2
Location Map3
Detailed Location Map4
Claim Location Map5
Introduction6
Property Description6
Topography and Drainage7
Property Exploration History8
Regional Geology9
Property Geology9
Mineralization11
Conclusions and Recommendations12
References13
Statement of Qualifications15
Appendix I - Detailed Map of North Showing
Appendix II - Sample Locations and Descriptions
Appendix III - Daily Report of Work Done
Appendix IV - Assay Certificates
Appendix V - Geology and Sample Location Map- Scale 1: 4000



Work Done

- 2 man days researching past work done in MNDM files
- 8 man days preparation and travel
- 8 man days prospecting on 100 meter line spacing
- 8 man days detailed mapping of North and Hodgson Showings
- 6 man days stripping/trenching the North and Hodgson showings

Summary of Work Done

The Shabumeni Township 2017 project carried out detailed mapping, prospecting, ang geochemical sampling on claim group #4279618. The main objective was to re-locate and determine the exact location of the historical North and Hodgson showings using GPS technology. These historical showings were re-sampled for confirmation and the North showing was detail mapped on a scale of 1: 250. The area in the vicinity of the Grace Lake Deformation Zone (GLDZ) was prospected on the western half of the property.

The prospecting confirmed these occurrences, widened the GLDZ from 450 to 600 meters, and increased the maximum grab sample assay on the North Showing to 58.6 gpt Au. (previous known maximum 18 gpt Au. taken by Fronteer Minerals)







Introduction

This report describes the survey carried out on the 15 claim unit group # 4279618 located on Shabumeni Lake Area sheet (G-1881), Red Lake Mining Division, in north-western Ontario. The survey was carried out June 30 - July 12, 2017, by Rand Hodgson and Roland Hodgson, both of 287 Swanston Ave., Peterborough, On. It was carried out using combined pace and compass traversing supplemented by GPS location technology. Traverse lines were directed north-south with 100 meter separation. Twenty-eight rock samples were analysed for gold using routine fire assay methodology. Ten select samples were subject to whole rock analysis. The analytical work was done by Activation Labs of Thunder Bay. Results are submitted in the appendix of the report and are located on the base map (1:4000). Samples are GPS located in the appendix. All coordinates are from UTM Zone 15.

Property Description, Location and Access

The property is referred to the "Guest Prospect" in government publication and assessment reports. It is located at the north-eastern edge of Swain Lake in Shabumeni Lake Area. Swain lake is located approximately 90 kilometers north-east of the town of Red Lake. Access is by float equipped aircraft or by boat through the Woman Lake water route which can be accessed by road from the town of Ear Falls. A winter road from Ear Falls passes within a few hundred meters of the western edge of the claims. Claims are registered in the name of Rand Hodgson- claim # 4279618.

Topography and Drainage

The claim group encompasse mixed low to moderate topography with a general rise in elevation of about 15-30 meters from south to north. Outcrop exposure is good (30-40%) and dispersed uniformly across the property with moderately increased exposure in the higher northern part. There are several small ponds and creeks which drain into Swain Lake to the west and Bobarris Lake to the east.

Property Exploration History

Known as the Guest Property, the history is taken from O.F.R. # 5835 by Parker and Atkinson -O.G.S. publication, 1992, page 308 :

-1965- Staked by A. Guest and optioned to Asarco of Canada. Ground mag., EM., and I.P. surveys carried out. Also 12 shallow holes drilled totalling 160 meters.

-1969- Vanco Exploration of Ontario flew airborne magnetic,

electromagnetic, and gamma ray spectrometer surveys with follow-up ground mag and self-potential surveys.

-1974- St. Joe Exploration Ltd. drilled 3 holes totalling 556 meters on claims KRL 368576 and 368567.

-1983- Labrador Exploration (Ontario) Ltd. staked the Guest Property which they referred to as the "Signal" claim group.

The company carried out mag and horizontal loop surveys and drilled 2 holes-total length 264 meters.

-1987- Exploreco Properties Inc. conducted ground geophysics and soil and humus geochem. surveys. Numerous conductors and soil anomalies identified, no follow-up drilling.

-1989- Noranda Exploration- Prospecting and geochem. Surveys.

-1991- Staked by D. Smith. Prospecting and VLF-EM surveys carried out by Rand Hodgson.

 - 2001-staked by P. English and optioned to Fronteer Development Group.
Joint venture with Red Lake Resources carried out extensive AEM (Aerodat) helicopter survey, also geology and geochemistry surveys.
Numerous geochem. Anomalies identified. Two drill targets identified but not drilled.

Regional Geology

All bedrock is Early Precambrian in age, part of the Birch/Uchi Lakes metavolcanic greenstone belt. A major north-east trending deformation zone, the Swain Lake Deformation Zone, passes close to the north-west corner of the property. The secondary Grace Lake Deformation Zone (GLDZ)splays off of the SLDZ and passes eastward over the claims.

Property Geology

The property covers the GLDZ which transects the claims in a south-easterly direction. It's thickness ranges between 400 and 600 meters and is generally foliated in the same direction. Geological mapping indicates that the property is underlain by east trending felsic-intermediate volcaniclastics in the north part and are in contact with mafic flows to the south. The Swain Lake stock, consisting of fine to medium grained monzonite has intruded the volcanics at the east end of Swain Lake.Several small intrusions of fine grained diorite have been mapped in the eastern and southern part of the property. Thick layers of oxide and sulfide iron formation are intercalated with the chlorite schists within the GLDZ. Polymictic conglomerate is exposed on the north side of Bobarris Lake. The metavolcanic rocks on the property are part of the Cycle III sequence described by P.C.Thurston - OGS Map P-2387, 1981.

There is strong evidence to suggest the presence of a north-east trending thrust fault which passes through the lake centred on 529900 E

5683350 N. At the south-west edge of the lake there are several occurrences of fault breccia with ankerite, biotite, and epidote. Also at this location on the shoreline is an outcrop of feldspar crystal lapilli tuff which is specifically diagnostic of the felsic pyroclastic unit normally found 150 meters to the north. This would explain the apparent discontinuity of the iron formation unit.

The felsic pyroclastic unit is very distinct and consistent. The textures are white feldspar crystal tuffs, lapilli tuffs, and agglomerates. Sericitic alteration is common, which becomes pervasive as the unit grades into the sericitic shear zone on the south side of Bobarris Lake.

Mineralization

The GLDZ exhibits strong shearing and consists of intercalated chert, oxide and sulfide iron formation, and chlorite schist. It contains pods, lenses and stringers of pyrite, chalcopyrite, and minor sphalerite with associated sericite, carbonate, arsenopyrite, silver, and gold.

There are upwards of thirty or more separate gold occurrences located within the boundaries of the property. The South showing is known to assay between 2-4% Cu. across 2 meters and up to 6 gpt Au. in grab samples. Noranda reported a channel sample of 2 gpt Au. across 2 meters. The South showing was not sampled.

Drilling in the vicinity of the North showing (529455 E 5683451 N) by St.Joe Exploration indicated 2.5 gpt Au. across 2 meters. Channel sampling at the Hodgson showing (529976 E 5683553 N) by Hodgson in 1992 indicated 2 gpt Au. across 8 meters.

Fronteer Development Group reported 2.55 gpt Au. across 1.7 meters from the Bobarris showing. Numerous other distinct and separate gold values upwards of 1 gpt occur within and adjacent to the GLDZ on this property- most of them identified on the 1:4000 geology map in this report.

Rock samples taken during this survey have confirmed the presence of gold at the North showing (58.6 gpt Au.) and the Hodgson showing (4.2 gpt Au.) No channel samples were taken.

Conclusions and Recommendations

The Swain Lake claims are highly prospective for polymetallic vein and massive sulfide type deposits for the following reasons:

- Consistently high gold values (up to 0.3 gpt Au.) in soil in several locations.
- The presence of the GLDZ and intersecting cross faults containing economic grade gold mineralization across widths up to 8 metres.
- 3) Several unexplained V.L.F EM and I.P. conductors, some of which are co-incident with surface mineralization.
- 4) Several drill targets readily identifiable- including two already identified and not drilled by Fronteer Development Group. (reference # 9)

References

pg.13

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- 2) Beakhouse, G.P., 1989, Precambrian Geology of the Western Birch Lake Area, Ontario Geological Survey (OGS) Map P3118
- Devaney, J.R., 2001, Stratigraphy of Epiclastic and Volcanoclastic facies units, Northern Birch-Uchi Subprovince, OGS Open File Report (OFR) 6030
- 4) Gray, R.S. 1966, Asarco Exploration of Canada report on geology, ground I.P., Vertical Loop geophysics- 52N07SE0064
- Hlava, M., 1974 St. Joe Exploration-diamond drill logs -Assessment files- Red Lake, On.
- 6) Hodges, D., 1989. Report of the Geology and Geochemistry of the Grace Lake, Hodgson option- for Falconbridge Ltd.- 52N07SE0006
- 7) Hodgson, R., 1992, Geological Report on the Swain Lake Gold/Base Metal Prospect- Assessment files-Red Lake On.
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- Klatt. H.M. 2003, Geotechnical Report on the Swain E.,Sol D'Or, and Grace Properties for Fronteer Development Group and Red Lake Resources.-52N08SW002
- 10) Nicholls, E.B., 1966, Geophysical Report on the Swain Lake property of Asarco Exploration-Assessment files-Red Lake, On.
- 11) Parker, J.R., and Atkinson, B.T., 1992, Gold Occurrences of the Birch-Confederation Lakes Area, OGS OFR 5835

12) Stott,G,M.,and Corfu,F. 1992, Uchi Subprovince Chapter 6 in Geology of Ontario, Special volume 4 part 1 pg. 145-238 MNDM

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13) Thurston, P.C., 1981- Geology of the Birch Lake Area OGS Map P-2387

Statement of Qualifications

I, Rand Hodgson , of 287 Swanston Ave. Peterborough Ont., do hereby state –

1) That I have been a consulting geologist practicing my profession from the above address since 2001, and have been actively engaged in mineral exploration since 1977.

2) That I hold a B. Sc. In geology from the University of Waterloo (1977)

3) That I am the author of the report on the Crowder Maun Lake claims, and that I personally supervised and carried out the field program.

4) That the data contained in the report is true to the best of my knowledge.

Respectfully submitted,

Rand G Hodgson, B.Sc., B.Ed.

Date of Signature:

Dec. 24/17



Appendix 2

Sample Locations and Descriptions - all locations from UTM zone 15

- 1. 521202 E 5682691 N no description
- 2. 529334 E 5683461 N iron formation, 10% py., as.
- 3. 529477 E 5683458 N banded iron formation, 10% py.
- 4. Same
- 5. 529469 E 5683418 N 30 cm. thick massive py. In chlorite schist
- 6. Same

7. 529455 E 5683431 N - narrow (15 cm.) quartz vein, strongly magnetic, 5% cpy.

- 8. Same
- 9. Same
- 10.Same
- 11. 529458 E 5683418 N chlorite schist, 5-10 %, locally massive py.
- 12. Same
- 13. Same
- 14. 529458 E 5683415 N massive py. in chlorite schist
- 15. 529673 E 5683400 N coarse grained chlorite schist, semi massive py.
- 16. 529359 E 5683417 N chlorite schist, massive py., iron formation -from old pit
- 17. 529473 E 5683400 N chert, 10% py.
- 18. Same location dacite, 10% py.

19. Same

- 20. Same location massive py.
- 21. 529554 E 5683428 N mafic volcanic,10% py.
- 22. 529482 E 5683454 N massive py., in banded iron formation
- 23. 529458 E 5683444 N narrow (10 cm.) quartz vein, 10% cpy.
- 24. Same location host chlorite schist
- 25. 529979 E 5683552 N chert fragments in 15 cm. Quartz vein, 2% py. Ser.
- 26. 529979 E 5683554 N quartz sericite schist 5% py.
- 27. 529980 E 5683556 N Quartz sericite schist 10% py.
- 28. 529981 E 568 3560 N Quartz sericite schist 10% py.

Appendix 3

Daily Report of Work Log - Claim # 4279618 - June-July 2017

- June 25 Mobilize
- June 26 drive to Sault St. Marie
- June 27 drive to Thunder Bay
- June 28 shop for supplies, meet with Garry Clark- O.E.C. office- O.P.A.- on to Dryden.
- June 29 supplies, drive to Woman Lake landing, boat to Swain Post Camp.
- June 30 check and confirm contractor staking. Prospecting
- July 01 prospecting west of the North Showing
- July 02 locate North Showing- prospecting, mapping
- July 03 stripping, trenching North Showing
- July 04 stripping, trenching North Showing
- July 05 stripping, trenching North Showing
- July 06 mapping, sampling North Showing
- July 07 mapping, sampling North Showing
- July 08 prospecting east and south- east of South Showing
- July 09 staking
- July 10 prospecting east and north of North Showing
- July 11 prospecting west of Hodgson Showing
- July 12 trenching, sampling Hodgson Showing.
- July 13 travel to Thunder Bay
- July 14 demobilize equipment, air transport to Toronto.

Appendix IV - ASSAYS + ASSAY ACTIONS Innovative Technology Kecepts

Quality Analysis ...

Innovative Technologies

Date Submitted: 13-Jul-17 Invoice No.: A17-07149 Invoice Date: 25-Jul-17 Your Reference:

Rand Hodgson 287 Swanston Avenue Peterborough Ontario Canada

ATTN: Rand Hodgson

CERTIFICATE OF ANALYSIS

36 Rock samples were submitted for analysis.

The following analytical package(s) were requested:

Code 1A2-Tbay Au - Fire Assay AA (QOP Fire Assay Tbay) Code 1A3-Tbay Au - Fire Assay Gravimetric (QOP Fire Assay Tbay)





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CERTIFIED BY:

Emmanuel Eseme, Ph.D. **Quality Control**

ACTIVATION LABORATORIES LTD.

1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X6 TELEPHONE +807 622-6707 or +1.888.228.5227 FAX +1.905.648.9613 E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Report Number: A17-07149		
Report Date: 25/7/2017	******	¢•••••••••••••••••••••••••••••••••••••
Analyte Symbol	Au	Au
Unit Symbol	daa	a/tonne
Detection Limit	5	0.03
Analysis Method	FA-AA	FA-GRA
01	17	
02	55	**************************************
03	76	
04	35	
05	168	
06	947	1
07	> 5000	11 /
08	> 5000	10.4
09	> 5000	10.4
10	> 5000	F0.6
11	- 0000 045	0.00
10	215	
12	394	
14	3/4	
14	1040	
10	149	
10	689	
17	5	
18	14	
19	59	
20	93	
21	86	
22	71	
23	> 5000	10.2
24	239	
25	1230	
26	839	
27	738	
28	4240	
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34	< 5	>YYNN
35	8	Oranew
36	8	

Quality Analysis ...



Innovative Technologies

Date Submitted: Invoice No.: Invoice Date: Your Reference:

13-Jul-17 A17-07149 (i) 10-Oct-17

Rand Hodgson 287 Swanston Avenue Peterborough Ontario Canada

ATTN: Rand Hodgson

36 Rock samples were submitted for analysis.

The following analytical package(s) were requested:

Code 1A2-Tbay Au - Fire Assay AA(QOP Fire Assay Tbay) Code 1A3-Tbay Au - Fire Assay Gravimetric (QOP Fire Assay Tbay)

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REPORT A17-07149 (i)

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CERTIFICATE OF ANALY

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY:

X

Emmanuel Eseme , Ph.D. Quality Control

X

ACTIVATION LABORATORIES LTD.

1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X6 TELEPHONE +807 622-6707 or +1.888.228.5227 FAX +1.905.648.9613 E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com Kesults

Activation Laboratories Ltd.

Keport: A1/-U/149

	Analyte Symbol	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	AI	As	В	Ва	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
	06	1.7	0.8	1430	255	133	15	8	31	1.03	372	< 10	12	< 0.5	33	0.03	35	1	> 30.0	10	1	0.02	< 10	0.46
×	10	87.8	< 0.5	6660	564	24	_ 38	101	52	0.78	102	< 10	34	0.5	1010	2.82	45	16	12.9	< 10	. 7	0.08	< 10	0.72
	12	11.8	< 0.5	4870	441	6	61	4	143	2.99	238	< 10	19	< 0.5	30	0.77	212	18	13.7	20	2	0.16	14	2.34
	14	20.5	< 0.5	> 10000	393	20	43	5	173	2.47	47	< 10	93	< 0.5	68	1.12	64	44	8.85	10	2	0.26	32	1.77
	16	6.5	< 0.5	> 10000	725	9	3	3	72	1.96	185	< 10	54	< 0.5	12	1.08	101	4	10.3	10	4	0.19	11	1.34
×	23	45.4	< 0.5	> 10000	482	27	53	26	92	1.02	143	< 10	34	0.8	257	2.34	95	19	13.5	< 10	3	0.09	< 10	0.81
	25	0.6	< 0.5	47	1170	5	18	8	67	0.24	125	< 10	22	< 0.5	< 2	5.92	12	11	5.00	< 10	< 1	0.13	< 10	2.40
	26	0.3	< 0.5	30	790	2	20	13	51	0.29	126	< 10	19	< 0.5	< 2	5.75	9	18	3.17	< 10	< 1	0.15	< 10	1.40
	27	0.4	< 0.5	22	809	2	21	11	45	0.31	128	< 10	21	< 0.5	3	5.27	9	18	3.21	< 10	< 1	0.17	< 10	1.32
	28	2.0	< 0.5	70	890	2	45	9	51	0.37	474	< 10	26	< 0.5	3	4.76	21	15	5.34	< 10	< 1	0.23	< 10	1.57

10 samples selected for whole rock

Page 2/5

