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# Technical Report on a Prospecting and Geochemical Sampling Survey on the Seagram Lake Claims, McBean Lake Area, Northwestern Ontario.

**Thunder Bay Mining Division** 

NTS 42E10H UTM Zone 16 535500 E 5499000 N Author: Rand Hodgson Bsc., B.Ed. December 10, 2018

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# **Summary of Work Done**

- -2 man days compilation of past work done- MNDM Assessment files
- -18 man days prospecting/sampling on north-south pace and compass grid ( 100 meter line spacing )
- -2 man days trenching/sampling at location 534600 E 5499450 N

# **Summary**

The Seagram Lake Claims 2018 prospecting program carried out detailed prospecting, mapping, and geochemical rock assaying. The main objective was to locate, prospect, and sample any exposures of anomalous sulphide mineralization associated with the Barton Bay Deformation Zone (BBDZ) which is known to transect the property- as well as any other mineralization found. Mineralization associated with the BBDZ was found in 3 locations- in the form of sulphide iron formation with associated quartz-sulphides. Elsewhere on the property, only background levels of sulphide mineralization was evident. Nineteen rock samples were assayed for gold. None were anomalous above 100 ppb.

#### Introduction

This report describes a prospecting and geochemical sampling survey carried out on a 290 hectare block of MLAS claims located on the west side of Seagram Lake in McBean Lake Area, the east side of the claim block in the Laponen Lake Area, Thunder Bay Mining Division, in northwestern Ontario. The survey was carried out during the months of July and August, 2018, by Rand Hodgson and Roland Hodgson, both residing at 287 Swanston Ave., Peterborough, Ontario. It was carried out using pace and compass traversing with GPS support. Traverse lines were directed northsouth, with 100 meter separation. Nineteen rock samples were analyzed for gold using routine fire assay methodology. The assayer used was SGS Minerals- Lakefield, Ontario. Results are included in the index of this report and are located on the base map (1:5000). Samples are described and GPS located- all coordinates from UTM Zone 16.

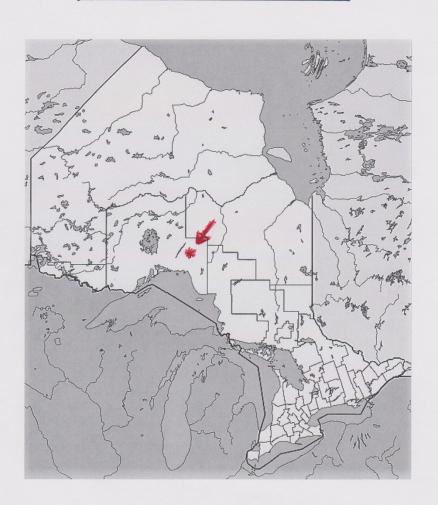
# **Property Description, Location, and Access**

The claim group is situated approximately 22 kilometers due south of the town of Longlac. Access is by the Catlonite Road which routes south from Longlac and onto the property. Access on the property is excellent due to the presence of old logging roads throughout. The property consists of a single block of 14 MLAS cell claims and 2 MLAS boundary claims centred on UTM 535500 E, 5499000 N. The claims are registered in the name of Rand Hodgson, CLN # 145101, 287 Swanston Ave., Peterborough, On. Claim registration numbers: 312586, 201990, 157366, 305775, 172034, 222055, 257137, 334726, 334727, 239829, 239828, 157378, 143294, 112397, 257140, and 258028.

Provincial cell #'s – 42E10H098, 42E10H099, 42E10H100, 42E10H118, 42E10H119, 42E10H120, 42E10H138, 42E10139, 42E10H140, 42E10H158, 42E10H159, 42E10H160, 42E09E081, 42E09E101, 42E09E121, and 42E09E141.

figure I

# ONTARIO BASE MAP



SEAGRAM LAKE CLAIMS LOCATION MAP Map Notes: figure I REGIONAL CLAIMS LOCATION

Date / Time of Issue: Sun Nov 25, 09:54:59 EST 2018

# Ontario

Ontario Ministry of Northern Development and Mines Mining Lands Tenure Map

#### Administrative Districts

Township

#### MCBEAN LAKE AREA

Mining Division
Thunder Bay

Land Registry
THUNDER BAY

MNRF District Office

Nipigon



Scale: 1:40,000

Map Datum: NAD 83 Projection: Web Mercator

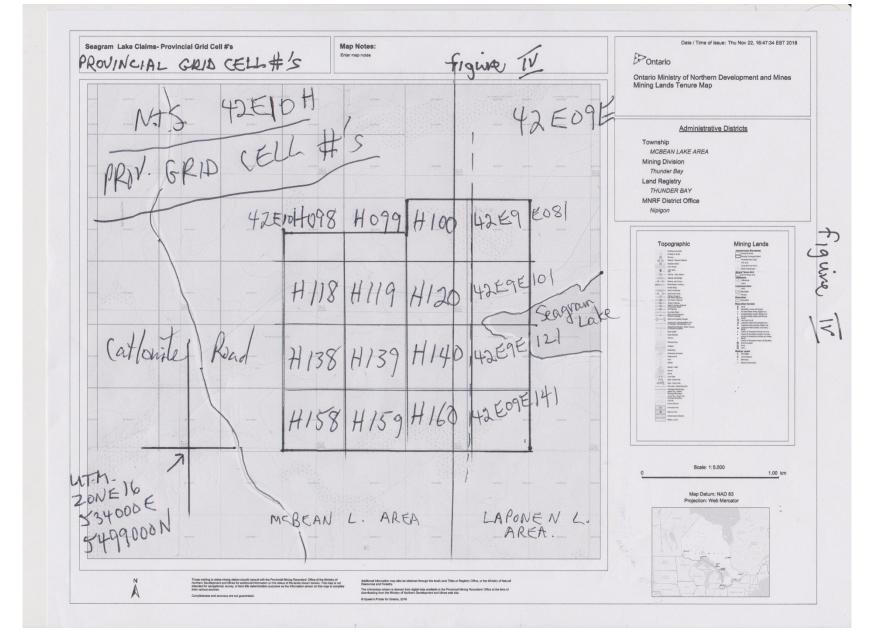


Those waining to take intering claims should consult with the Provinces Making Reposter Office of the Menting of Northern Development and Misses for additional information in the situat of the interior size site and the contraction of the co

Additional information may also be obtained through the local Land Titles or Registry Office, or the Ministry of Natur Resources and Forestity.

The information shown is derived from digital data available in the Provincial Mining Recorders' Office at the time of downloading from the Ministry of Northern Development and Mines web site.

Date / Time of Issue: Sun Nov 25, 10:19:36 EST 2018 SEAGRAM LAKE PROVINCIAL GRID AND AND CLAIM NUMBERS Map Notes: figure III Ontario CLAIMS LOCTION ON PROVINCIAL GRID Ontario Ministry of Northern Development and Mines Mining Lands Tenure Map Administrative Districts Township MCBEAN LAKE AREA Mining Division Thunder Bay Land Registry THUNDER BAY MNRF District Office Nipigon Topographic figure | March | Marc Scale: 1:5,000 1.00 km Map Datum: NAD 83 Projection: Web Mercator



# **Topography and Drainage**

This claim group is situated on relatively flat ground which rises moderately westbound from Seagram Lake. Maximum elevation change on the entire property would be less than 20 meters. Both the north and south claim boundaries are entirely covered by extensive swamps which encroach and cover much of the northeastern and southeastern quadrants of the group. At least 4 creeks drain these swamps westward -off the property and across the Catlonite road. Swamp and overburden are found along the fringes of all 4 of these creeks. Outcrop is restricted to 2 main east-west trending ridges-one on each side of the main logging road which transects the property in an easterly direction-see map. The total outcrop exposure on the property is estimated to be only about 10-15 % - concentrated in the vicinity of the two ridges, leaving 80-85 % of the property without rock exposure.

# **Exploration History**

Gold was discovered in the Geraldton area in 1931. The discovery initiated a staking rush which resulted in many occurrences being discovered. A second wave of staking occurred in the 1980's, resulting in the reevaluation of many known occurrences and some new discoveries. No mining activity has taken place in the claims area. The Geraldton camp, however, lies along strike just west of the McBean Lake Area and it produced over 3 million ounces of gold and 240 thousand ounces of silver between 1934 and 1970. The Theresa Mine, located immediately northwest of the claims area, produced 4785 ounces of gold and 202 ounces of silver during intermittent activity from 1935-1955. The mine was dewatered in 1987 by Duration Mines but no further work was carried out. Currently, a new open pit deposit has been delineated at the south end of Geraldton at the Highway 11 intersection. Referred to as the "Hardrock

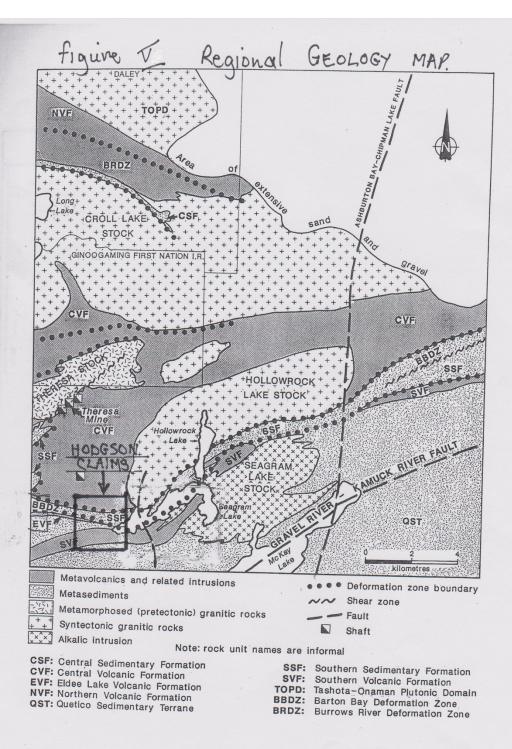
Mine", it is estimated to contain upwards of 7 million ounces Au. and is being developed by Greenstone Gold Mines Ltd.

Recent activity in the vicinity of the claims includes an extensive combined gold- in- till and reverse circulation drilling program carried out by the Northwest Company in 2011. It was a regionally extensive program which targeted magnetic anomalies associated with the Barton Bay Deformation Zone- a suite of volcano-sedimentary rocks which host the vast majority of gold occurrences in the camp and which extends all the way eastward, through the McBean Lake Area- including under the Seagram Lake claim group. Although a few anomalous results were obtained, none were found on or near the Seagram Lake claims. No other assessment work has been recorded on these claims.

Regional Geology- from OGS Report 273-Northern Longlac Area, pg. 6

The Beardmore-Geraldton-Longlac belt consists of a series of repetitive east trending mafic metavolcanic and metasedimentary units; the repetitive character of the units is believed to represent an imbricated stack of thrust slices from a mafic volcanic-sedimentary sequence. This north facing techno-stratigraphic succession has been subdivided into 3 volcanic-sedimentary unit pairs, referred to as the Northern, Central, and Southern Volcanic and Sedimentary Units. -see map taken from pg. 6 of ODM Report 273. (figure V)

East of Long Lake, two fault related deformation zones have been recognised as extending from the Geraldton area. These are the Barton Bay Deformation Zone (BBDZ) and the Burrows River Fault. The BBDZ has been been described as a series of shear zones with intervening areas of less deformed rocks, mainly clastic sediments and associated iron



formation varying in thickness up to 5 kilometers wide. The BBDZ underlies the north half of the claim group where it maintains a thickness of about 500 meters.

# **Property Geology**

The northern half of the property is underlain by an east-southeasterly sequence of clastic sediments associated with the Southern Sedimentary Formation (Unit). The south half is underlain by the Southern Volcanic Unit which strikes east-northeast and is manifested primarily as mafic pillow lavas. These two dominant lithologies converge at the west end of Seagram Lake where the actual contact can be closely inferred. Further west on the claims, the contact is under overburden.

Evidence of the BBDZ within the sedimentary unit is manifested by the presence of a series of thin (less than 10 cm.) sulphide iron formation

beds and associated thin concordant quartz veins-with pyrite. This iron formation/quartz-vein series transects the full length of the northern part of the property from west to east and has been identified in several location with a thickness up to about 50 meters.

Mafic intrusive rocks-mainly gabbro- are commonly exposed throughout both the sediments and the volcanics and do not appear to be concentrated into any major lithological unit which can be identified.

A small lense of mafic volcanics is identified within the sediments on claim 222055 seems to continue toward the west, appearing in outcrop again just west of the claim group at 524600E 5499450N in a trench/pit containing quartz veins with pyrite.

#### **Mineralization**

Elevated levels of sulphide mineralization was evident in several locations within the clastic sediments, primarily associated with the iron formation sequence. The volcanic lavas in the south half of the property were generally barren. Only 4 out of the 19 samples assayed were taken from the volcanics. The rest were from sediments, iron formation, or gabbro. Old trenches were identified in 2 locations- 534500E 5499500N and 536760E 5499450N. Samples were taken from quartz veins and accompanying schist material from both of these locations as well as several other locations within the sediments. None of the samples assayed identified anomalous levels of gold. The highest was 93 parts per billion.

#### **Conclusions and Recommendations**

Although the BBDZ has been identified on the property- manifested by the sulphide iron formation- quartz vein sequence, the assay results infer a dearth of anomalous gold mineralization. This evidence is supported by extensive gold-in-till and reverse circulation drilling surveys carried out by the Northwest Company in 2010. This was an extensive regional survey which appeared to target the BBDZ horizon both in the vicinity of the claims as well as several kilometers to the north-east. Although several gold anomalies were identified in both till and bedrock, none were in the vicinity of the Seagram Lake claims.

Outside of the narrow iron formation exposures, only very low to background levels of sulphide mineralization were identified. No further work is recommended on these claims.

## References

- -Barrett, T.J. and Fralick, P.W. 1989, Turbidites and iron formations, Beardmore-Geraldton.
- -Fitzpatrick, Dennis, 2011, Pagwachuan Property Work Report for Northwest Company, MNDM Assessment Work files. NTS 42E/09
- -Kresz, D.U., and Zayachivsky, B.,1991, Geology of the Seagram Lake Area; OFR Report 5802.
- -Kresz, D.U., and Zayachivsky, B., 1991, Precambrian Geology of the Northern Long Lake Area. OGS Report 273.
- -Macdonald, A.J., 1988, The Geraldton Gold Camp: The Role of Banded Iron Formation, OFR 5694.
- -Mason, J. and White, G., 1986, Gold Occurrences, Prospects, and Deposits of the Beardmore-Geraldton Area. OFR 5630.

# **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 Strong Lake claims Maun Lake Area, 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.

Rand Hodgson

B.Sc., B.Ed., December, 2018

#### Appendix I

# Seagram Lake Group Daily Log of Work Done

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- July 19/2018- Prospecting/mapping west and south of Seagram Lake on claims 257137, 239828, 157378. Samples 1-4.
- July 20- Prospecting/mapping southeast quadrant- access by logging road off Catlonite Rd.
- July 21- Prospecting/mapping southwest quadrant- access off Catlonite Road
- July 22- Prospecting/mapping the trail to Seagram Lake and north side of road claim 334729.
- Aug. 19- Prospecting/mapping north of road on claims 201990, 222055, and 257137. Samples 8-13.
- Aug. 20- Prospecting/sampling trenches east of claim 305775. Samples 14-17.
- Aug. 21- Prospecting/mapping north of road on claims 312586,172034. Samples 18-
- Aug. 22- Trench clearing/sampling trenches west of claim 312586. Samples 20-23.
- Aug. 24- Prospecting/mapping Seagram Lake shoreline.
- Aug. 25- Prospecting south of road on claims 222055,257137, and 239828.
- Aug 27- travel to O'Sullivan Lodge

#### Appendix II

## Seagram Lake Group - Sample Location and Descriptions

- S1) 536052 E 5498820 N chlorite schist (volcanic) with quartz stringers, 10% pyrite
- S2) 536053 E 5498830 N mafic schist with quartz stringers
- S3) 536053 E 5498835 N gabbro with 5 % pyrite
- S4) 536214 E 5498606 N sericite schist with 10 % fine pyrite
- S5) N.S.
- S6) N.S.
- S7) N.S.
- S8) 535505 E 5499360 N sandstone schist
- S9) 535500 E 5499490 N greywacke schist
- S10) 535500 E 5499490 N sandstone schist 10% pyrite
- S11) 535380 E 5499440 N sulphide iron formation
- S12) same
- S13) 535380 E 5499440 N sandstone schist
- S14) 536762 E 5499450 N iron formation
- S15) same
- S16) 536762 E 5499418 N quartz vein with 10% pyrite from iron formation
- S17 same
- S18) 534923 E 5499207 N quartz vein, minor pyrite, in greywacke
- S19) 534910 E 5499422 N greywacke with minor bedded pyrite
- S20) 534556 E 5499442 N- Quartz vein, 15 cm. Diameter, 10-20% pyrite
- S21) same
- S22) 534556 E 5499442 N greywacke with 10-20% pyrite
- S23) same



# Certificate of Analysis Work Order: LK1802247

[Report File No.: 0000017288]

Date: October 17, 2018

To: Rand Hodgson P.O. No.: Seagram Lake
White Fish Expl Project No.: \_DEFAULT

COD SGS MINERALS - GEOCHEM LAKEFIELD Samples: 19

185 CONCESSION ST Received: Sep 13, 2018
PO BOX 4300 Pages: Page 1 to 2

LAKEFIELD ON K0L 2H0 (Inclusive of Cover Sheet)

#### **Methods Summary**

No. Of Samples Method Code Description

19 G\_WGH79 Weighing of samples and reporting of weights

19 G\_PRP89 Weigh, Dry, to 3kg, Crush 75% -2mm, Split to 250g, Pulverize to 85% -75µm

19 GE FAA313 @Au, FAS, AAS, 30g-5ml

Storage: Pulp & Reject

PULP STORAGE : DISCARD

#### **Comments:**

Assays not suitable for commercial exchange.

Certified By

Brett Pipher Project Coordinator

SGS Minerals Services (Lakefield) is accredited by Standards Council of Canada (SCC) and conforms to the requirements of ISO/IEC 17025 for specific tests as indicated on the scope of accreditation to be found at http://www.scc.ca/en/programs/lab/mineral.shtml

Report Footer: L.N.R. = Listed not received

I.S. = Insufficient Sample

n.a. = Not applicable

-- = No result

\*INF = Composition of this sample makes detection impossible by this method M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion

Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted

Elements marked with the @ symbol (e.g. @Cu) denote assays performed using accredited test methods

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Final: LK1802247 Order: Seagram Lake

Report File No.: 0000017288

Element	WtKg	@Au
Method	G WGH79	GE FAA313
Det.Lim.	0.001	GL_FAA313
Units	kg	ppb
Seagram Lake 01	0.537	8
Seagram Lake 02	0.638	<5
Seagram Lake 03	1.069	<5
Seagram Lake 04	0.957	58
Seagram Lake 08	0.771	11
Seagram Lake 09	1.378	93
Seagram Lake 10	1.683	40
Seagram Lake 11	1.105	<5
Seagram Lake 13	1.641	8
Seagram Lake 14	0.479	50
Seagram Lake 15	0.480	17
Seagram Lake 16	0.442	6
Seagram Lake 17	0.572	9
Seagram Lake 18	0.531	9
Seagram Lake 19	0.864	11
Seagram Lake 20	0.710	<5
Seagram Lake 21	1.021	<5
Seagram Lake 22	0.868	13
Seagram Lake 23	0.828	<5
*Std OREAS-503C		696
*BIK BLANK		<5
*Rep Seagram Lake 08		9

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