Ontario

We are committed to providing accessible customer service.
If you need accessible formats or communications supports, please contact us.

Nous tenons à améliorer l’accessibilité des services à la clientèle.
Si vous avez besoin de formats accessibles ou d’aide à la communication, veuillez nous contacter.

Geological Mapping, Prospecting and Sampling of Pacton Gold's Swain Property, NW Ontario.

November 5th, 2020

Presented to:

Pacton Gold Inc.

Presented By:

Andrew Tims, PGO

for

GoldSpot Discoveries Corp.

69 Yonge St, Suite 1010
Toronto, ON
M5E 1K3

Table of Contents

Introduction 3

1 Location and Access 5

2 Claims and Ownership 5

3 Previous Work 7

4 Regional Geology 11

5 Property Geology 15

6 Work Program 20

Daily Field Log 21

7 CONCLUSION AND RECOMMENDATIONS 28

Proposed Budget 28

8 SUMMARY OF EXPENSES 29

9 REFERENCES 30

STATEMENT OF QUALIFICATIONS 33

APPENDIX 1 – Outcrop Geology and Assay Maps 35

APPENDIX 2 – Analytical Certificates 36

APPENDIX 3 – Outcrop Data Spread 37

Table of Figures

Figure 1 - Location of Pacton's Swain Property 4
Figure 2 - Swain Property Claims..... 6
Figure 3 - Regional Geology of the Swain Property (red outline). After Sanborn-Barrie et al. (2004). 14
Figure 4 - Swain Property geology. After Sanborn-Barrie et al. (2004). Known showings from MNDM AFRI files. 16
Figure 5 - 2020 tracks from field work and rock samples of Swain Lake Property. Geology after Sanborn-Barrie et al. (2004). 24

Table of Tables

Table 1 - Claim status data for Pacton's Swain Property 7
Table 2 - Gold production in the Red Lake District to September 30, 2019. (Paterson, 2020) 11
Table 3 - Sample descriptions, location and assay results for gold. 25
Table 4 - Summary of Expenses 29

Table of Photos

Photo 1 - Brecciated dacitic flow in vicinity of PNN showing on Shabumeni Lake..... 17
Photo 2 - Fine beds of alternating argillite & greywacke on Shabumeni Lake. 17
Photo 3 - Two distinct fabrics identified in felsic-intermediate volcanic rock, north side of Swain Lake..... 18
Photo 4 - Heteromictic conglomerate on Swain Lake. 18
Photo 5 - Variolites within intermediate flows at Peanut East. 19
Photo 6 - Variolites within intermediate flows at Peanut East 19

Introduction

The Swain Property is located in the Shabumeni Lake Area and Honeywell and Goodale Townships approximately 85 km northeast of Red Lake, Ontario, in the Red Lake Mining Division (Figure 1). The property consists of 15 claims of 206 cells, totaling 4,145 hectares.

Goldspot Discoveries Corp. (GoldSpot) was contracted by Pacton Gold Corp. (Pacton) of Vancouver, British Columbia, to conduct a surface exploration program on their Swain Property. Between June 22, 2020 and August 24th, 2020, a mapping, prospecting and sampling program was carried out on the three claim blocks that make up the Swain Property.

The focus of the of the work program was to locate the existing showings while mapping the local geology and sampling the known and any new mineralization found. The fieldwork program was carried by Andrew Tims, P.Geo and Kacper Halama with assistance by Megan Landman and Nina Buchanan.

Figure 1 - Location of Pacton's Swain Property

1 Location and Access

The Swain property is located 85 kilometers east-northeast from the town of Red Lake, Ontario on NTS sheet 52N07 in the Shabumeni Lake Area within the Red Lake Mining Division. This property is accessed by boat from the boat launch at the Woman River Camp 49 km north of Ear Falls on the South Bay Mine road. A 45 km boat ride through the Woman Lake water system accesses Swain Lake and the property. A 45 min floatplane ride from Red Lake is a more direct route. The Swain Post fishing camp provided accommodations and boat rental for the field crew during the program. Daily access to the property was available via motorboat or foot. A portage trail behind the Swain Post Camp allowed access to the southwestern portion of the Shabumeni Lake claim block as well as the Peanut Block. Forest harvesting activities west of Swain Lake are planned to proceed east towards the Peanut claim block. This should improve access to the area.

2 Claims and Ownership

The Swain property consists of 13 claims (Table 1) in three (3) claim blocks: Peanut, Shabumeni and Shabumeni Mini (Figure 2) and covers a total of 4 161 ha. The Peanut block consist of a single claim of 11 cells centered at 522720 mE, 5683432 mN (NAD83) between Swain and Shabumeni Lakes. The Shabumeni Lake block is shaped like a tilted inverted "U" with the western limb in Shabumeni Lake and the eastern limb swinging down to the east end of Swain Lake centred on 429242 mE, 5688075 mN (NAD83). The Shabumeni block covers 3 864 ha in 11 claims consisting of 192 cells. The Shabumeni Mini block is a single claim of 3 cells between the two limbs of the much larger Shabumeni block centered at 526362 mE and 5685377 mN (NAD83).

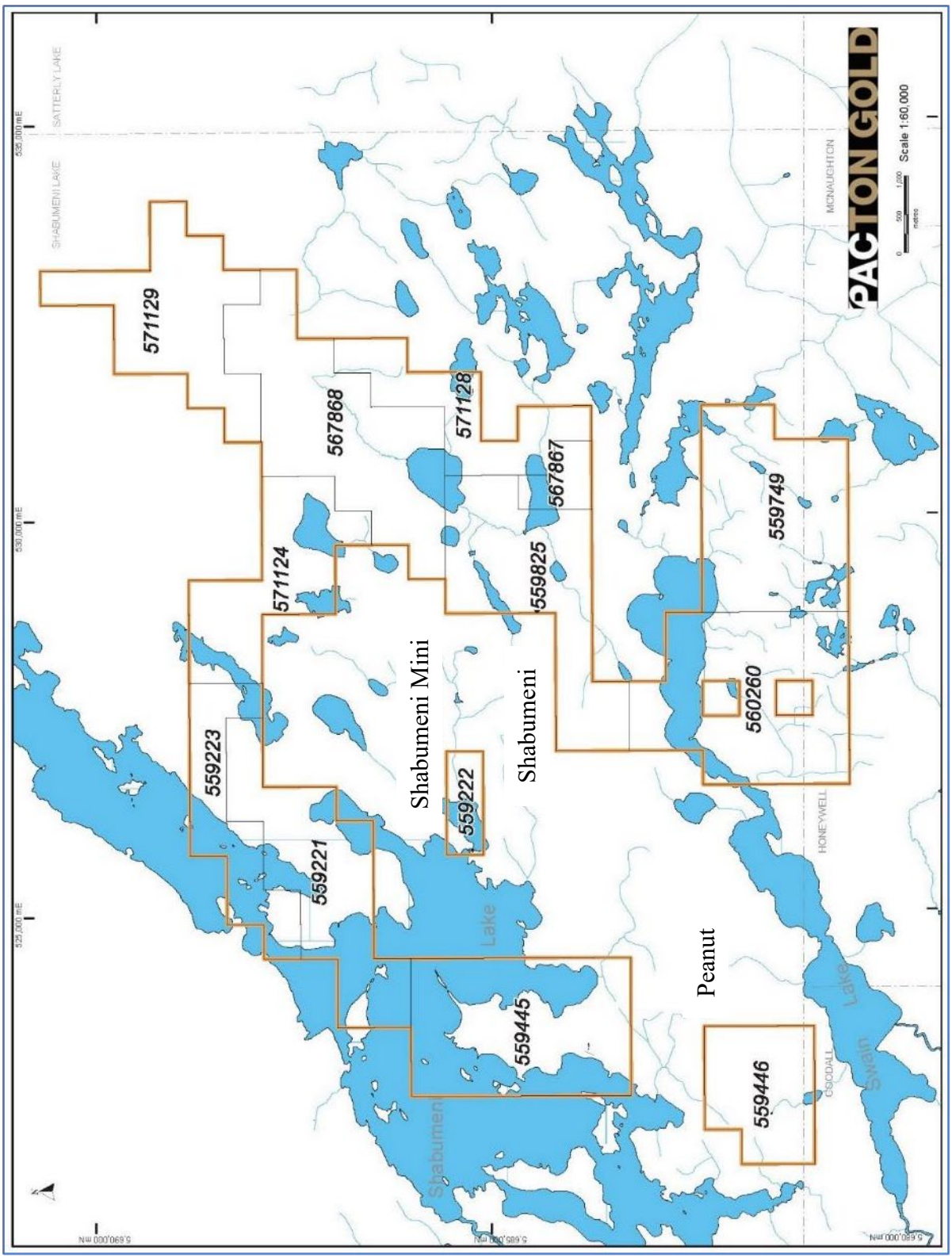


Figure 2 - Swain Property Claims

Table 1 - Claim status data for Pacton's Swain Property

Township / Area	Tenure ID	Tenure Type	Anniversary Date	Work Required
HONEYWELL,SHABUMENI LAKE AREA	560260	Multi-cell Mining Claim	2021-09-27	9600
HONEYWELL,SHABUMENI LAKE AREA	559749	Multi-cell Mining Claim	2021-09-27	8800
SHABUMENI LAKE AREA	571129	Multi-cell Mining Claim	2022-01-24	7200
SHABUMENI LAKE AREA	571128	Multi-cell Mining Claim	2022-01-24	4400
SHABUMENI LAKE AREA	571124	Multi-cell Mining Claim	2022-01-24	6000
SHABUMENI LAKE AREA	567868	Multi-cell Mining Claim	2021-12-31	10000
SHABUMENI LAKE AREA	567867	Multi-cell Mining Claim	2021-12-31	1200
SHABUMENI LAKE AREA	559825	Multi-cell Mining Claim	2021-09-27	8000
SHABUMENI LAKE AREA	559446	Multi-cell Mining Claim	2021-09-18	4400
SHABUMENI LAKE AREA	559445	Multi-cell Mining Claim	2021-09-18	9600
SHABUMENI LAKE AREA	559223	Multi-cell Mining Claim	2021-09-18	4400
SHABUMENI LAKE AREA	559222	Multi-cell Mining Claim	2021-09-18	1200
SHABUMENI LAKE AREA	559221	Multi-cell Mining Claim	2021-09-18	7600

3 Previous Work

Work started in the Shabumeni Lake area by the Ontario-Woman Lake Guild Mines in 1926. They continued exploration in this area until 1928 focusing on auriferous quartz veins. The work done was mainly geological surface work, prospecting and stripping. The work uncovered feldspar rich dyke with ladder structure quartz veining and quartz domes with traces of galena. (Stanley, 1988)

After a protracted hiatus, exploration activity in the region next occurred in the 1960's focussed on polymetallic base metal exploration.

A drilling program of 2,050.5 feet in five (5) drill holes, occurred in 1963 by Gunnex Ltd., in the East part of the Swain Lake area, but no significant values were found (Gunnex, 1963).

In 1965, Asarco Exploration Company of Canada Ltd. conducted geophysical surveys at the eastern end of Swain Lake, for a total of 28.8 miles of grid line and base line, that combined ground magnetometer and electromagnetic survey over their claims as well as more focussed I.P. survey over the most interesting zones located by the initial surveys. In 1966, along with geological mapping, Asarco Exploration performed ten (10) shallow drill holes using packsack drilling that highlighted significant copper mineralization (chalcopyrite, pyrite and pyrrhotite) in thin-banded cherts associated with iron formation. This discovery was named South Showing (Figure 4) (Gray, 1966).

In 1966, Dome Exploration completed a series of six (6) (1908 feet) drill holes that tested an electromagnetic anomaly that trends north-south through the peninsula of Shabumeni Lake. Assays of the drilling were low but visible gold was noted in a ½ inch quartz carbonate veinlet (Dome Exploration Ltd., 1967).

Under Vanco Exploration of Ontario Ltd. an airborne geophysical survey (magnetic, electromagnetic and gamma ray spectrometer survey), geological mapping, ground magnetic and self-potential geophysical surveys were conducted between 1969-1970 (Mekarski, 1969; Gergmann, 1970).

Drilling occurred south of Swain Lake in 1973 and northeastern of the Swain Lake in 1974 by St. Joseph Exploration. They drilled four (4) holes in 1973 with multiple mineralized intervals of pyrite, pyrrhotite, chalcopyrite and galena (assays are not available) and three (3) holes in 1974 with a best intersection of a 1.5 m interval with Au @ 2.74 g/t. (St Joseph Exploration Ltd., 1973; St Joseph Exploration Ltd. 1974).

McIntyre Mines Limited completed magnetic, electromagnetic and geology surveys, as well as two (2) diamond drill holes to test anomalous zones of electromagnetic conductivity and magnetism on the peninsula of Shabumeni Lake in 1978. The drilling totalled 964 feet and intersected significant but uneconomic base metal mineralization (McIntyre Mines Limited, 1978).

In 1978, Sulphide Syndicate drilled one (1) hole in the area of Peanut Lake Zone and intersected pyrite-calcite stringers with traces of chalcopyrite on a 0.7 m interval next to a mineralized quartz vein, but no assay results are available (Geophysical Engineering, 1978).

Sherritt Gordon Mines Limited did surface prospecting in the southeastern area of Swain Lake in 1981 and the best grab sample for gold was of 2.4 g/t (Forsgren, 1981).

From 1983 to 1985, Labrador Exploration (Ontario) Ltd. conducted geophysical surveys, combining helicopter-borne magnetic, electromagnetic and VLF surveys (Boustead, 1985), a drilling program of two (2) drill holes (Labrador Exploration (Ontario) Limited, 1984) and geological mapping and sampling (Davis et al. 1984). The geophysical surveys covered 18.5 km long from Shabumeni Lake up to Mink Lake. Drill holes in the northeastern area of Swain Lake reported disseminated pyrite, with very locally mineralization up to 15%, but no assay results are available. The 1984 geological mapping and sampling covered mostly the western shore of Birch Lake, where, in 1983, a quartz vein in a trench yielded 8.5 g/t gold.

In 1987, in the northwestern area of Swain Lake, Explorco Properties Inc. conducted electromagnetic and magnetic geophysical surveys, geological mapping and geochemical surveys.

Dome Exploration went back to the Shabumeni peninsula and completed one drill hole under the area of the reported visible gold.

Greenstar Resources Ltd. began a gold exploration program in 1987 that lasted until 1988. They completed line-cutting, geophysics, mapping and diamond drilling over a large area on both shores of Swain Lake which covered the Peanut Lake block. Along with the project operator Noramco Exploration Inc., Greenstar conducted an airborne magnetic and VLF-EM survey in the Swain Lake area (Barrie, 1987). The company drilled 18 holes, for a total of 3424.8 m, with six (6) anomalous intervals above 1 g/t gold and at best an isolated 3.2 g/t gold over a 1 m interval associated with a 2 cm carbonate vein with 2% pyrite. The drilling campaign also identified a 3 m interval with 0.27 g/t gold associated with pyrite, quartz-carbonate veining and tourmaline. 1529 samples were collected from diamond drill core and 423 from surface throughout the mapping and prospecting program. (Greenstar Resources Ltd, 1988; Stanley, 1988).

Prospecting and geological mapping was undertaken in the Birch Lake area by Noranda Exploration Co., Ltd. in 1990, but no significant gold bearing structures were delineated due to the lack of outcrop and alteration (MacIsaac, 1990).

Falconbridge Limited worked in the Swain Lake area in 1990 and conducted a drilling program of three (3) drill holes, for a total of 370 m. The holes were 750 m south of Swain Lake and were within a 250 m radius from the 2.4 g/t gold sample of Sherritt Gordon Mines Limited discovered in 1981 (Hood, 1991).

R. Hodgson conducted geological mapping and rock sampling in 1992, with grab sample results up to 9.23 g/t gold (Hodgson, 1992). Then in 1995 R. Hodgson finished a prospecting, sampling and limited VLF program located northeast of Swain Lake. Channel sampling across quartz-carbonate-chert-pyrite veins within sheared sericite schist returned an averaged grade of 0.05 oz/ton gold over 35 feet (Hodgson, 1996).

Greenstar Resources returned to the Peanut showings in 1992 and completed 4 drills around Peanut lake totaling 368 m, but no significant values were intersected (Berdusco, 1992).

Fronteer Development Group completed geological mapping, prospecting, rock and soil geochemical sampling in 2001. Fronteer continued to work in the area in 2002 by conducting airborne electromagnetic and magnetic surveys over their properties. Based on 2001 work and geophysical surveys, a ground follow-up consisted of a second program of geological mapping, prospecting, rock and soil geochemical sampling. The best grab sample results showed four (4) anomalous samples up to 40.22 g/t gold, 43.8 g/t silver and 2.08% copper in the Beaver Pond Showing area, as well as several anomalous samples up to 18.62 g/t gold, 48.8 g/t silver and 3.65% copper in the North and South Showing areas (Klatt, 2003).

Jilbey Gold Exploration completed a regional exploration for kimberlites in 2003 which covered a portion of the Shabumeni block. Work included ground magnetic survey, rock sampling, soil geochemical sampling and regional till sampling, The rock sample analyses returned five (5) values over 2 g/t gold along a North-North-East structure following the eastern side of the Shabumeni Lake (Lee, 2003).

In 2004, Fronteer Development Group completed twelve (12) drill holes in a 1200 m NQ diamond drilling program and two (2) drill holes were completed in the Beaver Pond

showing area on the southeast show of Swain Lake. The best result shows a 2.61 g/t gold over 0.5 m at 3 m depth (results from one of the drill hole are missing) (Valenta, 2004a). In the same year, Fronteer completed a ground magnetics survey on its Swain East and Sol D'Or properties (Valenta, 2004b).

AurCrest Gold completed a program of reconnaissance geology mapping and prospecting in 2012 along the Swain Lake Deformation Zone (SLDZ). The best results were of 0.116 g/t gold and 7.0 g/t silver, but no anomalous results were reported within the Pacton Gold's claims (Boyd, 2012).

4 Regional Geology

The Swain project area is located within the Birch-Uchi Greenstone Belt of the western Uchi Subprovince of northwestern Ontario (Figure 3). This belt has experienced recurring episodes of rifting and associated depositional and magmatic events. Between 2992 Ma and 2700 Ma, sequences of mafic to felsic volcanic strata and mostly clastic sedimentary strata separated by unconformities were amassed in this belt. The supracrustal strata can be split into 3 volcano-sedimentary mega-cycles that consist of the subsequent assemblages: Balmer, Woman and Confederation assemblages. The Balmer Assemblage is the primary host of most of the prolific gold production, over 58 million oz through 3rd quarter of 2019 (Paterson, 2020), associated with the Red Lake District (Table 2).

Table 2 - Gold production in the Red Lake District to September 30, 2019. (Paterson, 2020)

MINE	PERIOD	TONS	TROY OUNCES	GRADE GPT
Red Lake Gold Mines	2006–present	10,093,122	6 194 290	21. 84
Campbell Mine	1949–2006	19,944,241	11 216 443	17.49
Goldcorp (Dickenson)	1948–2006	8,715,228	5 962 948	21.28
Madsen	1938 - 76, 1997_99	7,872,679	2 452 388	9.69
Cochenour–Willans	1939–1971	2,096,654	1 244 279	18.46
McKenzie Red Lake	1935–1966	2,135,361	651 156	9.48

Howey	1930–1941, 1957	4,200,972	421 592	3.12
Hasaga	1938–1952	1,374,641	218 213	4.94
Starratt Olsen	1948–1956	823,554	163 990	6.19
Berens River	1939–1948	508,574	157 341	9.62
Uchi	1939–1943	686,806	114 467	5.18
Jason (Argosy)	1934–1952	250,903	101 875	12.63
H.G. Young	1960–1963	261,432	55 244	6.57
Sachigo River	1938–1941	42,145	52 560	38.79
McMarmac	1940–1948	138,779	45 246	10.14
Gold Eagle	1937–1941	163,379	40 204	7.65
Jackson Manion	1934–1940	95,578	27 142	8.83
Red Lake Gold Shore	1936–1938	78,320	21 100	8.38
Phoenix	2015	57,793	4906	2.64
Hudson Patricia	1936–1937	10,186	1857	5.67
Buffalo	1981–1982	29,017	1656	1.78
Abino	1985–1986	2,479	1397	17.53
Lake Rowan	1986–1988	11,814	1298	3.42
Kostynuk Brothers	1963–1966	577	1126	60.70
Mount Jamie	1976	882	377	13.30
Bobjo	1929	N/A	362 (10)	N/A
Bathurst	1927–1937	510	307	18.73
Red Summit	1935–1936	536	277	16.07
Sol d'Or	1933–1936	415	258	19.31
TOTALS		**58,324,578**	**29 153 937**	**15.55**

As summarized in Paterson et al., 2020: The Balmer Assemblage is comprised of basaltic tholeiite and komatiite flows with intercalated magnetite-quartz iron formation. Felsic pyroclastic rocks occur as comparatively thin units. Small mafic to ultramafic intrusives cut all the assemblages.

The Woman Assemblage consists of basaltic flows capped by minor felsic pyroclastic rocks with a common age of 2894 Ma and clastic and iron formation metasediments.

The Confederation Lake Assemblage is predominantly calk-alkalic with substantial amounts of felsic pyroclastic deposits.

At least three (3) phases of regional deformation affected the area resulting in the widespread development of folds, axial planar fabrics, and ductile shear zones. D1 deformation involved NW-SE shortening, the development of NE to N-striking folds and faults. D2 deformation involved NE-SW to N-S shortening and the development of ~E-W to WNW-ESE trending regional folds, faults and fabrics. This event is manifested to varying degrees throughout the belt from the Casummit Lake area in the north to the Slate Lake area in the south. D3 deformation appears to have involved renewed E-W shortening and is restricted to the northern part of the belt in the Mink Lake/Casummit Lake area. This shortening event resulted in the buckling of the regional S2 foliation into N-S folds. This event was accompanied by N-S striking S3 crenulation cleavage and ENE plunging F3 fold development.

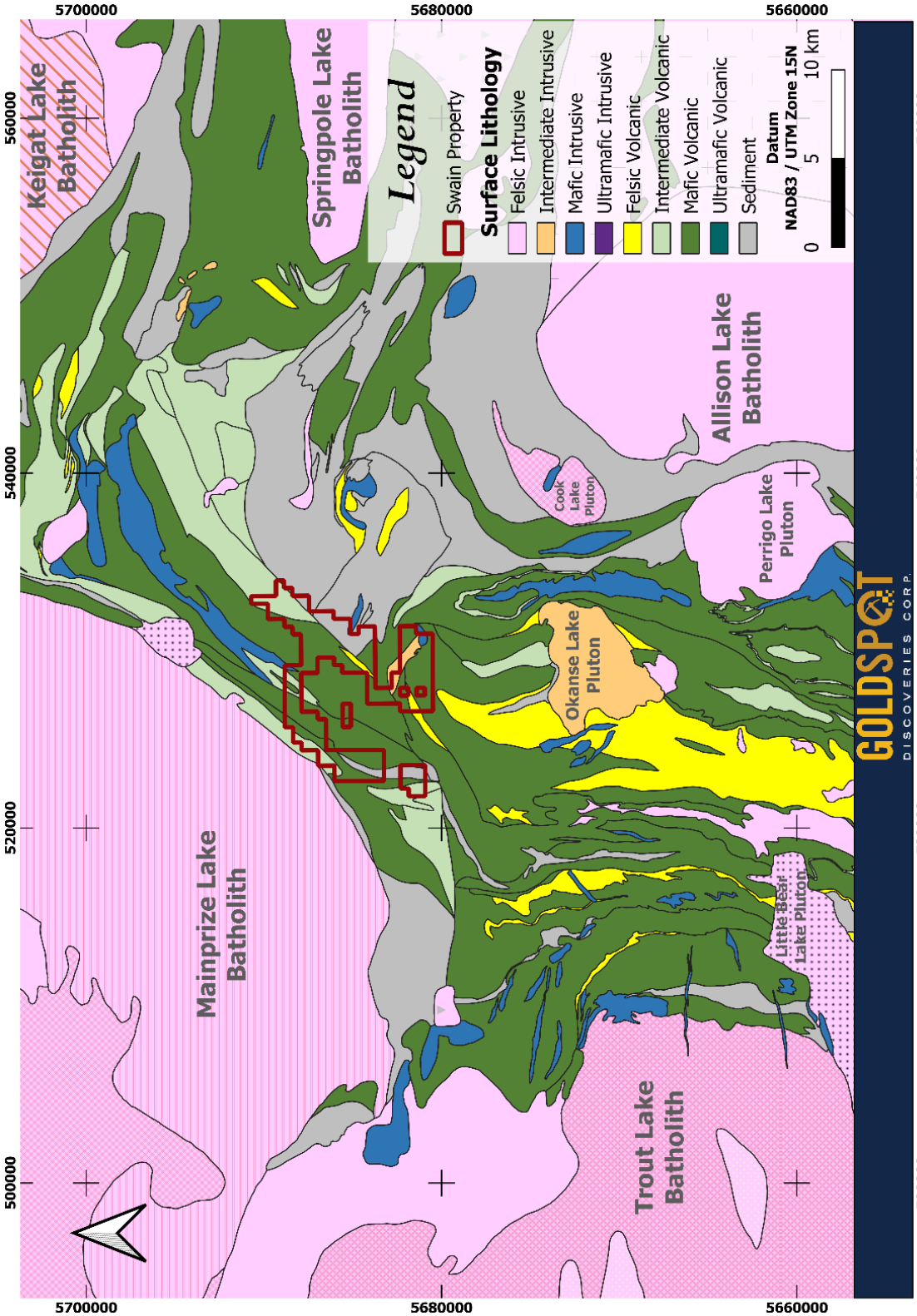


Figure 3 - Regional Geology of the Swain Property (red outline). After Sanborn-Barrie et al. (2004).

5 Property Geology

The Swain property consists of three blocks: the Sabumeni Lake block, the Peanut block, and the Sabumeni Mini block.

The Sabumeni Lake block is underlain mainly by mafic and intermediate volcanic flows (Photo 1), pyroclastic volcanic and associated sedimentary rocks. A narrow horizon of north-trending carbonaceous argillite (Photo 2) on the large peninsula has been the exploration target in the past. The eastern arm of the property extends down to the east end of Swain Lake. The regional northeast trending Swain Lake Deformation Zone parallels the length of Swain Lake and is characterized by faulting, shearing and alteration of variable intensity (Photo 3). The fault zone locally juxtaposes exposures with contrasting lithologies and structural styles. Where the Shabumeni Lake block continues south of the SLDZ mafic metavolcanic rocks are more abundant with metre-scale felsic flows, breccias, and fine-grained tuffs horizons. Clastic metasedimentary rocks include sub-metre scale interflow argillites and greywackes to thinly laminated to medium bedded greywackes, to thickly bedded arenites, and massive to crudely bedded polymictic conglomerates (Photo 4).

To the northwest of the SLDZ, in the Peanut block, the geology is characterized by north-easterly trending lithologies such as felsic and intermediate pyroclastic deposits and minor variolitic flows (Photo 5; Photo 6). Mafic volcanic tuffs and flows are subordinate.

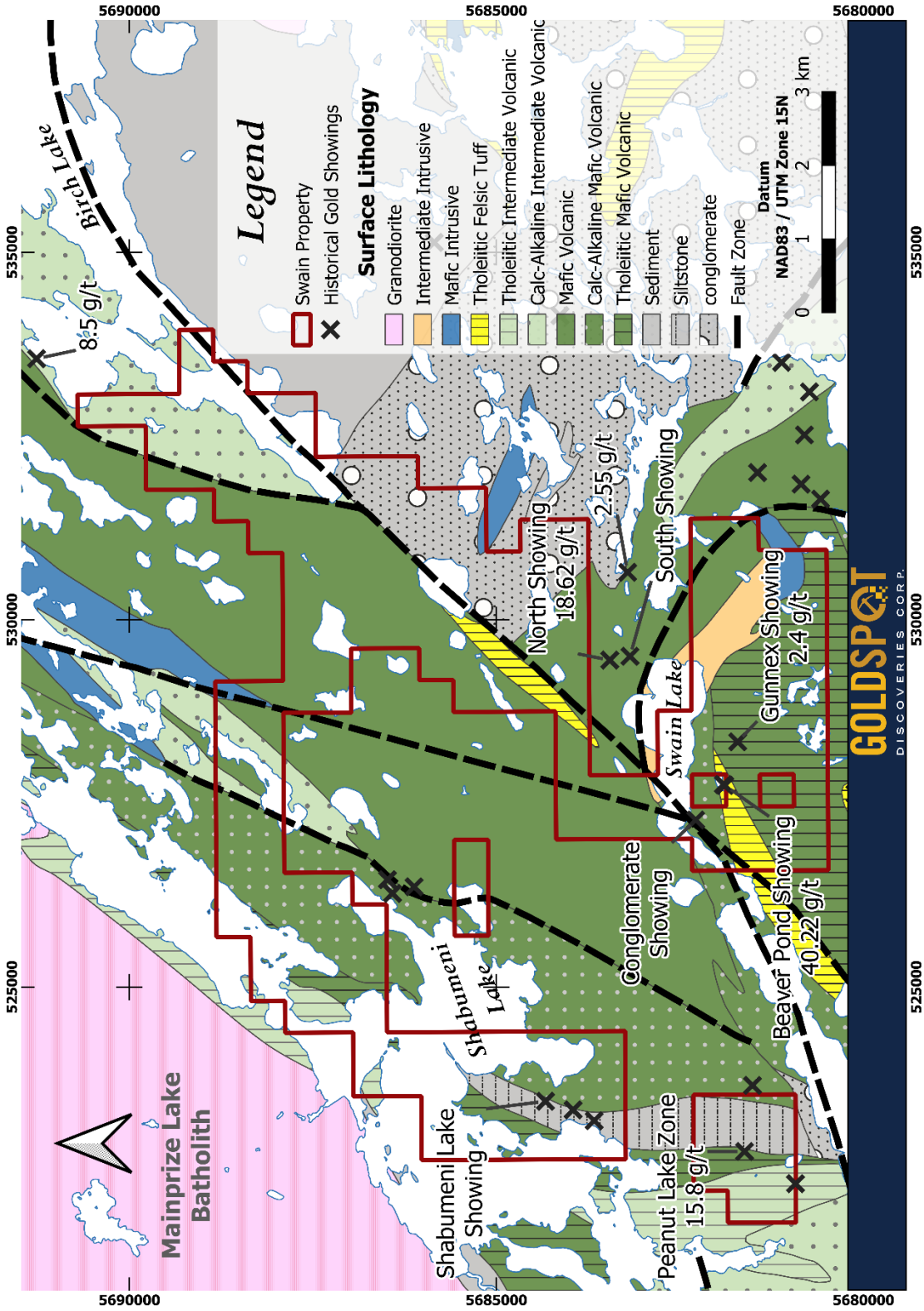


Figure 4 - Swain Property geology. After Sanborn-Barrie et al. (2004). Known showings from MNDM AFRI files.

Photo 1 - Brecciated dacitic flow in vicinity of PNN showing on Shabumeni Lake.

Photo 2 - Fine beds of alternating argillite & greywacke on Shabumeni Lake.

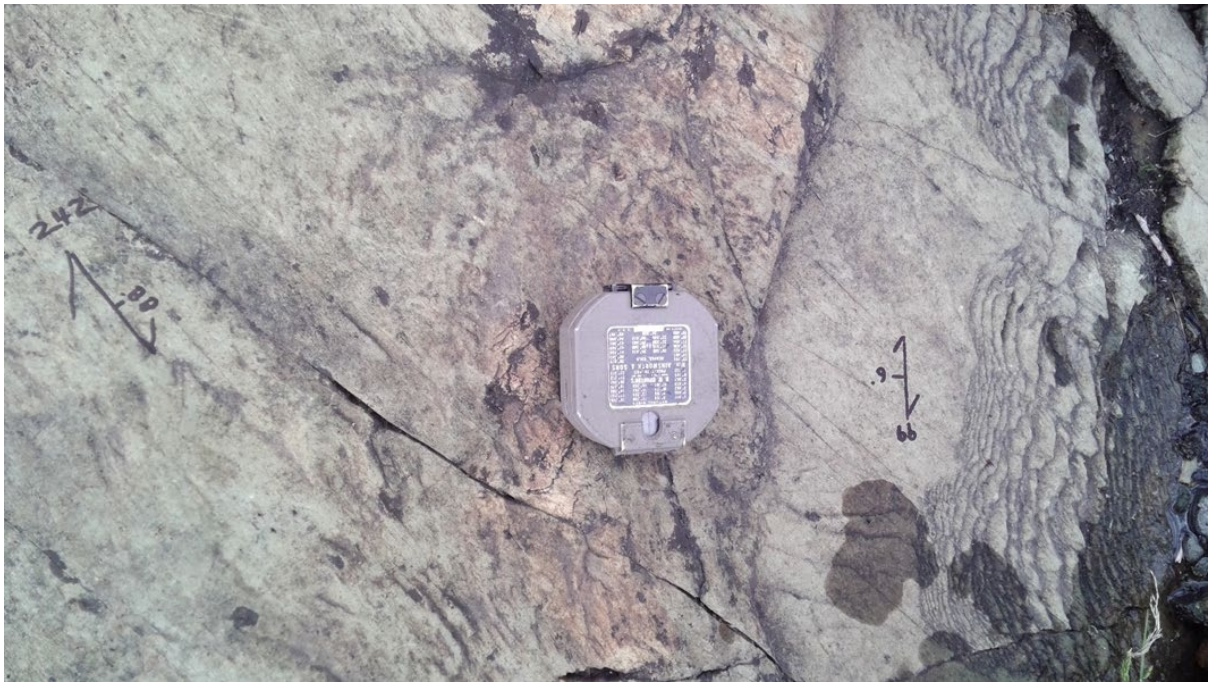


Photo 3 - Two distinct fabrics identified in felsic-intermediate volcanic rock, north side of Swain Lake.

Photo 4 - Heteromictic conglomerate on Swain Lake.

Photo 5 - Variolites within intermediate flows at Peanut East.

Photo 6 - Variolites within intermediate flows at Peanut East

6 Work Program

During the month of June 2020, a field mapping and prospecting program was initiated on the Swain property blocks. The goals of the work program were to locate known mineral occurrences and map any outcrops encountered, confirming or updating previous mapping performed in the area, and to collect grab samples for geochemical analysis. This work was carried out by two mapping geologists, Andrew Tims and Kacper Halama with assistance from Nina Buchanan and Megan Landman.

The property was accessed primarily by boat with the Peanut block accessed by foot from the Swain Post Camp. Traverses were preplanned the day before using satellite imagery and compiled historic data. Outcrops were mapped for lithology, alteration, mineralization and structure.

Geotools were used where necessary to strip moss, from outcrop and hammer and chisel to collect grab samples. Field observations were made and recorded in field books and a rugged tablet. Observations are displayed on a series of 8 maps in Appendix 1. Analytical certificates and outcrop data can be found in Appendix 2 & 3 respectively.

Where feasible traverses were run perpendicular to the strike of the geology. A total of ten (10) days, June 22nd to 30th, was spent mobilizing/demobilizing and working on the property with an additional day, August 24th, field checking results from June. A total of 19 samples were gathered during mapping for geochemical analysis using a 30 g Au Fire Assay with an Atomic Absorption finish and a Gravimetric re-assay for assays greater than 10 g. Samples were also analyzed using a 34 multi-element ICP-OES analysis. These samples were submitted to SGS Laboratories in Red Lake, Ontario.

Daily Field Log

Geologists: Andrew Tims & Kacper Halama

Assistants: Megan Landman & Nina Buchanan

June 22, 2020

Mobilize crew to Red Lake. Setup accommodations and orientation.

June 23, 2020

Groceries and Supplies. General logistics and arranging flight to Swain Post Camp.

June 24, 2020

Chartered a Superior Airways Caravan Amphibian C208 out of the former Greens Airways site to Swain Lake. Setup camp and orient crew in pace and compass, GPS and watercraft use.

June 25, 2020

Traversed from camp to claim 559446. Located and sampled the Peanut East and West showings. Mapped in outcrops from and too the showings to validate historical mapping. Mafic and Intermediate volcanics were noted. Samples 253256 and 253257 were collected for assaying. Hot day. Ran short of water.

June 26, 2020

Boated down Swain Lake to claim 560260. Tims and Buchanan traversed south from Swain Lake to the Gunnex Showing. Exposed rocks are all sedimentary near the shore of Swain Lake with intermediate flows and tuff with interflow sediments at the Gunnex Showing. Trace pyrite occurs within the weakly magnetic interflow sediment. One assays sample was taken, 253408.

Halama and Landman visited the area of the Beaver Showing looking for an extension of the Beaver mineralization onto the Pacton claim, 560260. One sample was taken for assay, 253258.

An attempt was made to locate the Conglomerate Showing west of the Beaver Showing. The MDI location for the Conglomerate Showing was plotted on a flat labrador tea/spruce terrain. It could not be located.

June 27, 2020

Tims and Landman walked the Swain Post portage to Shabuneni Lake and boated to claim 559445. An attempt was made to located Shabumeni Lake PS and PN showings. No outcrop was present and the historical drill setups were unidentifiable as the area was covered in blowdown (felled trees) making access to the area arduous and burying any exposures. Local knowledge explained the area has been ravaged by a tornado in 2018. One outcrop near the plotted location of the PN Showing was encountered. A silicified intermediate flow was mapped and a sample taken, 253409. Tims and Landman proceeded to map and prospect the shoreline of Shabumeni Lake within claim 559445.

Halama and Buchanan revisited the Conglomerate Showing expanding the search area. Outcrops of actual conglomerate were located 170 m to the southeast of the plotted MDI point. Rounded granitic cobbles supported in a weakly chloritic matrix hosted 2-3% fine-grained disseminated pyrite, sample 253259. Halama and Buchanan then prospected and mapped the eastern end of Swain Lake shoreline.

June 28, 2020

Halama and Landman attempted to find the Shabumeni PN Showing. Two outcrops were located in the approximate area of the showing. Exposures of iron stained felsic volcanic rock with 2-3 % disseminated pyrite and an intermediate volcanic rock were sampled; samples 253260 and 253261 respectively.

Tims and Buchanan traversed to the reported location of the PPN Showing. Outcrops and an old drill hole setup were identified and assumed to be the PPN Showing. Two samples were taken, 253410 and 253411. Sample 253410 consisted of a welded tuff with trace pyrite, sample 253411 was collected from a 5 cm wide bull white quartz vein.

All of the work performed on June 28, 2020 occurred on claim 559445.

June 29, 2020

Tims and Landman returned to the Peanut West Showing to have a closer look at the hematite alteration in the rocks on claim 559446. Sample 253412 sampled intermediate volcanic rock with a weak hematite staining and 1-2% fine-grained pyrite. Sample 253413 sampled a weakly magnetic sedimentary rock.

Halama and Buchanan completed the lakeshore geology and prospecting of the northern end of Shabumeni Lake on claims 559221, 559222 and 559223. One sample was taken on claim 559221 of a moderately foliated iron stained felsic volcanic rock.

June 30, 2020

Demob all samples and personnel out of bush to Red Lake by Caravan C208 aircraft.

August 24th, 2020

Tims, Halama, Buchanan and Carl Ginn chartered a Superior Airways Caravan Amphibian C208 from Red Lake and rented two boats from Swain Post camp. The area of the Beaver Showing south of Swain Lake on claim 560260 was the target of further exploration and prospecting due to the highly anomalous (greater than 68 g/t Au) sample (253258) collected from this location. Prospecting and mapping of the outcrops south of the Beaver Showing identified two historical trenches. Six samples were collected for gold assay and multi-metal analysis. Returned to Red Lake at end of day.

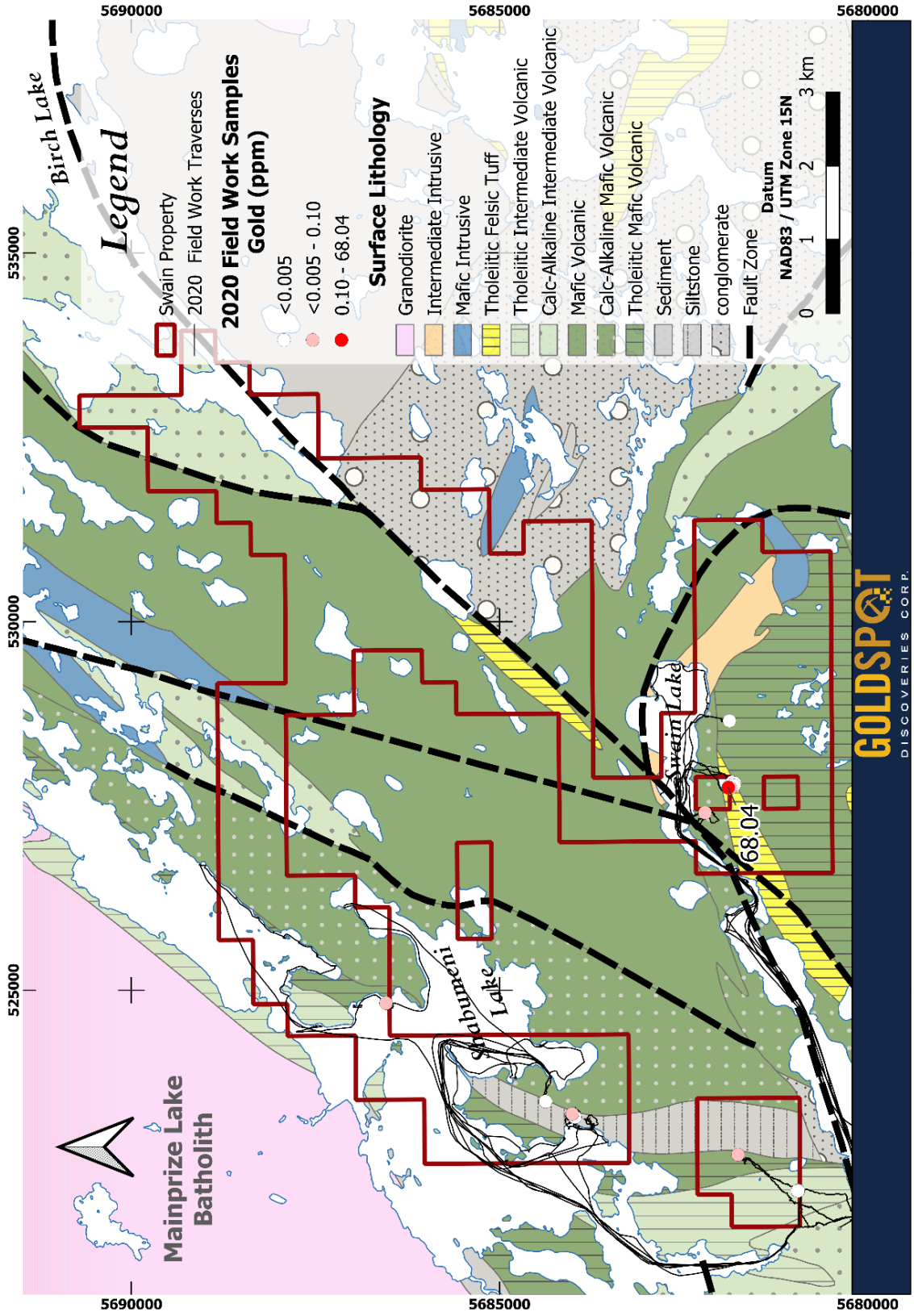


Figure 5 - 2020 tracks from field work and rock samples of Swain Lake Property. Geology after Sanborn-Barrie et al. (2004).

Table 3 - Sample descriptions, location and assay results for gold.

Date	ID	UTM_E	UTM_N	Rock_type	SampleID	Au (ppm)	Showing	Comments
2020-06-24	Swain007	522769	5681761	Intermediate volc	253256	0.043	Peanut East	Qc vein is vuggy and trace py. HE staining adjacent to veining. Pervasively altered, disseminated py
2020-06-24	Swain011	522281	5680939	Intermediate volc	253257	<0.005	Peanut West	<2mm disseminted pyrite, cubic and disseminated. Strongly foliated.
2020-06-25	Swain015B	527749	5681892	Felsic volc	253258	68.04	Beaver Pond	3-4% chalcopyrite, 2-3% malachite, trace auzurite, 1% sphalerite. Pale green coloured, strongly altered. Strong Fe surface staining. Brecciated veins and stwrk veining. Malachite bearing, silicified, and Fe stained surfaces.
2020-06-27	Swain020	527409	5682207	Conglomerate	253259	0.346	Conglomerate	Clasts composed of FS+/-QZ and rounded. Hard to get dip. Qz fracture fill and veining. Schistose, pervasively altered.
2020-06-28	Swain038A	523321	5684010	Intermediate volc	253260	0.035	Sabumeni Lake PN	Possible unconformity? Felsic volcanic? Some Fe staining on fracture surfaces. 4-5% disseminated cubic pyrite and strong Fe staining on fracture surfaces.
2020-06-28	Swain038B	523321	5684010	Intermediate tuf	253261	0.006	Sabumeni Lake PN	Intermediate tuff with moderate Fe staining on fractures.
2020-06-29	Swain061	524825	5686541	Intermediate volc	253262	0.015	Sabumeni Lake Shore	Moderately foliated, He stained (weak). Weak chl and sericite alt. Weak Fe staining on fractures.
2020-06-25	Swain102	528656	5681876	Intermediate volc	253408	<0.005	Gunnex Showing	Series of 25-30 m wide intermediate flows.
2020-06-27	Swain104	523278	5683974	Intermediate tuf	253409	<0.005	Sabumeni Lake PN	Silicified Int. Vol with 1/2-1% disseminated Py about centietre-scale Qv
2020-06-28	Swain111	523490	5684378	Intermediate volc	253410	<0.005	Sabumeni Lake PNN	Welded Intermeditae Tuff, silicified,>80% ash with 5-6% lapilli, possible amygdules indicating intercalated flows, trace dissemiated Py, evidence for ddh setup

Date	ID	UTM_E	UTM_N	Rock_type	SampleID	Au (ppm)	Showing	Comments
2020-06-28	Swain111	523491	5684375	Quartz vein	253411	<0.005	Sabumeni Lake PNN	Bull White Qv, 4-6 cm wide extensional veinlets with < 2m strike-length
2020-06-29	Swain107	522277	5680955	Intermediate volc	253412	<0.005	Peanut West	Grey-green, fine-grained, light beige weathered surface, pale red fresh surface due to weak Hm staining, not magnetic
2020-06-29	Swain107	522278	5680943	Intermediate volc	253413	<0.005	Peanut West	Dark grey-green, fine-grained, sugary texture, trace disseminated Py, weakly magnetic
2020-08-24	Swain508	527798	5681863	Mafic Volcanics	253435	0.067	Beaver Pond	Chip sample along a 4 m north-south historical trench, well devloped penetrative fabric, 1-5% fine to medium-grained Py, averaging 2%, unweathered material is weakly silicified and ankeritized.
2020-08-24	Swain509	527823	5681836	Mafic Volcanics	253436	<0.005	Beaver Pond	Grey-green weathered surface, med. Green fresh surface, fine-grained, chlorite rich groundmass, weakly silicified, well developed breccia texture, trace Cb, trace disseminated Py
2020-08-24	Swain510	527808	5681805	Mafic Volcanics	253437	<0.005	Beaver Pond	Grey-green weathered surface, med. Green fresh surface, fine-grained, weathered surface covered by irratically distributed centimetre-scale dark grey angular mineral, trace disseminatd Py
2020-08-24	Swain511	527778	5681812	Mafic Volcanics	253438	<0.005	Beaver Pond	Grey-green weathered surface, med. Green fresh surface, fine-grained, chlorite rich groundmass, weakly silicified, trace Cb, trace disseminated Py
2020-08-24	Swain512	527781	5681811	Mafic Volcanics	253439	<0.005	Beaver Pond	Grey-green weathered surface, chlorite rich groundmass, weakly brecciated, py on margins of breccica fluid.

Date	ID	UTM_E	UTM_N	Rock_type	SampleID	Au (ppm)	Showing	Comments
2020-08-24	Swain513	527741	5681861	Mafic Volcanics	253440	0.012	Beaver Pond	Chip sample along a 5 m east-west historical trench, 1-2% fine-grained Py, averaging 1%, unweathered material is weakly silicified and ankeritized.

7 CONCLUSION AND RECOMMENDATIONS

The work program located and sampled the known showings in the vicinity of Swain Lake. The Shabumeni Lake showings were not located with any confidence as they were geophysical targets tested by drilling. The best assay result came from near the Beaver Showing on the south shore of Swain Lake producing a 68.04 g/t gold assay. Follow-up sampling in the area of the Beaver Showing revealed additional historical workings and sulphide mineralization but assays results were inconclusive.

Due to the nature of the targets (drill intercepts) and the young dense vegetation the Shabumeni Lake showings require a more concentrated effort involving linecutting, geophysics and trenching. The area south of the Beaver Showing is close to the regional scale Swain Lake Deformation Zone and may represent mineralization along a fault splay. Overburden stripping in and around the historical trenches and a revaluation of the core from Fronteer's 2004 drill program should be undertaken to understand the gold potential of the area.

A budget of $129,800 is proposed below.

Proposed Budget

Shabumeni Lake

Geophysical Surveys

Linecutting/mag/IP 6 km @ 2,500/km 15,000

Trenching

Helicopter for trenching 12,000

Machine/washing/channel sawing 25,000

Assays 200 @ 55/sample 11,000

Swain/Beaver Showing Area

Trenching

Helicopter for trenching 12,000

Machine/washing/channel sawing 18,000

Assays 100 @ 55/sample 5,500

Accommodations for 4 (including boat rental) 13,500

Reports and Maps 6,000

Contingency (10%) 11,800

TOTAL $129,800

8 SUMMARY OF EXPENSES

A summary of expenses for the work included in this assessment report is included in Table 4.

Table 4 - Summary of Expenses

Type	Expense
Geological Consultants (35 man days x 1000$ per day)	$35,000.00
Supplies and Equipment Rental	$1,721.48
Food and Lodging	$5,562.64
Transportation to/from Mining Lands	$4,364.67
Geochemical Analysis	$658.35
Total	**$47,307.14**

9 REFERENCES

Band, R.B. 1987; Kidd Creek Mines Ltd. (Falconbridge Ltd.), Geophysical Report on the Hodgson Option, Swain Lake Grid. Assessment files of the Resident Geologist's office, Red Lake, Ontario.

Beakhouse, G.P., Forsyth, D.M., Scott, K.V., and Wallace, H., 1989; Precambrian Geology of the Western Birch Lake Area, Southern Half, District of Kenora (Patricia Portion); Ontario Geological Survey, Map P.3118.

Berdusco, B.,1992; Report on the 1992 Diamond Drilling Program on the Shabumeni Lake Property for Greenstar Resources, MNDM Assessment File 52N07SE0011.

Bosowec, D.F. 1987; Kidd Creek Mines Ltd. (Falconbridge Ltd.) Diamond drill logs for holes HO-1 and HO-2, Sol D'Or property. AFRI files 52N07SE0020, 52N07SE0024.

Boustead, G.A., 1985; Report on Combined Helicopter-Borne Magnetic, Electromagnetic and VLF Survey, by Aerodat Limited for Labrador Mining and Exploration Company Limited, 203 pg, MNDM Assessment File 52N07SE0090.

Boyd, T., 2012; Report on Reconnaissance Geology and Prospecting, Swain lake Property, NTS 52N/7, 52N/2, Red Lake Mining Division, for AurCrest Gold Inc.,27 pg., MNDM Assessment File 20013408.

Burchell, P., 1986; Dome Exploration Canada, diamond drill logs. Assessment files of the Resident Geologist's office, Red Lake, Ontario.

Canex Aerial Exploration Ltd. 1970; Report on the Dalhousie Oil Claims, Dent Township. Assessment files of the Resident Geologist's office, Red Lake, Ontario.

Barrie, C.Q., 1987; Report on an airborne magnetic and VLF-EM Survey – Shabumeni, Swain and Mosier Lakes Property. For Noramco Explorations Inc. by Terraquest Ltd., 34 pg, MNDM Assessment File 52N07SE9924.

Davis, C., McNaughton, J., 1984; Geology of the Birch Lake Claims, Labrador Exploration (Ontario) Limited, 26 pg, MNDM Assessment File 52N07SE0003

Dome Exploration Ltd., 1967; Diamond Drill Logs, Report No 11, 39 pg. MNDM Assessment File 52N07SE0068.

Forsgren, F. M., 1981; The Mining Act Report of Work, Sherritt Gordon Mines Limited, 6 pg, MNDM Assessment File 52N07SE0043.

Geophysical Engineering, 1978; Diamond Drill Logs, Report No 19, 4 pg. MNDM Assessment File 52N07SE0044.

Gergmann, H.J., 1970; Report on Electromagnetic Surveys for Vanco Exploration of Ontario Ltd. – Swain Lake Area, 19 pg, MNDM Assessment File 52N07SE0088.

Greenstar Resources Lrd., 1988; Diamond Drill Logs, Report No 27, 274 pg, MNDM Assessment File 52N08SE0013.

Gunnex Ltd., 1963; Diamond Drill Logs, Report No 17, 16 pg, MNDM Assessment File 52N07SE0051.

Gray, R.S. 1966; Geological Report – Swain Lake Prospect, Asarco Exploration of Canada Ltd., 26 pg. MNDM Assessment File 52N07SE0064

Hodgson, R., 1992; Geological Report on the Swain Lake Gold/Base Metal Prospect. Assessment files of the Resident Geologist's office, Red Lake, Ontario.

Hodgson, R., 1996; Report on the1995 Field Program on the Swain Lake Property, Shabumeni Lake Area, Northwestern Ontario. MNDM Assessment files of the Resident Geologist's office, Red Lake, Ontario.

Hood, W.C., 1991; Diamond Drill Logs, Report No 30, Falconbridge Limited, 27 pg, MNDM Assessment File 52N07SE0003.

Klatt, H.M., 2003; Geotechnical Report On Fronteer Development Group Inc. and Red Lake Resources' Swain East, Sol D'Or and Grace Properties, 250 pg, Assessment Report 52N08SW2002.

Labrador Exploration (Ontario) Limited, 1984; Diamond Drill Logs, Report No 20, 24 pg, MNDM Assessment File 52N07SE0033

Lee, F., 2003; Summary Report on the 2003 Summer Field Program, Birch -Uchi Project, Red Lake District prepared for JilBey Gold Exploration Ltd., Report# 857, A.C.A. Howe International Limited, 174 pg, MNDM Assessment Report 52N08SW2003

MacIsaac, M., 1990; Geological Survey – Mapping, Noranda Exploration Co Ltd., 15 pg, MNDM Assessment File 52N08SW0049.

McIntyre Mines Limited, 1978; Diamond Drill Logs, Report No 18, 62 pg, MNDM Assessment File 52N07SE0049.

Mekarski, J.E., 1969; Geophysical Survey Report, Vanco Exploration of Ontario Limited, 14 pg, MNDM Assessment File 52N07SE0055.

Paterson, W.P.E., Ravnaas, C., Lewis, S.O., Paju, G.F., Fudge, S.P., Daniels, C.M. and Pettigrew, T.K. 2020. Report of Activities 2019, Resident Geologist Program, Red Lake Regional Resident Geologist Report: Red Lake and Kenora Districts; Ontario Geological Survey, Open File Report 6363, 112p.

Sanborn-Barrie, M., Rogers, N., Skulski, T., Parker, J., NcNicoll, V., and Devaney, J., 2004; Geology and Tectonostratigraphic Assemblages, East Uchi Subprovince, Red Lake and Birch-Uchi belts, Ontario; Geological Survey of Canada, Open File 4256; Ontario Geological Survey, Preliminary Map P.3460, scale 1:250 000.

Seals, J., Siemieniuk, S., 2011; 2011 Stripping, Sampling and Mapping Of the South Showing On Frontline Gold's Shabumeni Lake Property, Red Lake Mining Division Goodall and Skinner Townships Shabumeni Lake and Little Shabumeni Lake Areas, for Frontline Gold, MNDM Assessment File 20009138. 35 pg.

St. Joseph Explorations Ltd., 1973; Diamond Drill Logs, Report No 14, 12 pg, MNDM Assessment File 52N07SE0069.

St. Joseph Explorations Ltd., 1974; Diamond Drill Logs, Report No 15, 8 pg, MNDM Assessment File 52N07SE0066.

Stanley, M., 1988; Geological Report For The Swain Lake Property, Goodale and Honeywell Township, Red Lake Mining Division For Inlet Resources Ltd., 100 pg., MNDM Assessment Report 52N07SE9868.

Stanley, M., 1988; Geological Report For The Shabumeni Lake Property, Goodale and Honeywell Township, Red Lake Mining Division For Greenstar Resources Ltd., 97 pg., MNDM Assessment Report 52N07SE0010.

Stone, D. and Crawford, J., 1994; Precambrian geology, Shabumeni Lake area; Ontario Geological Survey, Preliminary Map P.3285, scale 1:50,000.

Valenta, R. K., 2004a; 2004 Winter Drill Program, Geotechnical Submission for Assessment Credit, 152 pg, MNDM Assessment File 52N07SE2004.

Valenta, R.K., 2004b; Geotechnical Report on Spring 2004 Geophysics Program – Swain East – Sol D'Or Properties, Fronteer Development Group Inc., 45 pg, MNDM Assessment File 52N07SE2003.

STATEMENT OF QUALIFICATIONS

I, Andrew A. B. Tims, of 317 Sillesdale Cr., Thunder Bay Ontario hereby certify that:

1.) I am the co-author of this report.

2.) I graduated from Carleton University, in Ottawa, with a Bachelor of Science Degree in Geology (1989).

3.) I possess a lifetime prospector's license and have been practising my profession in mineral exploration industry for the past 35 years.

4.) I am a practising member of the Association of Professional Geoscientist of Ontario as well as a Fellow of the Geological Association of Canada.

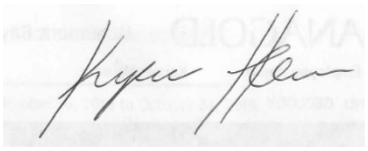
Thunder Bay, Ontario — Andrew Tims, P.Geo

January 15, 2021 — Northern Mineral Exploration Services

I, Kacper Halama, of 44 Jameson Cres., Brampton Ontario hereby certify that:

1.) I am the co-author of this report.

2.) I graduated from Acadia University, in Wolfville Nova Scotia, with a Bachelor of Science Degree in Geology (2012).



Brampton, Ontario
September 14, 2020

Kacper Halama

APPENDIX 1 – Outcrop Geology and Assay Maps

Lithology Map Codes

Mafic Flow, pillowed	1a
Mafic Flow, massive	1b
Mafic Tuff	1c
Intermediate Flow, massive	2a
Intermediate Tuff	2c
Felsic Flow, massive	3a
Felsic Tuff	3c
Sediment, siltstone or wacke	4
Conglomerate	4c
Granite to Granodiorite	6
Quartz Vein	10

521,000 mE
522,000 mE
523,000 mE
524,000 mE
5,682,000 mN
5,681,000 mN
5,680,000 mN

Magnetic Declination of 0°6W
MAGNETIC
TRUE
N

Shabumeni Lake

GOODALL TWP

SHABUMENI LAKE AREA

HONEYWELL TWP

559446

EAST PEANUT LAKE ZONE

WEST PEANUT LAKE ZONE

★NORTHWEST EXPLORERS

2a
Sericite
87
2a
Chlorite
2a
80
Calcite

2a
Sericite

2a
Chlorite
88
Chlorite
Calcite
Chlorite
2a
1c
1c
2a
Calcite
87
2a
Calcite
Calcite
Chlorite
2a
2a
2a
2a
Calcite
2a
Iron carbonate
2a
Iron carbonate
Iron carbonate
2a
Chlorite
1a

Shabumeni
Swain
Portage
Swain Post Camp
Swain Lake

Index Map

Traverse Tracks
AT- A.Tims, KH- K Halama
June 25, 2020
June26, 2020
June 27, 2020_AT
June 27, 2020_ KH
June 28, 2020_KH
June 28, 2020 _AT
June 29, 2020_KH
June 29, 2020_AT
August 24, 2020

Legend
Discretionary Mineral Occurrence
Claim Cell Boundary
Lithological Contact
Foliation with dip direction
Second foliation with dip direction
Fold Hinge
Quartz Vein- trend
Mapped Outcrop
Faults - interpreted
Mafic Volcanics
Intermediate Volcanics
Felsic Volcanic

PACTON GOLD

Swain Property
Peanut Claim Block
GEOLOGY MAP

Date: 2020-09-19
Author: pgeo_tims
Office:
Drawing: Geo1a
Scale: 1:5000
Projection: UTM Zone 15 (NAD 83)
MAP 1a

0 75 150 300
metres

521,000 mE
522,000 mE
523,000 mE
524,000 mE
5,682,000 mN
5,681,000 mN
5,680,000 mN

Magnetic Declination of 0°6W
MAGNETIC
TRUE
N

Shabumeni Lake

GOODALL TWP

SHABUMENI LAKE AREA

HONEYWELL TWP

0.043 253,256

EAST PEANUT LAKE ZONE

NORTHWEST EXPLORERS

<0.005 253,412
<0.005 253,413
WEST PEANUT LAKE ZONE

<0.005 253,257

559446

Shabumeni

Swain

Portage

Swain Post Camp

Swain Lake

Index Map

Traverse Tracks
AT - A. Tims KH - K. Halama
June 25, 2020
June 26, 2020
June 27, 2020_KH
June 27, 2020_AT
June 28, 2020_KH
June 28, 2020_AT
June 29, 2020_KH
June 29,2020_AT
August 24, 2020

Legend
Discretionary Mineral Occurrence
Claim Cell Boundary
Swain_Mapping_Data
Au ppm Sample Number
Sample
Faults - interpreted
Mafic Volcanics
Intermediate Volcanics
Felsic Volcanic

PACTON GOLD

Swain Property
Peanut Claim Block
GOLD ASSAY MAP

Date: 2020-09-19
Author: pgeo_tims
Office:
Drawing: Geo1a
Scale: 1:5000
Projection: UTM Zone 15 (NAD 83)
MAP 1b

0 75 150 300
metres

523,000 mE
524,000 mE
525,000 mE
5,687,000 mN
5,686,000 mN
5,685,000 mN
5,684,000 mN
5,683,000 mN

Magnetic Declination of 0°6W
MAGNETIC
TRUE
N

82 calcite
2a
2a
calcite

3c
Sericite

1b
Chlorite

559445

1a
Calcite

1c
Chlorite

4
Sericite

85
2c
Sericite
2c
Sericite
16
Sericite
82
SHABUMENI LAKE - PNN

3c
Sericite

4
Silica

2c
59
65
Calcite 2a
2c
Sericite 3a
70
3a
epidote
2c
Sericite
85
SHABUMENI LAKE-PN

SHABUMENI LAKE - PS

79
1a
Hematite

1a
Hematite

Traverse Tracks
June 28, 2020_AT
June 28, 2020_AT
June 28, 2020_KH
June 29, 2020-KH

Claim Boundary
Mapped Outcrop
Lithological Contact
Foliation with dip
Second foliation with dip
Swain_Structure_Data_mi
Quarz vien - trend
Hold Hinge
Fault interpreted
Discretionary Mineral Occurrence
Mineral Occurrence
Mafic Volcanic
Intermediate Volcanic
Felsic Volcanic

PACTON GOLD

Swain Property
Shabumeni West Claim Block
GEOLOGY MAP

Date: 2020-09-19
Author: pgeo_tims
Office:
Drawing:
Scale: 1:5000
Projection: UTM Zone 15 (NAD 83)
MAP 2a

0 75 150 300
metres

523,000 mE
524,000 mE
525,000 mE
5,687,000 mN
5,686,600 mN
5,686,200 mN
5,685,800 mN
5,685,400 mN
5,685,000 mN

Magnetic Declination of 0°6W
MAGNETIC
TRUE
N

0.015 253,262
0

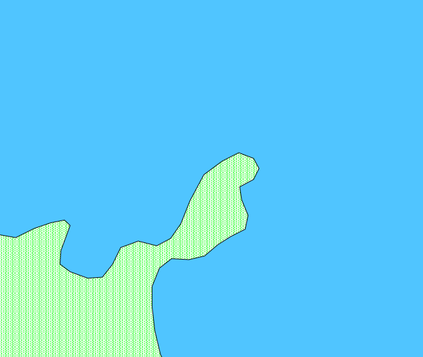
559445

<0.005 253,411
<0.005 253,410
SHABUMENI LAKE - PNN

0.006 253,261
0.035 253,260
SHABUMENI LAKE-PN
<0.005 253,409
SHABUMENI LAKE - PS

Claim Boundary
Mapped Outcrop
Sample with assays result - ppm
Fault interpreted
Discretionary Mineral Occurrence
Mineral Occurrence
Mafic Volcanic
Intermediate Volcanic
Felsic Volcanic

Traverse Tracks
June 27, 2020
June 28, 2020_AT
June 28, 2020_KH
June 29, 2020



PACTON GOLD

Swain Property
Shabumeni West Claim Block
GOLD ASSAY MAP

Date: 2020-09-19
Author: pgeo_tims
Office:
Drawing:
Scale: 1:5000
Projection: UTM Zone 15 (NAD 83)
MAP 2b

0 75 150 300
metres

525,000 mE
526,000 mE
527,000 mE
528,000 mE
5,689,000 mN
5,688,000 mN
5,687,000 mN

Magnetic Declination of 0°6W
MAGNETIC
TRUE
N

Claim Boundary
Discretionary Mineral Occurrence
Mineral Occurrence
Mapped outctop
Lithological Contact
Foliation with dip
Second foliation with dip
Quartz Vien
Fold Hinge
Fault - interpreted
Mafic Volcanic
Intermediate Volcanic
Felsic Volcanic

559223
559221

2a Calcite 80
2a Calcite
2a Calcite
68
2a Calcite
83
2c hematite
2c chlorite
2c
89
2a Calcite
2a
2a Calcite
2a calcite 87
2c hematite
2a
2a calcite
80
2c hematite
2a Calcite
2a chlorite 86
2a calcite
2a calcite 76

Traverse Tracks
June 29, 2020

Index Map

PACTON GOLD

Swain Property
Shabumeni North Claim Block
GEOLOGY MAP

Date: 2020-09-20
Author: pgeo_tims
Office:
Drawing:
Scale: 1:5000
Projection: UTM Zone 15 (NAD 83)
MAP 3a

0 75 150 300
metres

525,000 mE
526,000 mE
527,000 mE
528,000 mE
5,689,000 mN
5,688,000 mN
5,687,000 mN

Magnetic Declination of 0°6W

MAGNETIC
TRUE
N

Claim Boundary
Discretionary Mineral Occurrence
Mineral Occurrence
Sample with assays results - ppm
Mapped Outcrop
Fault - interpreted
Mafic Volcanic
Intermediate Volcanic
Felsic Volcanic

Shabumeni Lake

559223

559221

Traverse Tracks
June 29, 2020

Index Map

PACTON GOLD

Swain Property
Shabumeni North Claim Block
GOLD ASSAY MAP

Date: 2020-09-20
Author: pgeo_tims
Office:
Drawing:
Scale: 1:5000
Projection: UTM Zone 15 (NAD 83)
MAP 3b

0 75 150 300
metres

526,000 mE
527,000 mE
528,000 mE
529,000 mE
5,683,000 mN
5,682,000 mN
5,681,000 mN

Magnetic Declination of 0°6W
MAGNETIC
TRUE
N

559825
560260
559749

Guest
Swain Lake
Beaver Pond
Shabumeni Lake Area
Honeywell Twp

CONGLOMERATE SHOWING

4
2a 6 Epidote
6
6
2a Epidote
88
2a 6 Epidote
2a Calcite
88
6
6
4c 80 88
2a
4c 72
Chlorite
4c
4c
4c
4c Chlorite
4c
Chlorite
85
2a Epidote 82
2a Calcite
2a Calcite
2a Sericite
Beaver Pond
3a Sericite
2a Calcite
3a Epidote
2a Calcite
1a Sericite
75
2a Calcite
1a
1a
1a Chlorite
Chlorite
85
4c Sericite
62
2a Calcite
Gunnex

Claim Boundary
Discretionary Mineral Occurrence
Mineral Occurrence
mapped Outcrop
Lithological Contact
Foliation with dip
Second foliation with dip
Quartz Vein - trend
Fold Hinge - trend
Fault - interpreted
Mafic Volcanic
Intermediate Volcanic
Felsic Volcanic

Traverse Tracks
June 26, 2020_AT
June 27, 2020_KH
June 29, 2020_AT
August 24, 2020

Index map

PACTON GOLD

Date: 2020-09-20	Swain Property Shabumeni South Claim Block GEOLOGY MAP
Author: pgeo_tims	
Office:	
Drawing:	
Scale: 1:5000	Projection: UTM Zone 15 (NAD 83) MAP 4a

0 75 150 300
metres

526,000 mE
527,000 mE
528,000 mE
529,000 mE
5,683,000 mN
5,682,000 mN
5,681,000 mN

Magnetic Declination of 0°6W
MAGNETIC TRUE
N

559825

Guest

Swain Lake

CONGLOMERATE SHOWING

253259 0.346

Beaver Pond

253258
68.04

0.012
253440

253436 <0.005

<0.005 253.437

<0.005
253439

<0.005 253438

<0.005 253408

Gunnex

560260

559749

Shabumeni Lake Area
Honeywell Twp

Claim Boundary
Discretionary Mineral Occurrence
Mineral Occurrence
Sample with assay results - ppm
Lithological Contact
Foliation with dip
Second foliation with dip
Quartz Vein - trend
Fold Hinge - trend
Fault - interpreted
Mafic Volcanic
Intermediate Volcanic
Felsic Volcanic

Legend
June 26, 2020_AT
June 27, 2020_KH
All_SW_Tracks_mi
June 29, 2020 _AT
August 24, 2020

Index map

PACTON GOLD

Swain Property
Shabumeni South Claim Block
GOLS ASSAY MAP

Date: 2020-09-20
Author: pgeo_tims
Office:
Drawing:
Scale: 1:5000
Projection: UTM Zone 15 (NAD 83)
MAP 4b

0 75 150 300
metres

APPENDIX 2 – Analytical Certificates

ANALYSIS REPORT YRL20-00110

To PACTON GOLD INC
KARLY OLIVER
1680-200 BURRARD ST
VANCOUVER V6C 3L6
BC
CANADA

Project	Maybrun	Date Received	23-Jul-2020
Submission Number	RED LAKE 07232020	Date Analysed	23-Jul-2020 - 25-Jul-2020
Number of Samples	13	Date Completed	25-Jul-2020
		SGS Order Number	YRL20-00110

Methods Summary

Number of Sample	Method Code	Description
13	G_WGH_KG	Weight of samples received
13	GE_FAA30V5	Au, FAS, exploration grade, AAS, 30g-5ml
1	GO_FAG30V	Au, FAS, Gravimetric, 30g

Authorised Signatory

Dennis Dykin
Operations Manager

- not analysed | -- element not determined | I.S. insufficient sample | L.N.R. listed not received

Redlake | 16 A Young Street PO Box 1349 Red Lake Ontario P0V 2M0 CANADA t +001 (807) 727 2939 f +001 (807) 727 3183 www.sgs.com

Project	Maybrun
Submission Number	RED LAKE 07232020
Number of Samples	13

ANALYSIS REPORT YRL20-00110

Element	Wtkg	@Au	@Au
Method	G_WGH_KG	GE_FAA30V5	GO_FAG30V
Lower Limit	0.01	0.005	0.5
Upper Limit	--	10	10,000
Unit	kg	ppm m / m	ppm m / m
253408	1.59	<0.005	-
253409	0.90	<0.005	-
253410	1.15	<0.005	-
253411	1.24	<0.005	-
253412	0.63	<0.005	-
253413	1.27	<0.005	-
253256	1.23	0.043	-
253257	1.08	<0.005	-
253258	2.09	>10.000	68.040
253259	1.19	0.346	-
253260	0.76	0.035	-
253261	0.67	0.006	-
253262	1.04	0.015	-
*Std CDN-GS-45	-	-	45.508
*Blk BLANK	-	0.007	-
*Rep PREP_BLANK	-	<0.005	-
*Std OREAS221	-	1.092	-

SGS Canada Minerals Redlake conforms to the requirements of ISO/IEC17025 for specific tests as listed on their scope of accreditation found at https://www.scc.ca/en/search/laboratories/sgs
Tests and Elements marked with an "@" symbol in the report denote ISO/IEC17025 accreditation.

- not analysed | -- element not determined | I.S. insufficient sample | L.N.R. listed not received

Redlake | 16 A Young Street PO Box 1349 Red Lake Ontario P0V 2M0 CANADA t +001 (807) 727 2939 f +001 (807) 727 3183 www.sgs.com

ANALYSIS REPORT YRL20-00110

To PACTON GOLD INC
KRIS RAFFLE
1680-200 BURRARD ST
VANCOUVER V6C 3L6
BC
CANADA

Project	Red Lake	Date Received	23-Jul-2020
Submission Number	*BBY* Maybrun Project/ 14 Rocks	Date Analysed	07-Aug-2020 - 08-Aug-2020
Number of Samples	13	Date Completed	10-Aug-2020
		SGS Order Number	YRL20-00110

Methods Summary

Number of Sample	Method Code	Description
13	G_LOG	Sample Registration Fee
13	GE_ICP90A50	Na2O2 Fusion, ICPAES, 0.1g-50ml

Authorised Signatory

John Chiang
Laboratory Operations Manager

- not analysed | -- element not determined | I.S. insufficient sample | L.N.R. listed not received

SGS Canada | CA MIN Burnaby, BC 3260 Production Way, Burnaby, BC V5A 4W4 Burnaby CANADA t +1 (604) 638 2349 f www.sgs.com

Project	Red Lake
Submission Number	*BBY* Maybrun Project/ 14 Rocks
Number of Samples	13

ANALYSIS REPORT YRL20-00110

Element	Al	As	Ba	Be	Ca	Cd
Method	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50
Lower Limit	0.01	30	10	5	0.1	10
Upper Limit	25	100,000	50,000	25,000	25	50,000
Unit	%	ppm m / m	ppm m / m	ppm m / m	%	ppm m / m
253408	5.83	<30	168	<5	2.5	<10
253409	6.11	<30	853	<5	0.2	<10
253410	0.52	<30	19	<5	<0.1	<10
253411	6.50	<30	686	<5	0.2	<10
253412	5.14	<30	115	<5	1.4	<10
253413	5.55	<30	153	<5	1.8	<10
253256	4.83	<30	361	<5	0.3	<10
253257	4.66	<30	141	<5	2.1	<10
253258	6.86	1285	<10	<5	14.7	<10
253259	8.02	31	868	<5	2.3	<10
253260	4.40	<30	6695	<5	3.3	<10
253261	5.77	<30	607	<5	1.5	<10
253262	6.78	<30	58	<5	3.9	<10
*Blk BLANK	<0.01	<30	<10	<5	<0.1	<10
*Rep 253261	5.60	<30	571	<5	1.5	<10
*Std OREAS 623	5.04	88	1300	<5	1.4	51
*Std MP-2a	5.78	5201	12	<5	3.1	12
*Std OREAS 927	6.05	<30	287	<5	0.4	<10

Element	Co	Cr	Cu	Fe	K	La
Method	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50
Lower Limit	10	10	10	0.01	0.1	10
Upper Limit	50,000	50,000	50,000	25	25	50,000
Unit	ppm m / m	ppm m / m	ppm m / m	%	%	ppm m / m
253408	<10	12	12	6.62	0.7	21
253409	<10	<10	<10	1.61	1.4	39
253410	<10	19	<10	0.66	<0.1	<10
253411	<10	<10	<10	1.97	1.1	45
253412	<10	<10	<10	5.39	0.5	21
253413	<10	<10	<10	5.92	1.3	29

- not analysed | -- element not determined | I.S. insufficient sample | L.N.R. listed not received

SGS Canada | CA MIN Burnaby, BC 3260 Production Way, Burnaby, BC V5A 4W4 Burnaby CANADA t +1 (604) 638 2349 f www.sgs.com

Project	Red Lake
Submission Number	*BBY* Maybrun Project/ 14 Rocks
Number of Samples	13

ANALYSIS REPORT YRL20-00110

Element	Co	Cr	Cu	Fe	K	La
Method	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50
Lower Limit	10	10	10	0.01	0.1	10
Upper Limit	50,000	50,000	50,000	25	25	50,000
Unit	ppm m / m	ppm m / m	ppm m / m	%	%	ppm m / m
253256	<10	<10	<10	4.10	1.7	53
253257	<10	<10	<10	5.35	0.5	28
253258	47	175	8837	8.63	<0.1	<10
253259	<10	260	249	5.98	1.6	15
253260	<10	<10	17	1.16	0.4	62
253261	<10	<10	16	1.47	2.1	70
253262	33	22	<10	12.43	0.1	10
*Blk BLANK	<10	<10	<10	<0.01	<0.1	<10
*Rep 253261	<10	<10	14	1.42	2.0	68
*Std OREAS 623	222	29	17121	13.50	1.5	26
*Std MP-2a	<10	151	465	5.07	1.2	151
*Std OREAS 927	32	69	10210	8.36	1.8	34

Element	Li	Mg	Mn	Mo	Ni	P
Method	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50
Lower Limit	10	0.01	10	10	10	0.01
Upper Limit	50,000	25	100,000	50,000	100,000	25
Unit	ppm m / m	%	ppm m / m	ppm m / m	ppm m / m	%
253408	16	0.64	1168	<10	<10	0.09
253409	<10	0.28	114	<10	<10	<0.01
253410	<10	0.02	73	<10	<10	<0.01
253411	15	0.29	150	<10	<10	<0.01
253412	15	0.59	669	<10	<10	0.07
253413	19	0.46	719	<10	<10	0.07
253256	15	0.08	521	<10	<10	0.02
253257	14	0.28	971	<10	<10	0.06
253258	23	0.84	1318	<10	165	0.03
253259	33	2.21	1018	<10	28	0.08
253260	<10	0.19	1491	<10	<10	<0.01
253261	12	0.33	611	<10	<10	<0.01

- not analysed | -- element not determined | I.S. insufficient sample | L.N.R. listed not received

SGS Canada | CA MIN Burnaby, BC 3260 Production Way, Burnaby, BC V5A 4W4 Burnaby CANADA t +1 (604) 638 2349 f www.sgs.com

Project	Red Lake
Submission Number	*BBY* Maybrun Project/ 14 Rocks
Number of Samples	13

ANALYSIS REPORT YRL20-00110

Element	Li	Mg	Mn	Mo	Ni	P
Method	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50
Lower Limit	10	0.01	10	10	10	0.01
Upper Limit	50,000	25	100,000	50,000	100,000	25
Unit	ppm m / m	%	ppm m / m	ppm m / m	ppm m / m	%
253262	17	2.67	1984	<10	15	0.17
*Blk BLANK	<10	<0.01	<10	<10	<10	<0.01
*Rep 253261	10	0.31	604	<10	<10	0.01
*Std OREAS 623	15	1.21	598	<10	<10	0.05
*Std MP-2a	89	0.09	1017	1498	<10	<0.01
*Std OREAS 927	32	2.10	1109	<10	22	0.06

Element	Pb	Sb	Sc	Si	Sn	Sr
Method	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50
Lower Limit	20	50	5	0.1	50	10
Upper Limit	100,000	100,000	50,000	30	50,000	5,000
Unit	ppm m / m	ppm m / m	ppm m / m	%	ppm m / m	ppm m / m
253408	<20	<50	15	>30.0	<50	131
253409	<20	<50	<5	>30.0	<50	143
253410	<20	<50	<5	>30.0	<50	20
253411	<20	<50	<5	>30.0	<50	153
253412	<20	<50	13	>30.0	<50	61
253413	<20	<50	13	>30.0	<50	55
253256	<20	<50	7	>30.0	<50	35
253257	<20	<50	12	>30.0	<50	74
253258	<20	<50	20	19.4	<50	261
253259	<20	<50	19	26.7	<50	451
253260	<20	<50	<5	>30.0	<50	426
253261	<20	<50	<5	>30.0	<50	134
253262	<20	<50	38	21.2	<50	113
*Blk BLANK	<20	<50	<5	<0.1	<50	<10
*Rep 253261	<20	<50	<5	>30.0	<50	132
*Std OREAS 623	2308	<50	7	22.8	<50	85
*Std MP-2a	2642	<50	5	>30.0	503	14
*Std OREAS 927	193	<50	10	27.9	<50	29

- not analysed | -- element not determined | I.S. insufficient sample | L.N.R. listed not received

SGS Canada | CA MIN Burnaby, BC 3260 Production Way, Burnaby, BC V5A 4W4 Burnaby CANADA t +1 (604) 638 2349 f www.sgs.com

Project	Red Lake
Submission Number	*BBY* Maybrun Project/ 14 Rocks
Number of Samples	13

ANALYSIS REPORT YRL20-00110

Element	Ti	V	W	Y	Zn
Method	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50
Lower Limit	0.01	10	50	5	10
Upper Limit	25	50,000	40,000	25,000	50,000
Unit	%	ppm m / m	ppm m / m	ppm m / m	ppm m / m
253408	0.44	<10	<50	89	79
253409	0.09	<10	<50	81	31
253410	0.01	<10	<50	9	<10
253411	0.11	21	<50	93	36
253412	0.38	<10	<50	137	67
253413	0.37	<10	<50	116	87
253256	0.22	<10	<50	160	96
253257	0.36	<10	<50	100	111
253258	0.42	181	<50	12	530
253259	0.35	137	<50	12	56
253260	0.06	12	<50	57	30
253261	0.08	15	<50	82	41
253262	1.28	212	<50	44	151
*Blk BLANK	0.01	<10	<50	<5	<10
*Rep 253261	0.08	13	<50	83	40
*Std OREAS 623	0.15	25	<50	16	9920
*Std MP-2a	0.03	<10	3204	216	5659
*Std OREAS 927	0.32	73	<50	20	694

- not analysed | -- element not determined | I.S. insufficient sample | L.N.R. listed not received

SGS Canada | CA MIN Burnaby, BC 3260 Production Way, Burnaby, BC V5A 4W4 Burnaby CANADA t +1 (604) 638 2349 f www.sgs.com

ANALYSIS REPORT YRL20-00199

To PACTON GOLD INC
KARLY OLIVER
1680-200 BURRARD ST
VANCOUVER V6C 3L6
BC
CANADA

Submission Number	Gullrock / Swain 08252020	Date Received	25-Aug-2020
Number of Samples	23	Date Analysed	25-Aug-2020 - 27-Aug-2020
		Date Completed	27-Aug-2020
		SGS Order Number	YRL20-00199

Methods Summary

Number of Sample	Method Code	Description
23	G_WGH_KG	Weight of samples received
23	GE_FAA30V5	Au, FAS, exploration grade, AAS, 30g-5ml

Authorised Signatory

Dennis Dykin
Operations Manager

- not analysed | -- element not determined | I.S. insufficient sample | L.N.R. listed not received

Redlake | 16 A Young Street PO Box 1349 Red Lake Ontario P0V 2M0 CANADA t +001 (807) 727 2939 f +001 (807) 727 3183 www.sgs.com

Submission Number Gullrock / Swain 08252020
Number of Samples 23

ANALYSIS REPORT YRL20-00199

Element	Wtkg	@Au
Method	G_WGH_KG	GE_FAA30V5
Lower Limit	0.01	0.005
Upper Limit	--	10,000
Unit	kg	ppm m / m
253422	9.02	0.006
253423	3.00	<0.005
253424	1.77	<0.005
253425	0.53	0.006
253426	2.29	<0.005
253427	0.78	0.008
253428	2.19	<0.005
253429	2.71	0.041
253430	1.03	0.008
253431	2.21	<0.005
253432	1.59	0.007
253433	2.52	0.005
253434	1.88	0.011
253435	1.74	0.009
253291	2.20	<0.005
253292	1.78	<0.005
253293	1.98	<0.005
253435	1.58	0.067
253436	0.54	<0.005
253437	1.55	<0.005
253438	1.12	<0.005
253439	1.53	<0.005
253440	1.72	0.012
*Blk BLANK	-	<0.005
*Std OREAS222	-	1.228
*Rep 253435	-	0.012
*Std OREAS221	-	1.085

- not analysed | -- element not determined | I.S. insufficient sample | L.N.R. listed not received

Redlake | 16 A Young Street PO Box 1349 Red Lake Ontario P0V 2M0 CANADA t +001 (807) 727 2939 f +001 (807) 727 3183 www.sgs.com

Submission Number	Gullrock / Swain 08252020
Number of Samples	23

ANALYSIS REPORT YRL20-00199

SGS Canada Minerals Redlake conforms to the requirements of ISO/IEC17025 for specific tests as listed on their scope of accreditation found at https://www.scc.ca/en/search/laboratories/sgs
Tests and Elements marked with an "@" symbol in the report denote ISO/IEC17025 accreditation.

- not analysed | -- element not determined | I.S. insufficient sample | L.N.R. listed not received

Redlake | 16 A Young Street PO Box 1349 Red Lake Ontario P0V 2M0 CANADA t +001 (807) 727 2939 f +001 (807) 727 3183 www.sgs.com

ANALYSIS REPORT YRL20-00199

To PACTON GOLD INC
KRIS RAFFLE-RED LAKE PROJECT
1680-200 BURRARD ST
VANCOUVER V6C 3L6
BC
CANADA

Project	Red Lake	Date Received	25-Aug-2020
Submission Number	*BBY* Gullrock + Swain/ 23 Rocks	Date Analysed	21-Sep-2020 - 24-Sep-2020
Number of Samples	23	Date Completed	24-Sep-2020
		SGS Order Number	YRL20-00199

Methods Summary

Number of Sample	Method Code	Description
23	GE_ICP90A50	Na2O2 Fusion, ICPAES, 0.1g-50ml

Comments

Preparation of samples was performed at the SGS Red Lake site.
Analysis of samples was performed at the SGS Burnaby site.

Authorised Signatory

John Chiang
Laboratory Operations Manager

- not analysed | -- element not determined | I.S. insufficient sample | L.N.R. listed not received

SGS Canada | CA MIN Burnaby, BC 3260 Production Way, Burnaby, BC V5A 4W4 Burnaby CANADA t +1 (604) 638 2349 f www.sgs.com

Project	Red Lake
Submission Number	*BBY* Gullrock + Swain/ 23 Rocks
Number of Samples	23

ANALYSIS REPORT YRL20-00199

Element	Al	As	Ba	Be	Ca	Cd
Method	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50
Lower Limit	0.01	30	10	5	0.1	10
Upper Limit	25	100,000	50,000	25,000	25	50,000
Unit	%	ppm m / m	ppm m / m	ppm m / m	%	ppm m / m
253422	5.88	<30	196	<5	6.8	<10
253423	7.03	<30	134	<5	8.8	<10
253424	7.34	<30	85	<5	11.7	<10
253425	4.21	<30	16	7	0.9	<10
253426	10.81	<30	878	<5	2.7	<10
253427	2.19	<30	<10	<5	4.4	<10
253428	0.17	<30	<10	<5	1.6	<10
253429	2.35	<30	<10	5	7.8	<10
253430	7.31	<30	152	<5	11.0	<10
253431	0.84	<30	<10	<5	0.4	<10
253432	6.14	<30	28	<5	14.2	<10
253433	6.33	<30	27	<5	15.6	<10
253434	8.04	<30	355	<5	13.3	<10
253435	7.00	<30	167	<5	2.5	<10
253291	7.68	<30	4134	<5	1.9	<10
253292	9.60	<30	414	<5	5.2	<10
253293	7.63	<30	25	<5	15.8	<10
253435a	8.86	87	43	<5	3.4	<10
253436	7.76	<30	14	<5	6.6	<10
253437	8.10	49	<10	<5	11.0	<10
253438	8.69	<30	353	<5	6.3	<10
253439	9.32	<30	74	<5	9.3	<10
253440	8.11	33	701	<5	2.4	<10
*Blk BLANK	<0.01	<30	<10	<5	<0.1	<10
*Rep 253430	7.20	<30	152	<5	10.8	<10
*Std OREAS 623	4.85	83	1241	<5	1.3	46
*Std MP-2a	6.19	5140	12	<5	3.2	11
*Std OREAS 927	6.72	<30	298	<5	0.4	<10

- not analysed | -- element not determined | I.S. insufficient sample | L.N.R. listed not received

SGS Canada | CA MIN Burnaby, BC 3260 Production Way, Burnaby, BC V5A 4W4 Burnaby CANADA t +1 (604) 638 2349 f www.sgs.com

Project	Red Lake
Submission Number	*BBY* Gullrock + Swain/ 23 Rocks
Number of Samples	23

ANALYSIS REPORT YRL20-00199

Element	Co	Cr	Cu	Fe	K	La
Method	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50
Lower Limit	10	10	10	0.01	0.1	10
Upper Limit	50,000	50,000	50,000	25	25	50,000
Unit	ppm m / m	ppm m / m	ppm m / m	%	%	ppm m / m
253422	39	86	183	12.33	0.5	<10
253423	42	117	228	10.91	0.4	<10
253424	38	81	201	10.28	0.3	<10
253425	<10	70	11	0.78	0.1	<10
253426	72	230	228	5.03	4.5	<10
253427	<10	48	139	16.59	0.1	<10
253428	<10	44	27	7.99	<0.1	<10
253429	<10	22	286	13.49	<0.1	<10
253430	36	152	111	9.28	1.0	<10
253431	10	50	92	0.99	<0.1	<10
253432	28	29	76	11.21	0.1	<10
253433	41	184	<10	7.90	<0.1	<10
253434	51	146	94	7.97	0.3	<10
253435	28	117	246	7.23	1.2	11
253291	<10	21	13	1.58	2.2	25
253292	25	66	<10	4.12	1.6	<10
253293	41	278	28	6.49	<0.1	<10
253435a	43	130	535	11.70	0.2	<10
253436	34	184	43	9.01	<0.1	<10
253437	38	121	<10	6.10	<0.1	<10
253438	39	127	<10	6.23	1.2	<10
253439	47	141	<10	6.09	0.3	<10
253440	19	144	36	4.34	2.1	23
*Blk BLANK	<10	<10	<10	<0.01	<0.1	<10
*Rep 253430	36	147	111	9.17	1.0	<10
*Std OREAS 623	215	29	16602	12.85	1.4	23
*Std MP-2a	<10	142	479	4.94	1.3	150
*Std OREAS 927	28	63	10553	8.52	1.9	33

- not analysed | -- element not determined | I.S. insufficient sample | L.N.R. listed not received

SGS Canada | CA MIN Burnaby, BC 3260 Production Way, Burnaby, BC V5A 4W4 Burnaby CANADA t +1 (604) 638 2349 f www.sgs.com

Project	Red Lake
Submission Number	*BBY* Gullrock + Swain/ 23 Rocks
Number of Samples	23

ANALYSIS REPORT YRL20-00199

Element	Li	Mg	Mn	Mo	Ni	P
Method	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50
Lower Limit	10	0.01	10	10	10	0.01
Upper Limit	50,000	25	100,000	50,000	100,000	25
Unit	ppm m / m	%	ppm m / m	ppm m / m	ppm m / m	%
253422	36	2.24	3648	<10	44	0.06
253423	32	3.26	3289	<10	62	0.05
253424	31	2.34	3432	<10	35	0.05
253425	11	0.10	552	<10	<10	<0.01
253426	146	1.36	1047	<10	141	0.05
253427	<10	2.19	15595	<10	<10	0.02
253428	<10	0.82	4002	<10	<10	<0.01
253429	<10	0.85	11075	<10	<10	0.02
253430	27	2.24	3267	<10	66	0.04
253431	23	0.15	159	<10	<10	<0.01
253432	12	2.53	5112	<10	14	0.05
253433	12	1.73	4443	<10	77	0.03
253434	45	2.07	4919	<10	77	0.04
253435	94	1.24	1196	<10	46	0.04
253291	42	0.39	509	<10	<10	0.03
253292	58	2.19	840	<10	60	0.04
253293	25	2.05	3393	<10	124	0.03
253435a	29	1.79	1199	<10	83	0.03
253436	36	7.04	1506	<10	130	0.03
253437	<10	3.12	1231	<10	191	0.02
253438	17	6.02	1266	<10	199	0.02
253439	15	3.28	1135	<10	227	0.02
253440	37	1.44	622	<10	28	0.06
*Blk BLANK	<10	<0.01	<10	<10	<10	<0.01
*Rep 253430	26	2.21	3198	<10	57	0.04
*Std OREAS 623	15	1.16	625	10	11	0.05
*Std MP-2a	91	0.09	1006	1447	<10	0.02
*Std OREAS 927	36	2.20	1144	<10	25	0.06

- not analysed | -- element not determined | I.S. insufficient sample | L.N.R. listed not received

SGS Canada | CA MIN Burnaby, BC 3260 Production Way, Burnaby, BC V5A 4W4 Burnaby CANADA t +1 (604) 638 2349 f www.sgs.com

Project	Red Lake
Submission Number	*BBY* Gullrock + Swain/ 23 Rocks
Number of Samples	23

ANALYSIS REPORT YRL20-00199

Element	Pb	Sb	Sc	Si	Sn	Sr
Method	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50
Lower Limit	20	50	5	0.1	50	10
Upper Limit	100,000	100,000	50,000	30	50,000	5,000
Unit	ppm m / m	ppm m / m	ppm m / m	%	ppm m / m	ppm m / m
253422	<20	<50	27	25.5	<50	131
253423	<20	<50	34	22.8	<50	103
253424	<20	<50	35	23.1	<50	111
253425	<20	<50	<5	>30.0	<50	53
253426	<20	<50	44	26.2	<50	90
253427	<20	<50	8	27.3	<50	16
253428	<20	<50	<5	>30.0	<50	<10
253429	<20	<50	<5	28.3	<50	16
253430	<20	<50	32	21.6	<50	87
253431	96	<50	<5	>30.0	<50	<10
253432	<20	<50	32	21.5	<50	150
253433	<20	<50	31	20.2	<50	70
253434	<20	<50	39	21.4	<50	158
253435	<20	<50	19	27.1	<50	207
253291	<20	<50	<5	>30.0	<50	225
253292	<20	<50	12	25.7	<50	168
253293	<20	<50	32	19.9	<50	124
253435a	<20	<50	19	18.2	<50	160
253436	<20	<50	22	18.8	<50	220
253437	<20	<50	18	19.1	<50	186
253438	<20	<50	19	19.8	<50	125
253439	<20	<50	21	20.7	<50	306
253440	<20	<50	15	26.2	<50	378
*Blk BLANK	<20	<50	<5	<0.1	<50	<10
*Rep 253430	<20	<50	33	21.2	<50	86
*Std OREAS 623	2230	<50	7	22.9	<50	85
*Std MP-2a	2658	<50	<5	29.6	518	16
*Std OREAS 927	202	<50	10	28.1	<50	32

- not analysed | -- element not determined | I.S. insufficient sample | L.N.R. listed not received

SGS Canada | CA MIN Burnaby, BC 3260 Production Way, Burnaby, BC V5A 4W4 Burnaby CANADA t +1 (604) 638 2349 f www.sgs.com

Project	Red Lake
Submission Number	*BBY* Gullrock + Swain/ 23 Rocks
Number of Samples	23

ANALYSIS REPORT YRL20-00199

Element	Ti	V	W	Y	Zn
Method	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50
Lower Limit	0.01	10	50	5	10
Upper Limit	25	50,000	40,000	25,000	50,000
Unit	%	ppm m / m	ppm m / m	ppm m / m	ppm m / m
253422	0.56	237	<50	20	162
253423	0.64	281	<50	23	141
253424	0.80	295	<50	24	119
253425	0.02	<10	<50	17	21
253426	0.82	355	<50	16	243
253427	0.08	45	<50	16	244
253428	<0.01	<10	<50	<5	86
253429	0.04	45	<50	19	162
253430	0.61	274	<50	18	117
253431	0.02	11	<50	<5	117
253432	0.71	294	<50	22	101
253433	0.50	224	<50	20	116
253434	0.51	248	<50	18	114
253435	0.31	114	<50	15	104
253291	0.16	<10	<50	7	71
253292	0.28	77	<50	7	151
253293	0.45	211	<50	16	100
253435a	0.39	150	<50	7	50
253436	0.51	205	<50	12	91
253437	0.35	146	<50	7	57
253438	0.37	158	<50	8	64
253439	0.40	173	<50	9	50
253440	0.27	126	<50	11	61
*Blk BLANK	<0.01	<10	<50	<5	<10
*Rep 253430	0.60	275	<50	18	116
*Std OREAS 623	0.14	26	<50	15	9844
*Std MP-2a	0.03	<10	3159	212	5564
*Std OREAS 927	0.34	72	<50	20	725

- not analysed | -- element not determined | I.S. insufficient sample | L.N.R. listed not received

SGS Canada | CA MIN Burnaby, BC 3260 Production Way, Burnaby, BC V5A 4W4 Burnaby CANADA t +1 (604) 638 2349 f www.sgs.com

APPENDIX 3 – Outcrop Data Spread

Date	Project Name	Station_ID	Logger	Date and Time	DATUM	UTM_E	UTM_N	Ele
2020-06-24	Swain	Swain007	Kacper Halama	2020/06/24 1:21:54PM	15U	522769.1866	5681760.521	457.469604
2020-06-24	Swain	Swain003A	Kacper Halama	2020/06/24 10:32:45AM	15U	522153.8354	5681043.695	451.461426
2020-06-24	Swain	Swain003B	Kacper Halama	2020/06/24 10:32:45AM	15U	522153.8354	5681043.695	451.461426
2020-06-24	Swain	Swain003C	Kacper Halama	2020/06/24 10:32:45AM	15U	522153.8354	5681043.695	451.461426
2020-06-24	Swain	Swain002	Kacper Halama	2020/06/24 10:44:45AM	15U	522106	5680991	435
2020-06-24	Swain	Swain004	Kacper Halama	2020/06/24 11:08:14AM	15U	522259.9433	5681144.418	443.290161
2020-06-24	Swain	Swain005	Kacper Halama	2020/06/24 12:32:38PM	15U	522709.8163	5681643.057	459.872803
2020-06-24	Swain	Swain006	Kacper Halama	2020/06/24 12:59:36PM	15U	522695.7815	5681677.336	452.90332
2020-06-24	Swain	Swain008	Kacper Halama	2020/06/24 2:19:45PM	15U	522464.896	5681312.99	435.119141
2020-06-24	Swain	Swain009	Kacper Halama	2020/06/24 2:46:45PM	15U	522335.0884	5681025.019	432.715942
2020-06-24	Swain	Swain010	Kacper Halama	2020/06/24 2:59:39PM	15U	522314.9135	5680952.511	439.444946
2020-06-24	Swain	Swain011	Kacper Halama	2020/06/24 3:12:01PM	15U	522281.1614	5680939.473	436.561157
2020-06-25	Swain	Swain014	Kacper Halama	2020/06/25 10:05:46AM	15U	527782.3577	5681907.875	416.133301
2020-06-25	Swain	Swain015A	Kacper Halama	2020/06/25 10:16:12AM	15U	527748.9165	5681891.809	417.575195
2020-06-25	Swain	Swain015B	Kacper Halama	2020/06/25 10:16:12AM	15U	527748.9165	5681891.809	417.575195
2020-06-25	Swain	Swain016	Kacper Halama	2020/06/25 11:18:26AM	15U	527708.5678	5681846.26	426.707642
2020-06-25	Swain	Swain017	Kacper Halama	2020/06/25 11:33:51AM	15U	527744.5363	5682001.148	417.815552
2020-06-25	Swain	Swain018	Kacper Halama	2020/06/25 11:42:02AM	15U	527815.2908	5682024.948	423.102783
2020-06-25	Swain	Swain019	Kacper Halama	2020/06/25 11:51:47AM	15U	527917.3173	5682097.765	422.381714
2020-06-25	Swain	Swain012	Kacper Halama	2020/06/25 9:38:24AM	15U	527854.1071	5681896.175	416.613892
2020-06-25	Swain	Swain013	Kacper Halama	2020/06/25 9:51:37AM	15U	527808.6346	5681913.834	416.133301
2020-06-25	Swain	Swainain110	Andrew Tims	2020-06-28 10:05:11AM	15U	523573	5684386	418
2020-06-26	Swain	Swainain101	Andrew Tims	2020/06/26 12:32:05PM	15U	528657	5681984	430
2020-06-26	Swain	Swainain102	Andrew Tims	2020/06/26 12:32:05PM	15U	528656	5681876	442
2020-06-26	Swain	Andesite1	Andrew Tims	2020-06-29 8:32:05AM	15U	521988	5680893	419
2020-06-27	Swain	Swain034	Kacper Halama	2020/06/27 1:05:13PM	15U	526033.7095	5681936.69	393.061768
2020-06-27	Swain	Mvflowtop	Andrew Tims	2020/06/27 1:06:24PM	15U	522819	5684711	396
2020-06-27	Swain	Swain035	Kacper Halama	2020/06/27 1:14:18PM	15U	525794.3007	5681929.084	395.705322
2020-06-27	Swain	Mvpillow	Andrew Tims	2020/06/27 1:22:01PM	15U	523447	5685612	396
2020-06-27	Swain	Fvtuff	Andrew Tims	2020/06/27 1:33:09PM	15U	524156	5685700	395
2020-06-27	Swain	Fvflwbrx	Andrew Tims	2020/06/27 1:55:40PM	15U	523840	5684313	396
2020-06-27	Swain	Swain026A	Kacper Halama	2020/06/27 10:12:43AM	15U	528640.985	5682336.696	390.658447
2020-06-27	Swain	Swain026B	Kacper Halama	2020/06/27 10:12:43AM	15U	528640.985	5682336.696	390.658447
2020-06-27	Swain	Swain027	Kacper Halama	2020/06/27 10:31:20AM	15U	528815.5529	5682171.097	387.53418
2020-06-27	Swain	Swain028	Kacper Halama	2020/06/27 10:41:24AM	15U	528892.4387	5682154.276	388.255249
2020-06-27	Swain	Swain029A	Kacper Halama	2020/06/27 10:59:16AM	15U	529398.7885	5682503.348	389.216553
2020-06-27	Swain	Swain029B	Kacper Halama	2020/06/27 10:59:16AM	15U	529398.7885	5682503.348	389.216553
2020-06-27	Swain	Swain030	Kacper Halama	2020/06/27 11:41:14AM	15U	529394.7469	5682867.226	387.293945
2020-06-27	Swain	Swain031A	Kacper Halama	2020/06/27 12:26:00PM	15U	529105.0017	5682947.014	389.9375
2020-06-27	Swain	Swain031B	Kacper Halama	2020/06/27 12:26:00PM	15U	529105.0017	5682947.014	389.9375
2020-06-27	Swain	Swain032	Kacper Halama	2020/06/27 12:26:56PM	15U	529011.8281	5682875.137	389.9375
2020-06-27	Swain	Swainain104	Andrew Tims	2020/06/27 12:32:05PM	15U	523278	5683974	412
2020-06-27	Swain	Swain033	Kacper Halama	2020/06/27 12:36:46PM	15U	528981.3054	5682848.08	387.053589
2020-06-27	Swain	Sedchert	Andrew Tims	2020/06/27 12:49:58PM	15U	522996	5684123	396
2020-06-27	Swain	Sed?	Andrew Tims	2020/06/27 2:22:27PM	15U	523800	5684772	399
2020-06-27	Swain	Swain020	Kacper Halama	2020/06/27 7:33:17AM	15U	527408.9706	5682207.055	413.009033
2020-06-27	Swain	Swain021	Kacper Halama	2020/06/27 8:27:15AM	15U	527268.1399	5682116.769	415.652588
2020-06-27	Swain	Swain022	Kacper Halama	2020/06/27 8:46:30AM	15U	527284.7812	5682124.324	412.768677
2020-06-27	Swain	Swain023	Kacper Halama	2020/06/27 8:54:36AM	15U	527368.6096	5682163.727	417.334961
2020-06-27	Swain	Swain024	Kacper Halama	2020/06/27 9:11:32AM	15U	527425.7661	5682203.211	408.92334
2020-06-27	Swain	Swain025	Kacper Halama	2020/06/27 9:19:27AM	15U	527448.9109	5682239.354	403.63623
2020-06-28	Swain	Swain039	Kacper Halama	2020/06/28 10:04:04AM	15U	523312.5288	5684006.943	413.72998
2020-06-28	Swain	Swain040	Kacper Halama	2020/06/28 10:08:12AM	15U	523299.1584	5684002.286	408.202393
2020-06-28	Swain	Swain041	Kacper Halama	2020/06/28 10:17:26AM	15U	523294.4283	5683991.461	413.72998
2020-06-28	Swain	Swain042	Kacper Halama	2020/06/28 11:34:26AM	15U	523017.8769	5683592.893	405.318481
2020-06-28	Swain	Swain043	Kacper Halama	2020/06/28 11:47:29AM	15U	522940.799	5683522.486	392.581055
2020-06-28	Swain	Swain044	Kacper Halama	2020/06/28 11:59:40AM	15U	522694.4157	5684884.565	390.898804
2020-06-28	Swain	Swain036	Kacper Halama	2020/06/28 8:52:30AM	15U	523275.2272	5684052.216	398.829712
2020-06-28	Swain	Swain038A	Kacper Halama	2020/06/28 9:37:59AM	15U	523320.7534	5684009.963	413.24939
2020-06-28	Swain	Swain038B	Kacper Halama	2020/06/28 9:37:59AM	15U	523320.7534	5684009.963	413.24939
2020-06-28	Swain	Swain038C	Kacper Halama	2020/06/28 9:37:59AM	15U	523320.7534	5684009.963	413.24939
2020-06-28	Swain	Swain037	Kacper Halama	2020/06/28 9:55:42AM	15U	523319.5291	5684011.934	412.52832
2020-06-28	Swain	Swainain106	Andrew Tims	2020-06-28 12:28:00PM	15U	523572	5684404	419
2020-06-28	Swain	Swainain111	Andrew Tims	2020-06-28 12:28:00PM	15U	523490	5684378	420
2020-06-28	Swain	Swainain112	Andrew Tims	2020-06-28 12:28:00PM	15U	523573	5684390	418
2020-06-29	Swain	Swain053	Kacper Halama	2020/06/29 10:04:46AM	15U	525590.8156	5687552.815	395.705322
2020-06-29	Swain	Swain054	Kacper Halama	2020/06/29 10:10:14AM	15U	525478.0603	5687470.323	399.069946
2020-06-29	Swain	Swain055	Kacper Halama	2020/06/29 10:16:27AM	15U	525331.5628	5687211.337	397.387695
2020-06-29	Swain	Swain056	Kacper Halama	2020/06/29 10:20:11AM	15U	525214.9968	5687434.948	381.04541
2020-06-29	Swain	Swain057	Kacper Halama	2020/06/29 10:40:11AM	15U	525276.0731	5687616.436	397.868408
2020-06-29	Swain	Swain058	Kacper Halama	2020/06/29 10:44:19AM	15U	525252.5603	5687862.301	398.348999
2020-06-29	Swain	Swain059	Kacper Halama	2020/06/29 10:53:33AM	15U	525066.2101	5687927.904	401.473267

Date	Project Name	Station_ID	Logger	Date and Time	DATUM	UTM_E	UTM_N	Ele
2020-06-29	Swain	Swain060	Kacper Halama	2020/06/29 11:44:26AM	15U	524924.0046	5687866.011	386.092285
2020-06-29	Swain	Swain061	Kacper Halama	2020/06/29 11:45:41AM	15U	524824.9747	5686540.905	385.851929
2020-06-29	Swain	Swain062	Kacper Halama	2020/06/29 12:00:55PM	15U	524798.877	5686462.494	404.357178
2020-06-29	Swain	Swain063	Kacper Halama	2020/06/29 12:19:35PM	15U	525838.8099	5686785.925	390.898804
2020-06-29	Swain	Swain064	Kacper Halama	2020/06/29 12:28:15PM	15U	525992.2591	5686906.254	395.705322
2020-06-29	Swain	Swain065	Kacper Halama	2020/06/29 12:32:05PM	15U	526113.9704	5687112.25	391.379395
2020-06-29	Swain	Swain045	Kacper Halama	2020/06/29 8:33:24AM	15U	526709.1071	5689068.288	393.542358
2020-06-29	Swain	Swain046	Kacper Halama	2020/06/29 8:43:17AM	15U	526693.3415	5689001.22	402.43457
2020-06-29	Swain	Swain047	Kacper Halama	2020/06/29 8:57:23AM	15U	526255.3972	5688570.336	394.503662
2020-06-29	Swain	Swain048	Kacper Halama	2020/06/29 9:05:52AM	15U	525986.2173	5688270.123	398.589355
2020-06-29	Swain	Swain049	Kacper Halama	2020/06/29 9:15:04AM	15U	525896.1333	5688198.476	393.782715
2020-06-29	Swain	Swain050	Kacper Halama	2020/06/29 9:27:08AM	15U	525791.6773	5688061.272	398.589355
2020-06-29	Swain	Swain051	Kacper Halama	2020/06/29 9:49:24AM	15U	525704.7798	5687907.361	398.829712
2020-06-29	Swain	Swain052	Kacper Halama	2020/06/29 9:55:13AM	15U	525656.8211	5687720.62	400.992554
2020-06-29	Swain	Swainain111a	Andrew Tims	2020-06-28 12:28:00PM	15U	523491	5684375	419
2020-06-29	Swain	Sed/dyk20/86	Andrew Tims	2020-06-29 11:42:24AM	15U	527657	5682816	398
2020-06-29	Swain	Andsite2	Andrew Tims	2020-06-29 8:42:34AM	15U	522086	5680924	425
2020-06-29	Swain	Spherul1	Andrew Tims	2020-06-29 8:44:32AM	15U	522101	5680919	427
2020-06-29	Swain	Dac1	Andrew Tims	2020-06-29 8:49:23AM	15U	522159	5680910	424
2020-06-29	Swain	Mv3	Andrew Tims	2020-06-29 8:52:08AM	15U	522189	5680901	425
2020-06-29	Swain	Swainain107	Andrew Tims	2020-06-29 9:50:53AM	15U	522277	5680955	432
2020-06-29	Swain	Swainain107a	Andrew Tims	2020-06-29 9:50:53AM	15U	522278	5680943	432
2020-06-29	Swain	AndesiteANK	Andrew Tims	2020-06-2910:33:42AM	15U	522116	5680911	432
2020-08-24	Swain	Swain508	Kacper Halama	2020-08-24 9:50:53AM	15U	527798	5681863	421
2020-08-24	Swain	Swain509	Kacper Halama	2020-08-24 9:50:53AM	15U	527823	5681836	425
2020-08-24	Swain	Swain510	Kacper Halama	2020-08-24 9:50:53AM	15U	527808	5681805	419
2020-08-24	Swain	Swain511	Kacper Halama	2020-08-24 9:50:53AM	15U	527778	5681812	431
2020-08-24	Swain	Swain512	Kacper Halama	2020-08-24 12:47:37PM	15U	527781	5681811	426
2020-08-24	Swain	Swain513	Kacper Halama	2020-08-24 9:50:53AM	15U	527741	5681861	411
2020-08-24	Swain	Swain514	Kacper Halama	2020-08-24 1:54:47PM	15U	527979	5682379	384

Station_ID	Rock_type	GrainSize	Rock_alternative	Alt_type	Alt_intensity	Alt_distrib	Silicification	Magnetism
Swain007	Intermediate volc	fine		Sericite	Moderate	pervasive	Moderate	strong
Swain003A	Mafic tuf	aphanitic		Calcite	Strong	pervasive	weak	strong
Swain003B	Mafic tuf			Chlorite	Moderate	pervasive	Moderate	Moderate
Swain003C	Intermediate volc	very fine	massive	Sericite	Moderate			None
Swain002	Intermediate volc	very fine	massive	Calcite	Weak	pervasive		
Swain004	Intermediate volc	very fine		Chlorite	Weak			strong
Swain005	Intermediate volc	very fine	massive	Calcite	Moderate	pervasive		Moderate
Swain006	Intermediate volc	Spherulitic	fine	Chlorite	Moderate	pervasive		
Swain008	Intermediate volc	very fine		Sericite	Moderate	pervasive	Moderate	
Swain009	Intermediate volc	very fine		Calcite	Moderate			strong
Swain010	Intermediate volc	very fine		Calcite	Moderate			strong
Swain011	Intermediate volc	very fine		Calcite	Strong			None
Swain014	Felsic volc	very fine	massive	Calcite	Strong	pervasive		
Swain015A	Intermediate volc	very fine	massive	Calcite	Strong	pervasive	Strong	
Swain015B	Felsic volc	medium	massive	Sericite	Strong	pervasive	Strong	
Swain016	Intermediate volc	very fine	massive	Calcite	Very weak	pervasive		
Swain017	Intermediate volc	fine	massive	Calcite	Weak	pervasive	Weak	
Swain018	Intermediate volc	fine	massive	Calcite	Weak	pervasive	Weak	
Swain019	Intermediate volc		massive	Epidote	Weak	vein	Moderate	Moderate
Swain012	Felsic volc	fine	massive	Epidote	Moderate	pervasive		None
Swain013	Intermediate volc	fine	massive	Sericite	Moderate			None
Swainain110	Sedimentary (clastic)			Sericite	Weak	pervasive	Weak	Weak
Swainain101	Sedimentary (clastic)	fine	fine	Sericite	Moderate	pervasive	weak	Weak
Swainain102	Intermediate volc	Spherulitic	medium	Calcite	Moderate	pervasive	Weak	
Andesite1	Intermediate volc	Fine-Medium	massive	Iron carbonate	Weak	pervasive		None
Swain034	Intermediate volc		massive					
Mvflowtop	Mafic volc	fragmental		Chlorite	Moderate	pervasive		Weak
Swain035	Conglomerate	fine						
Mvpillow	Mafic volc	pillowed		Chlorite	Moderate	pervasive		Weak
Fvtuff	Felsic tuf	fragmental		Sericite	Weak	pervasive		None
Fvflwbrx	Felsic tuf	fragmental		Sericite	Weak	pervasive		None
Swain026A	Felsic int	Medium-Coarse	massive	Calcite	Weak			None
Swain026B	Intermediate volc	fine	massive					Weak
Swain027	Felsic int	Medium-Coarse	massive					
Swain028	Felsic int	Medium-Coarse	massive					
Swain029A	Felsic int	Medium-Coarse	massive					
Swain029B	Intermediate volc	fine	massive	Epidote	Weak	pervasive		
Swain030	Intermediate volc	fine		Epidote	Weak			strong
Swain031A	Intermediate volc	Fine-Medium	massive					strong
Swain031B	Felsic int	Medium-Coarse	massive	Epidote	Weak			none
Swain032	Felsic int	Fine-Medium						none
Swainain104	Intermediate tuf	fine	fine	Sericite	Weak	pervasive	Moderate	Moderate
Swain033	Felsic int	Fine-Medium						none
Sedchert	Sedimentary (clastic)	very fine		Silica	Moderate	pervasive	Moderate	None
Sed?	Sedimentary (clastic)	fine		Sericite	Weak	pervasive		None
Swain020	Conglomerate	fine		Chlorite	Weak	pervasive		None
Swain021	Conglomerate	fine		Chlorite	Weak	pervasive		None
Swain022	Conglomerate	fine		Chlorite	Weak	pervasive		None
Swain023	Conglomerate	fine		Chlorite	Weak	pervasive		None
Swain024	Conglomerate	fine		Chlorite	Weak	pervasive		None
Swain025	Conglomerate	fine		Chlorite	Moderate	pervasive		None
Swain039	Felsic volc	fine	massive	sericite	moderate	pervasive	strong	weak
Swain040	Felsic volc			epidote	weak			weak
Swain041	Felsic volc	fine	massive					
Swain042	Mafic volc	fine	massive	Hematite	weak	fracture		none
Swain043	Mafic volc	fine	massive	Hematite	weak	fracture		none
Swain044	Mafic volc	fine	massive	Calcite	strong	pervasive	moderate	
Swain036	Intermediate tuf	very fine					Moderate	moderate
Swain038A	Intermediate volc	very fine	massive	Calcite	Strong	pervasive	Moderate	none
Swain038B	Intermediate tuf	very fine	massive	Calcite	Weak	pervasive	weak	None
Swain038C	Intermediate tuf	very fine	massive	Calcite	Weak	pervasive	weak	None
Swain037	Intermediate volc	fine						moderate
Swainain106	Intermediate tuf	massive						None
Swainain111	Intermediate tuf	very fine	fragmental	Sericite	Strong	pervasive	Strong	None
Swainain112	Sedimentary (clastic)			Sericite	Weak	pervasive	Weak	Weak
Swain053	Intermediate volc							
Swain054	Intermediate volc	Medium-Coarse		calcite	strong	pervasive		
Swain055	Intermediate volc	fine	massive	Calcite	moderate	pervasive	moderate	none
Swain056	Intermediate tuf	very fine		hematite	moderate	fracture	moderate	none
Swain057	Intermediate tuf	very fine		hematite	moderate	fracture	moderate	none
Swain058	Intermediate volc	fine	massive	Calcite	weak	pervasive		strong
Swain059	Intermediate volc	fine	massive	Calcite	weak	pervasive		strong

Station_ID	Rock_type	GrainSize	Rock_alternative	Alt_type	Alt_intensity	Alt_distrib	Silicification	Magnetism
Swain060	Intermediate volc	fine-medium						weak
Swain061	Intermediate volc			calcite	strong	pervasive		weak
Swain062	Intermediate volc	very fine		calcite	strong	pervasive		
Swain063	Intermediate volc	fine		calcite	strong	pervasive		
Swain064	Intermediate volc	fine-medium		calcite	strong	pervasive		
Swain065	Intermediate volc	very fine	fragmental	chlorite	moderate	pervasive		
Swain045	Intermediate volc	fine						
Swain046	Intermediate volc	fine-medium		Calcite	moderate			
Swain047	Intermediate volc	fine		Calcite	weak			
Swain048	Intermediate volc	fine		Calcite	moderate			
Swain049	Intermediate tuf	fine		hematite	weak	fracture	weak	
Swain050	Intermediate tuf	very fine		chlorite	weak			
Swain051	Intermediate tuf	very fine						
Swain052	Intermediate volc			calcite	strong	pervasive	moderate	
Swainain111a	Quartz vein	aphanitic						None
Sed/dyk20/86	Sedimentary (clastic)	fine						None
Andsite2	Intermediate volc	Fine-Medium	massive					None
Spherul1	Intermediate volc	Variolitic	medium	iron carbonate	Weak	pervasive	weak	None
Dac1	Intermediate volc	fine					weak	None
Mv3	Mafic volc	Fine-Medium		Chlorite	moderate	pervasive		None
Swainain107	Intermediate volc			Sericite	Weak	pervasive	None	None
Swainain107a	Intermediate volc	fine	fine	Hematite	Weak	pervasive	weak	None
AndesiteANK	Intermediate volc	Fine-Medium	massive	iron carbonate	Moderate	pervasive		None
Swain508	Mafic volc	fine		Sericite	Moderate	pervasive	Moderate	None
Swain509	Mafic volc	fine		Chlorite	Weak	pervasive	weak	None
Swain510	Mafic volc	fine		Chlorite	Weak	pervasive	weak	None
Swain511	Mafic volc	fine		Chlorite	Weak	pervasive	weak	None
Swain512	Mafic volc	fine		Chlorite	Weak	pervasive	weak	None
Swain513	Mafic volc	fine		Chlorite	Weak	pervasive	weak	None
Swain514	Mafic volc	very fine		Chlorite	Weak	pervasive		weak

Station_ID	Vein_Type	Vein_Proportion	Vein_Text	Vein_Morp	Vein_width_cm	Mineralization	Min_percent	2_Mineralization
Swain007	quartz-carb		V_mass	V_boud		Pyrite	2	
Swain003A	quartz	0.1	V_mass	V_straight	0.1	Pyrite	0.1	
Swain003B								
Swain003C						Pyrite	0.5	
Swain002								
Swain004								
Swain005	quartz	0.1	V_mass	V_straight	1			
Swain006								
Swain008								
Swain009						Pyrite	0.1	
Swain010						Pyrite	0.1	
Swain011						Pyrite	3	
Swain014		0.1	V_mass	V_boud	0.5	Pyrite	0.5	
Swain015A						Pyrite	1	Sphalerite
Swain015B	quartz-carb	2	V_mass	V_stwk	1	Pyrite	5	Malechite
Swain016						Pyrite	1	
Swain017	quartz-carb	0.5	V_mass	V_boud	0.5			
Swain018								
Swain019	quartz-carb	0.1	V_mass	V_boud	0.8	Pyrite	1	
Swain012						Pyrite	0.5	
Swain013						Pyrite	0.5	
Swainain110								
Swainain101								
Swainain102	sulphide	0.1	V_mass	V_straight			0.5	
Andesite1								
Swain034	quartz-carb	2	V_mass	V_straight				
Mvflowtop								
Swain035								
Mvpillow								
Fvtuff								
Fvflwbrx								
Swain026A	carb	0.1	v_mass	V_stwk	0.1			
Swain026B								
Swain027								
Swain028	quartz	0.5	v_mass	V_straight				
Swain029A								
Swain029B								
Swain030	quartz	0.5	v_mass		1	Pyrite	2	
Swain031A	quartz-carb	0.1						
Swain031B						Pyrite	0.1	
Swain032								
Swainain104	sulphide	0.5	V_mass	V_straight		pyrite	0.5	
Swain033	quartz-carb	1						
Sedchert								
Sed?								
Swain020	quartz	1	V_mass	V_straight		Pyrite	3	
Swain021	quartz	1	V_mass	V_straight	1	Pyrite	2	
Swain022						Pyrite	2	
Swain023						Pyrite	1	
Swain024						Pyrite	0.5	
Swain025						Pyrite	0.5	
Swain039								
Swain040	quartz	1	V_mass	V_boud	5			
Swain041	quartz	1	V_mass	V_straight	0.1			
Swain042	quartz-carb	0.1	V_mass	V_straight	0.5			
Swain043								
Swain044	quartz-carb	1	V_mass	V_stwk	1			
Swain036	quartz	5	V_mass	V_stwk	0.1	Pyrite	0.5	
Swain038A						Pyrite	5	
Swain038B						Pyrite	0.5	
Swain038C								
Swain037	quartz	5	V_mass	V_stwk	0.1			
Swainain106								
Swainain111						Pyrite	0.5	
Swainain112								
Swain053								
Swain054								
Swain055						pyrite	0.5	
Swain056	quartz	1	V_mass	V_stwk	0.1	pyrite	2	
Swain057	quartz	1	V_mass	V_stwk	0.1	pyrite	2	
Swain058								
Swain059								

Station_ID	Vein_Type	Vein_Proportion	Vein_Text	Vein_Morp	Vein_width_cm	Mineralization	Min_percent	2_Mineralization
Swain060	quartz	1	V_mass	v_STWK	1			
Swain061	quartz	0.1	V_mass	v_STWK	1	pyrite	3	
Swain062						pyrite	0.5	
Swain063								
Swain064								
Swain065								
Swain045	quartz	0.1	V_mass	V_straight	1			
Swain046	quartz	1	V_mass	V_straight	3			
Swain047								
Swain048								
Swain049								
Swain050	quartz-carb	1	V_mass	V_stwk	1			
Swain051								
Swain052								
Swainain111a	quartz	1	V_mass	V_straight				
Sed/dyk20/86								
Andsite2								
Spherul1								
Dac1								
Mv3								
Swainain107						Pyrite	0.1	
Swainain107a						Pyrite	0.5	
AndesiteANK								
Swain508						Pyrite	3	Pyrrhotite
Swain509						pyrite	0.1	
Swain510						pyrite	0.1	
Swain511								
Swain512						pyrite	0.1	
Swain513						pyrite	1	
Swain514						Pyrite	1	

Station_ID	2_Min_percent	Planar_structure	Az	Dip	Linear_structure	Plunge	Trend	sample_ID	Photos	Analysis
Swain007		vein	245					253256		FA, ICP
Swain003A		foliation	110	88						
Swain003B		foliation	110	82						
Swain003C		foliation	205	80						
Swain002										
Swain004										
Swain005		foliation	235	80						
Swain006		foliation	245	87					20200624_130428	
Swain008										
Swain009		foliation	265	87						
Swain010		foliation	265	87						
Swain011		foliation	105	72				253257		FA, ICP
Swain014										
Swain015A	0.5								20200625_101500	
Swain015B	3	vein	22	85				253258	20200625_102004	FA, ICP
Swain016										
Swain017										
Swain018										
Swain019		vein	35	82					20200625_105210	
Swain012										
Swain013										
Swainain110		foliation	216	82						
Swainain101										
Swainain102		foliation	232	62				253408		FA,ICP
Andesite1										
Swain034										
Mvflowtop										
Swain035		foliation	30	88					20200627_131409	
Mvpillow										
Fvtuff										
Fvflwbrx										
Swain026A		contact	264	88					20200627_102401	
Swain026B										
Swain027										
Swain028										
Swain029A		contact	264	88					20200627_110137	
Swain029B									20200627_105640	
Swain030									20200627_120416	
Swain031A										
Swain031B										
Swain032										
Swainain104		foliation	53	85				253409		FA,ICP
Swain033										
Sedchert										
Sed?										
Swain020		foliation	26					253259		FA, ICP
Swain021		foliation	24	85					20200627_082501	
Swain022									20200627_084617	
Swain023										
Swain024									20200627_091111	
Swain025		shear	16	72						
Swain039										
Swain040										
Swain041										
Swain042		foliation	175	79					20200628_113756	
Swain043										
Swain044										
Swain036		bedding	290							
Swain038A		foliation	148	59				253260	20200628_094738	FA, ICP
Swain038B		foliation	230	70				253261	20200628_094738	FA, ICP
Swain038C		contact	170	65					20200628_094738	
Swain037										
Swainain106										
Swainain111		foliation	300	85				253410		FA,ICP
Swainain112					hinge		26			
Swain053										
Swain054										
Swain055										
Swain056		Foliation	210	80						
Swain057									20200629_104028	
Swain058										
Swain059										

Station_ID	2_Min_percent	Planar_structure	Az	Dip	Linear_structure	Plunge	Trend	sample_ID	Photos	Analysis
Swain060		Foliation	230	89					20200629_105828	
Swain061								253262		FA, ICP
Swain062		foliation	226	82						
Swain063		foliation	206	76						
Swain064										
Swain065		foliation	220	86						
Swain045		foliation	230	80						
Swain046		vein	204						20200629_084741	
Swain047										
Swain048		foliation	238	68						
Swain049		foliation	220	83					20200629_091839	
Swain050									20200629_092654	
Swain051										
Swain052		foliation	214	87						
Swainain111a								253411		FA,ICP
Sed/dyk20/86										
Andsite2										
Spherul1										
Dac1										
Mv3										
Swainain107								253412		FA,ICP
Swainain107a								253413		FA,ICP
AndesiteANK										
Swain508	2	shear	135	75				253435		FA,ICP
Swain509								253436		FA,ICP
Swain510								253437		FA,ICP
Swain511								253438		FA,ICP
Swain512								253439		FA,ICP
Swain513								253440		FA,ICP
Swain514										

Station_ID	sample_descr	Comments
Swain007	Pervasively altered, disseminated py.	QCB vein is vuggy and trace py. HE staining adjacent to veining.
Swain003A		Strong foliation.
Swain003B		Moderate foliation.
Swain003C		Weak foliation.
Swain002		Moderate foliation.
Swain004		Weathered surface indicates sericite alteration.
Swain005		
Swain006		Possible breccia top.
Swain008		Possible quartz eyes; porphyry?
Swain009		Moderate foliation.
Swain010		Same as 009/same outcrop as above.
Swain011	Strongly foliated, disseminted py.	<2mm pyrite, cubic and disseminated.
Swain014		Pale green, very similar to Swain012.
Swain015A		Pale green, str silica and carb alteration overprint. Brecciated.
Swain015B	Malechite bearing, silicified, and Fe stained surfaces.	2-3% malechite, trace auzurite, 1% sphalerite. Strong Fe staining. Brecciated veins and stwrk.
Swain016		Weakly altered.
Swain017		Weak Fe staining; vuggy vein.
Swain018		
Swain019		BSLT? Epidote alt along vn. Mod Fe staining.
Swain012		Pale-moderate green, moderate ser alt, strongly altered rock. Diss py, cube.
Swain013		Fe-staining on weathered surface; med-dark green; mod altered; no HCl.
Swainain110		Interlayerd siltstone & greywack on the ceentimetre scale,foliation bends to 198/82W
Swainain101		Fine-grained sediment or reworked mafic tuff.
Swainain102	Gunnex Showing	Series of 25-30 m wide intermediate flows.
Andesite1		
Swain034		Vuggy veins.
Mvflowtop		Hyaloclastite breccia
Swain035		Glacial striae @242d. Sub-angular to rounded, many felsic in composition, some pitted/eroded. Multiple beds/layers. Some Int Vol layers.
Mvpillow		Pillowed flow, stretched 2:1
Fvtuff		Felsic tuff
Fvflwbrx		Brecciated felsic flow
Swain026A		Unfoliated.
Swain026B		Weak foliation.
Swain027		
Swain028		
Swain029A		Glacial Striae @245d. Contact interpreted same as Swain026.
Swain029B		Contains large fragment of granite. Vesicular at contact.
Swain030		
Swain031A		Many small inclusions and rare (<10cm) fragments.
Swain031B		Difficult to get proper contact measurement.
Swain032		Weak BI <5%
Swainain104	Sabumeni Lake PN	Silicified Int. Vol with 1/2-1% disseminated Py about centietre-scale Qv
Swain033		
Sedchert		Interlayerd siltstone, greywack and chert on the ceentimetre scale
Sed?		Fine-grained greywacke with possible grading to the west
Swain020	Schistose, pervasively altered.	Clasts composed of FS+/-QZ and rounded. Hard to get dip. Qz fracture fill and veining.
Swain021		Some veins strike ~148d. Predominatly rounded FS composed clasts, rare sub-angular mafic clasts. Some HE surface staining.
Swain022		Some QZ composed clasts.
Swain023		
Swain024		
Swain025		Strongly foliated and schistose, platy fracturing. Mod Fe staining on fracture surface. 240d glacial striae.
Swain039		Possible glacial erratic. Gneissic, contains maffic fragments.
Swain040		
Swain041		Weakly foliated.
Swain042		Basalt? Contains tuffaceous layers, whiteish, mm-scale. Glacial striae @266d.
Swain043		Contains tuffaceous layers, mm-scale.
Swain044		
Swain036		Tuff? Contains black cherty unit or xenoliths?
Swain038A	Intermediate volcanic rock with cubic pyrite and strong Fe staining on fracture surfaces.	Possible unconformity? Felsic volcanic? Some Fe staining on fracture surfaces.
Swain038B	Intermediate tuff with moderate Fe staining on fractures.	
Swain038C		Hammers show respective strikes of units in photo.
Swain037		Possible pit area?
Swainain106		
Swainain111		Welded Intermeditae Tuff, silicified,>80% ash with 5-6% lapilli, possible amygdules indicating intercalated flows, trace dissemiated Py, evidence for ddh setup
Swainain112		
Swain053		
Swain054		Cg feldspars. Possible flow? Moderate to strong foliation.
Swain055		Hard, fresh.
Swain056		Thin layers, sheared? Moderate Fe-stained surface and fractures.
Swain057		Thin layers, sheared? Moderate Fe-stained surface and fractures.
Swain058		Moderately foliated
Swain059		Moderately foliated

Station_ID	sample_descr	Comments
Swain060		Strongly foliated. Dismembered bands/layers.
Swain061	Weak Fe staining on fractures.	Moderately foliated, He stained (weak). Weak chl and sericite alt.
Swain062		Weak chl and sericite alt. Moderate foliation.
Swain063		No observed sulphides. Weak chl alt. Discontinous banding.
Swain064		Slightly more felsic than 063. Moderate chl. No py observed.
Swain065		Possibly a flow-top breccia? Some segregation of chl altered groundmass and fg felsic material.
Swain045		Moderate foliation.
Swain046		Possible framents or dismembered layers.
Swain047		Weak sericite alteration observed on surface.
Swain048		Moderate foliation.
Swain049		Tuff/MetaSed? Platy fracturing along foliation. No HCl reaction.
Swain050		Dextral. Extentional fracture fill. No HCl reaction.
Swain051		Metased?
Swain052		moderate to strong foliation
Swainain111a		Bull White Qv, 4-6 cm wide extensional veinlets with < 2m strike-length
Sed/dyk20/86		Sediment cut by a QFP dyke @ 020°/86°
Andsite2		
Spherul1		
Dac1		More dacitic
Mv3		
Swainain107	Peanut West	Grey-green, fine-grained, light beige weathered surface, pale red fresh surface due to weak Hm staining, not magnetic
Swainain107a	Peanut West	Dark grey-green, fine-grained, sugary texture, trace disseminated Py, weakly magnetic
AndesiteANK		
Swain508	Beaver Pond	Chip sample along a 4 m north-south historical trench, well devloped penetrative fabric, 1-5% fine to medium-grained Py, averaging 2%, unweathered material is weakly silicified and ankeritized.
Swain509	Beaver Pond	Grey-green weathered surface, med. Green fresh surface, fine-grained, chlorite rich groundmass, weakly silicified, well developed breccia texture, trace Cb, trace disseminated Py
Swain510	Beaver Pond	Grey-green weathered surface, med. Green fresh surface, fine-grained, weathered surface covered by irratically distributed centimetre-scale dark grey angular mineral, trace disseminatd Py
Swain511	Beaver Pond	Grey-green weathered surface, med. Green fresh surface, fine-grained, chlorite rich groundmass, weakly silicified, trace Cb, trace disseminated Py
Swain512	Beaver Pond	Grey-green weathered surface, chlorite rich groundmass, weakly brecciated, py on margins of breccica fluid.
Swain513	Beaver Pond	Chip sample along a 5 m east-west historical trench, 1-2% fine-grained Py, averaging 1%, unweathered material is weakly silicified and ankeritized.
Swain514		