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ASSESSMENT REPORT

January 13, 2022

Jackfish Lake Project – 2021 Prospecting Program

SYINE TOWNSHIP
NTS Sheet 042D15

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Assessment Report

JACKFISH LAKE PROJECT – 2021 PROSPECTING PROGRAM

SUMMARY

On July 4th and 5th, and then between September 29th and October 11th, a surficial prospecting program was completed on the Jackfish Project, which is currently under option to Fulcrum Metals. The property is located 20km east of the town of Terrace Bay, Ontario in Syine Township. Bayside Geoscience, based out of Thunder Bay, ON, was contracted to complete the program. The crew consisted of a senior field geologist, 2 geologists in training, and 2 field assistants. The crew mobilized to site via Highway 17 and were accommodated at the Jackfish Lake cottages, which is situated on the mineral claim property itself.

The program was completed in two phases. The first phase was a two-day confirmatory sampling program completed by Steven Flank. The results of this sampling program, returned 6 grab samples with greater than 1 g / ton, including a sulfide mineralized granite that returned 39.8 g/t Au. Following up on these very encouraging results, a second phase of work focused on a 1.5 square kilometer area located along the southern margin of the property. Areas of historical surface mineralization were rigorously prospected and sampled during this phase of work resulting in 141 grab samples being collected and sent for assay and geochemical analysis.

The work program has outlined an area of anomalous Au mineralization along the southern margin of the Terrace Bay Batholith, where it is in contact with metavolcanic rocks of the Terrace Bay-Schreiber greenstone belt. This area of the property has seen no modern geophysics and no diamond drilling is recorded. A follow up work program comprised of an induced polarization survey, trenching and diamond drilling is recommended.

INTRODUCTION

On July 4th and July 5th Steven Flank, of Bayside Geoscience, conduct a confirmatory sampling program on zones of historic mineralization. Steven was guided by local prospector and optionee Wayne Richards. On the second phase of the program, between September 29th and October 11th, Bayside Geoscience completed a prospecting and mapping program. The program was staffed by a team of 5 personnel: Steven Flank (Senior Field Geologist), Megan Landman (Geologist in Training), Rami Abou-Shamalah (Geologist in Training), Cameron Mitchell (Field Assistant), and Daniel Flank (Field Assistant). While actively participating in the field program, Steven Flank, oversaw all operations, and was responsible for the final data compilation, interpretation and technical contents of this report.

The co-ordinate system used throughout this report is: UTM NAD 83 Zone 16U

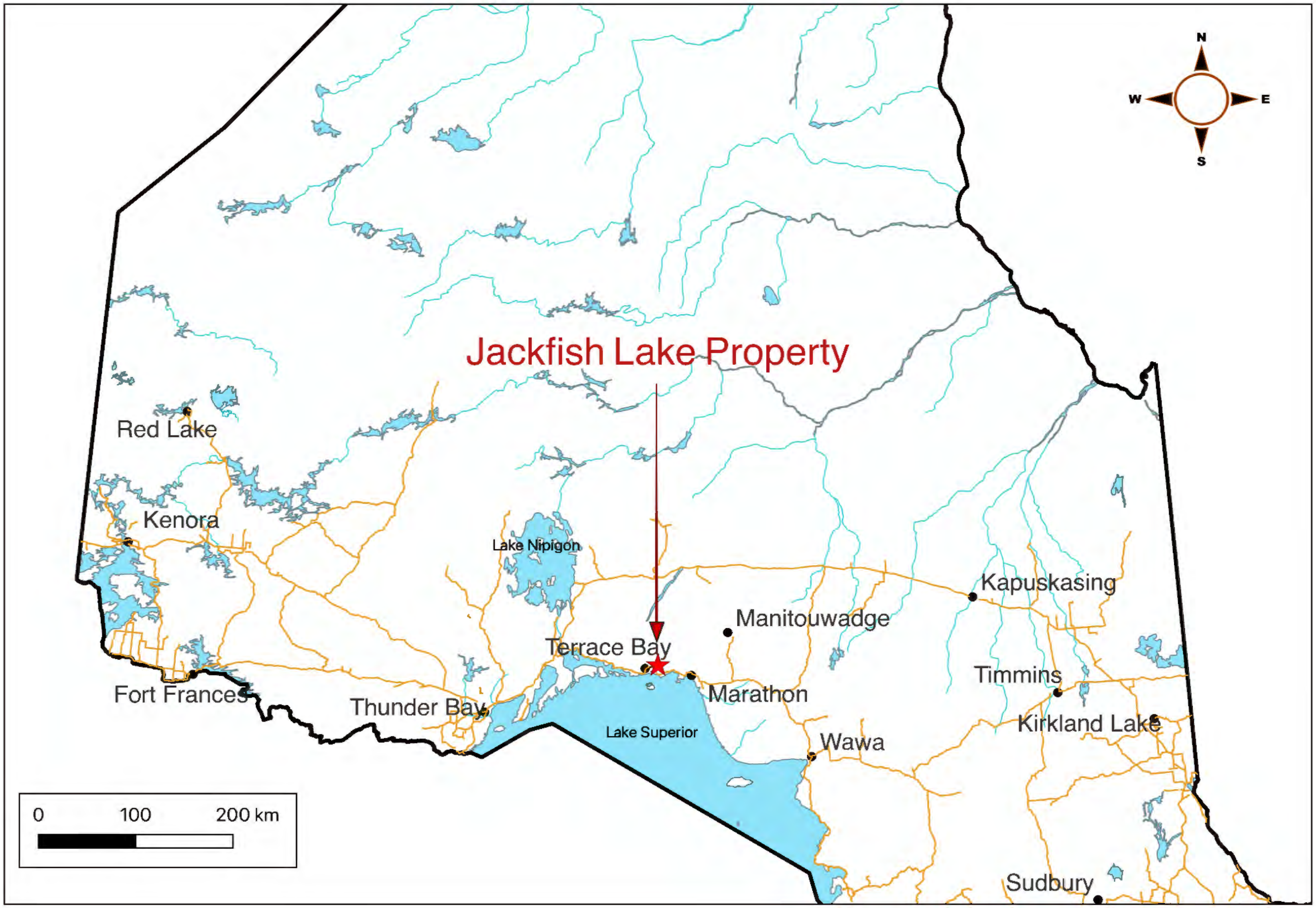

Figure 1: Location of the Jackfish Property

LOCATION AND ACCESS

The Jackfish property is located 20km east of Terrace Bay, off the northern shores of Lake Superior (Figure 1). Highway 17, cuts through the property, providing excellent access to the property. There are few trails cut the property itself, which is characterized by rugged topography and thick forest cover. Hiking on foot is the primary means of access to the eastern and northern portions of the property.

During the 2021 prospecting program, the crew was lodged at Jackfish Lake cottages.

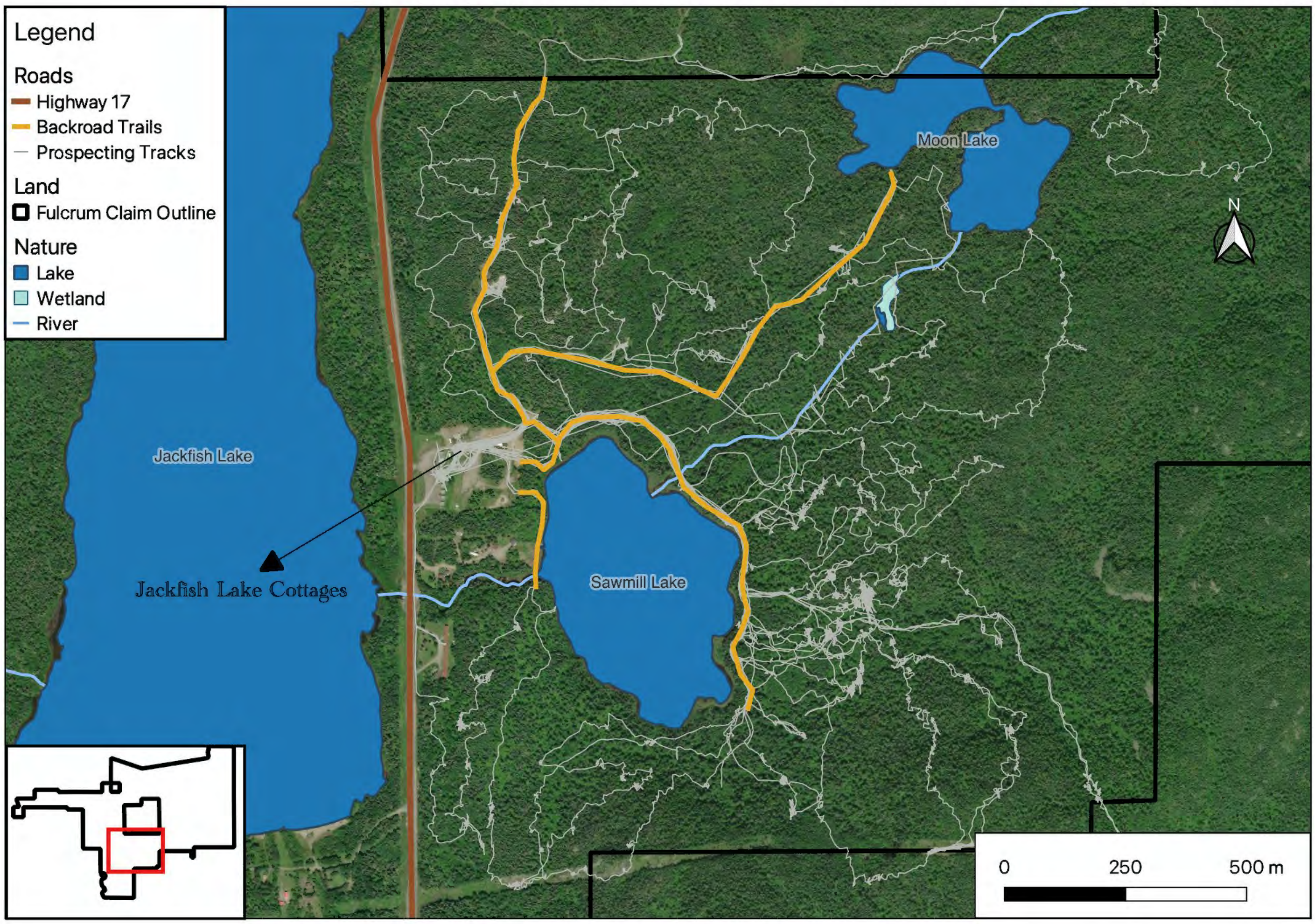

Figure 2: Location of accommodations, trails and prospecting tracks.

PROPERTY OWNERSHIP AND CLAIMS

The Jackfish Lake Property is located within the Thunder Bay Mining Division and comprises 264 total claim blocks, totaling 3,921 Ha. All the claims are under option to Fulcrum Metals with current owners summarized in Appendix A. Claim locations are shown in Figure 3.

EXPLORATION HISTORY

Exploration activity in this area started at the end of the 19th century, spurred by the discovery of the Empress Mine in 1895 (Walker, 1967) and silver mineralization at the Elgin Silver Mine in 1882 (.   The focus of exploration on the property has been for gold and silver-copper-lead-zinc.   A summary of the exploration history is presented below in Table 1.

REGIONAL GEOLOGY

The property is located in the Wawa subprovince of the Superior Province of the Canadian Shield, which is the world's largest Archean craton; it formed by amalgamation of subprovinces of various origins (plutonic, volcanic-plutonic, gneissic, sedimentary) (Polat and Kerrich, 2000). The subprovinces range in age from 3.0 to 2.65 Ga. The Wawa Subprovince extends from Minnesota in the west to the Kapuskasing structural zone in the east (Magnus, 2016).

"The Schreiber–Hemlo greenstone belt is part of the Wawa–Abitibi granite–greenstone terrane of the Superior Province. Locally, the supracrustal rocks of the Wawa–Abitibi terrane have been interpreted to have formed in an island arc volcanic setting offshore of the proto-continental Wabigoon and Marmion granite–greenstone terranes (Williams 1989). The Coldwell alkalic intrusive complex, which occupies the eastern edge of the map area, and a multitude of diabase and lamprophyre dikes that crosscut the map area, were emplaced into the Archean bedrock during the formation of the Midcontinent Rift (circa 1.1 Ga (Keweenawan): Sage, 1991).

Based on structural interpretation, the stratigraphically oldest rocks in the map area include the felsic-dominated volcanic to volcaniclastic rocks that form the core of an eastward-plunging anticline that stretches from the Terrace Bay pluton to McKellar Lake. These rocks comprise felsic lapilli and crystal tuffs, tuff-breccia and monolithic clast-supported breccia (likely proximal to unobserved coherent felsic rocks) with minor pillowed mafic rocks and lenses of chemical metasedimentary rocks (i.e., chert, graphitic argillite and iron sulphide). Higher in the volcanic stratigraphy, massive to pillowed mafic flows become more dominant. Pillows are commonly bun shaped, with rinds up to 2 cm thick, and interstices filled with hyaloclastite and locally filled with iron-sulphide mineralization. Locally, the cores of the pillows are variolitic (Magnus and Walker 2015).

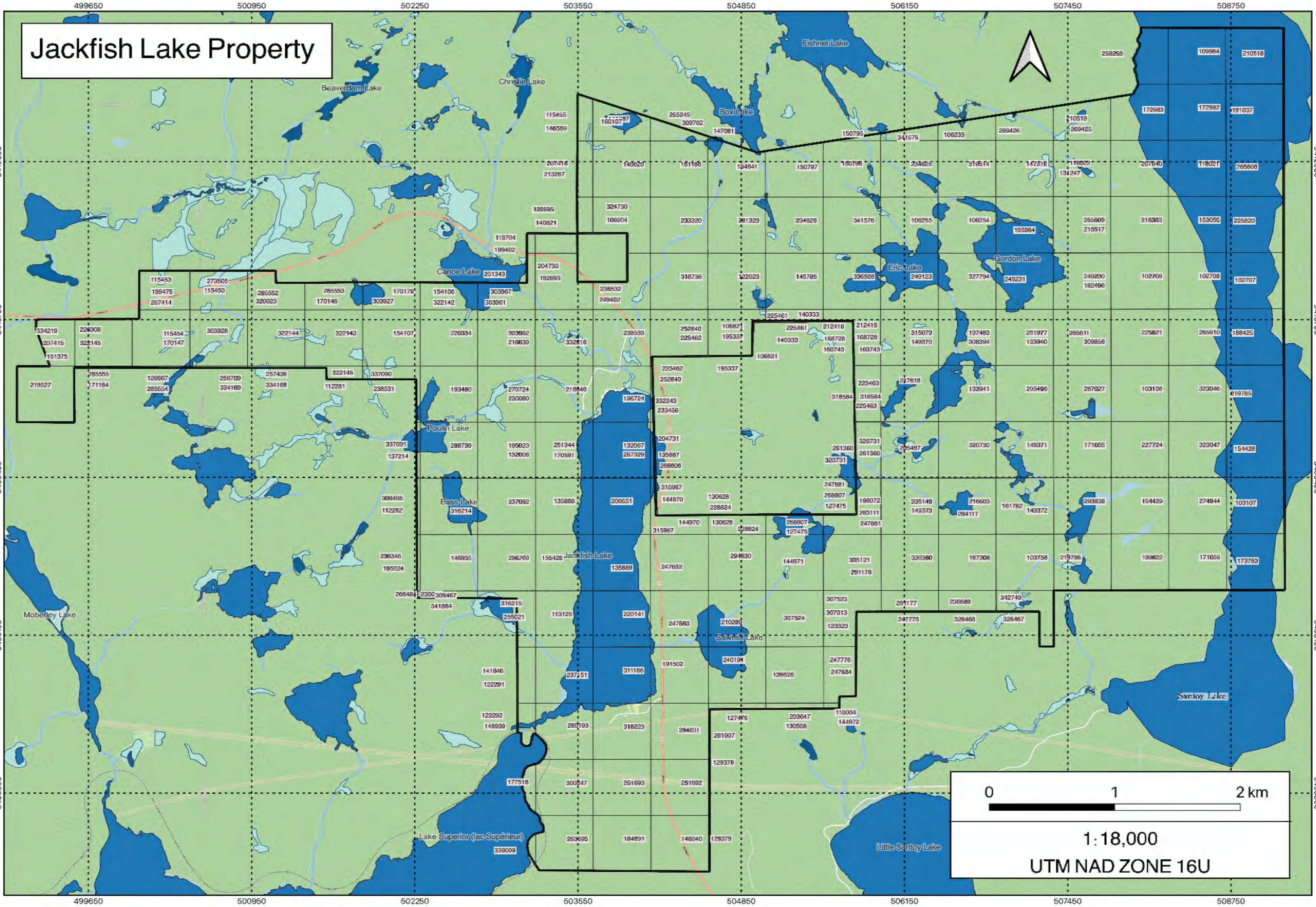

Figure 3: Jackfish Property Map

Table 1: History of exploration work on the Jackfish Property

Year	Company	Type of Work	Results	Assessment
1882	Elgin Silver	Underground mining from 2 adits	No production data	42D15SW8353
1932	Siville-Ferrier Syndicate	Stripping, sampling	Up to 10.29 g/t Au over 0.91 m	42D15SW8353
1982	Micham Explorations Inc.	Magnetic and electromagnetic (VLF) surveys	No magnetic anomalies; several weak to moderate conductors	42D14SE1074
1983	Rose Resource Corp.	Magnetic and electromagnetic (VLF) surveys	10 EM conductors and no significant magnetic anomalies	42D15SE0128
1983	Wasabi Resources	Airborne magnetic and EM (VLF) survey	Identified 6 EM conductors	42D15SW0088
1983	Wasabi Resources	Ground proofing of airborne EM conductors	All 6 conductors sulfide iron formation with no Au values	42D15SW0066
1984	John Ferguson	Magnetic and electromagnetic surveys	No significant mag; 2 weak VLF anomalies	42D15SW0121
1984	Goldhurst Resources	Magnetic and electromagnetic surveys	No significant mag; 11 very weak EM conductors	42D15SW0116
1984	Goldhurst Resources	Drilling, 4 drill holes; total 305.1m (1001 feet)	Drill hole 84-04: 2.87 g/t Au over 2.44 m including 6.07g/t Au over 0.91m and 0.96g/t Au over 1.22m	42D15SW0118
1985	Micham Explorations Inc.	Mapping, trenching, sampling (58 rock samples)	Highest assay 13.54g/t Au in quartz vein at N Siville showing outside of Jackfish claims	42D15SW0114
1985	Micham Explorations Inc.	Soil sampling (1521 samples)	Two anomalous areas; Empress structure W Siville showing; Mocan valley structure	42D15SW0115
1985	Micham Explorations Inc.	Diamond drilling 4 drill holes 482.9m (1584.2 ft)	Highest assays 1166 ppb Au over 1.52; 1588 ppb Au over 1.83m, 44.23 g/t Au over 0.61 m	42D15SW0117
1986	John Ferguson	Stripping, de-watering, trenching; sampling	Highest assay 13.03 g/t Au; 4.075 g/t Ag	42D15SW0504
1986	John Ferguson	Magnetic and electromagnetic surveys	No significant results	42D15SW0111
1987	John Ferguson	Soil sampling	No significant results	42D15SW0106
1987	Forerunner Resources	Mapping, stripping, trenching, sampling	Highest assay 93.24 g/t Au; 109.03 g/t Ag; 1.2% Cu; 7.85% Pb	42D15SW0505
1987	Micham Explorations Inc.	Diamond drilling 10 drill holes, total 1674m	No assays recorded	42D15SW0109
1988	Beardmore Resources	Trenching, soil sampling, bedrock sampling	Highest assays: 21.05 g/t Au plus 13.3 g/t Ag and 11.45 g/t Au plus 0.2 g/t Ag	42D15SW8353
1989	J.R. Hamel	sampling (11 samples), diamond drilling	Highest assay 93.26 g/t Au, 82.79 g/t Ag	42D15SW0110
1991	J.R. Hamel	Stripping and sampling	Highest assay 21.05 g/t Au and 26.06g/t Ag	42D15SW0102
1992	Beavercreek Exploration (J.R. Hamel)	Drilling 2 drill holes 28.04m	Highest assay 12.21 g/t Au over 1.52 m	42D15SW0002
1994	Beavercreek Exploration (J.R. Hamel)	Drilling 5 drill holes 45.1m	Best result: 0.51 g/t Au over 3.05 m	42D15SW0001
1995	George Daniels et al.	Stripping, trenching, sampling, line cutting, VLF survey	16.39 g/t Au on claim #1207882 Santoy Lake; 15.77 g/t Au Syine Twp. Historic claim #1224852	42D15NW0009
1996	Big Lake Geological Consulting on behalf of J. Ferguson	Mapping, sampling	Highest assays from trench 14.3 g/t Au and 16.39 g/t Au	42D15NW0038

Year	Company	Type of Work	Results	Assessment
1996	George Daniels	Prospecting, stripping, trenching	Highest assays from trench 21.94 g/t Au	42D15NW0028
1996	Rudolph Wahl et al.,	Rock sampling (100 samples); soil sampling	No significant results	42D15SW0008
1997	Landis Mining Corp.	Evaluation of previous exploration activity in the area	20 lb composite grab sample: 22.97 g/t Au over 3.05 m from Empress structure	42D15SW2002
1998	George Daniels	sampling (11 samples), diamond drilling	Highest assays from Jon's showing 1.45 g/t Au	42D15SW2003
1999	Cameco Gold Inc.	Line cutting; map., IP; trenching; re-logging & re-sampling	DDH 441087-9: 8.07 g/t Au; 93.8 g/t Ag over 0.52 m; DDH 44184-7: 7.09 g/t Au; 19.8 g/t Ag over 1.4 m	42D15SW2010
2000	George Daniels	Trench cleaning, minor blasting	No results	42D15SW2013
2004	Brian Fowler	Line cutting; mag; prospecting, sampling (21)	Highest assay 324 ppb Au	42D15SW2024
2005	Phoenix Matachewan Mines	Prospecting sampling (19 rock samples)	Highest assay 262 ppb Au	20000001155
2007	Wayne Richards	Prospecting, mapping, stripping, sampling (4 samples)	No Au assays; two samples >100 g/t Ag	20000003831
2007	Alto Ventures Ltd.	Mapping, prospecting and sampling (47 rock samples)	Highest assay 2,278 ppb Au	20000002005
2008	Alto Ventures Ltd.	Drilling 2 drill holes 332 m on Empress structure	0.66 g/t Au over 2.3 m	20000003772
2009	Rudolph Wahl	Prospecting, mapping, sampling (22 samples)	No significant results	I20000004525
2010	Galahad Metals	Soil sampling (619 samples), mapping trenching, sampling (89 samples)	26.8 g/t Au and 119 g/t Ag; 24.7 g/t Au and 40.4 g/t Ag at creek showing	20000005783
2010	Bond et al.	Prospecting, mapping, rock samples (63 samples) and lake sediment samples (7 samples)	309 and 459 ppb Au	20000006073
2010	Bond et al.	Drilling 2 holes 240 m	No significant results	20000006073
2012	Rudolph Wahl	Prospecting, mapping, sampling (30 samples)	1.9 g/t Au sample # 997103	20000007183
2012	Hamel et al.	sampling (11 samples), diamond drilling	No significant results	20000007081, 2.53866
2014	Alto Ventures Ltd.	Bedrock sampling (21 samples)	No significant results	20000008044
2015	Alto Ventures Ltd.	Surface Till and Bedrock Sampling		20000013949
2016	Wayne Richards	Diamond drilling, outcrop stripping, sampling	38.3g/t and 5.21g/t Au grab samples, no significant results from drilling	20000013548
2016	Alto Ventures Ltd.	Surface Glacial Till Sampling		20000013750
2017	Wayne Richards	Ground VLF Survey	Weak conductors identified	20000015411
2017	Santana Resources Inc	UAV airborne magnetic survey	Magnetic anomalies to follow up	20000017132
2017	Santana Resources Inc	SPOT remote sensing	Digital terrain map	20000017281
2017	Santana Resources Inc	Outcrop sctripping, channel sampling on Rudy Block	2 prospects with significant channel sample Au results #5 and #7	20000017291
2017	Santana Resources Inc	Ground VLF Survey on Rudy Block	One strong conductor identified	20000017298
2017	Santana Resources Inc	Geological Compilation and Interpretation	Recommendations for future exploration	20000017310

A band of chemical metasedimentary rock, composed of chert and graphitic argillite with local beds of iron sulphide, separates the metavolcanic rocks in the north from a sequence of siliciclastic metasedimentary rocks. These rocks comprise decimeter- to metre-scale beds of turbiditic wacke, which display normal grading upward (generally southward), with intermittent beds of mudstone. Fralick, Purdon and Davis (2006) collected 2 samples of turbiditic wacke along McKellar Harbour from the interpreted stratigraphically lowest and highest locations of the depositional package. These samples yielded overlapping youngest zircon ages (maximum ages of deposition) of 2696±3 Ma and 2693±4 Ma, respectively. However, the Jackfish–Middleton–McKellar Harbour shear zone (JMMHSZ), which crosscuts sedimentary rocks in the vicinity of the 2 samples, has complicated the interpretation of local stratigraphy. Hence, the maximum age of deposition for these samples may not reliably constrain the base of the metasedimentary package, nor do they provide a minimum age for the deposition of chemical metasedimentary rocks that underlie the clastic metasedimentary package.

A panel of metavolcanic rock is present south of the clastic metasedimentary package, composed mainly of massive to pillowed (locally variolitic) mafic flows with minor volcaniclastic rocks. On the islands east of Prairie Cove, felsic volcaniclastic rocks (tuff, tuff-breccia and epiclastic conglomerate) are present, with minor pillowed mafic flows. The contact between these metavolcanic rocks and the metasedimentary rocks to the north lie within the JMMHSZ (Jackfish-Middleton-McKellar Harbour shear zone), which makes the nature of the contact difficult to determine and precludes stratigraphic correlation between these metavolcanic rocks and those in the north.

Mafic intrusive rocks (melanocratic to leucocratic metagabbro) are abundant in the map area and crosscut all of the previously described supracrustal rocks. Mylonitic textures have been observed in these intrusive rocks, especially in the vicinity of the JMMHSZ and, based on the map pattern, the intrusive rocks appear to have been affected by folding along with the supracrustal rocks. Several large granitoid plutons of unknown age crosscut and surround all of the previously described rock types in the map area". (Magnus 2016)

Structure

The overall trend of the belt is in the southeast direction. Near the contact of the supracrustal rocks and the batholith, the geological units dip steeply away from the batholith. Furthermore, the supracrustal rocks form a synclinical fold with a southeast trending axis northwest of the batholith (ITR, 2017).

Whereas the trend of the belt is SE, foliation and schistosity dip to the north and northwest (Marmont 1984).

There are 2 major faults in the area: the right lateral Schreiber Point Fault, and the Worthington Bay Fault. Although both of these faults are outside the property perhaps they still influence the geology.

Consistently across the pluton, sub-parallel quartz veins with often-times stockworking, occur as both vitreous and less-so smoky. More often than not, the parallel set of quartz veins are associated with mineralization, whereas the perpendicular, vertical trending veins are barren. The veins range from 0.5 to

40cm in width and appear undeformed. Oftentimes the host granodiorite around the veins is altered, and especially around the stockwork veins.

Mineralization

Gold mineralization at the margins of the Terrace Bay Batholith was noticed by Marmont in 1984.

Mineralization is also associated with the parallel system of quartz veins, that usually have perpendicular quartz veins in lesser width, and more often than not these vertical veins are smoky. This mineralization type is hosted by quartz-carbonate veins, and is usually enveloped by potassium, carbonate and silica alteration halos. Whereas these veins trend sub-parallel, in the abandoned North Shore Mine, they cross-cut the intrusions. These veins also fill fractures that show moderate to extensive shearing. Like for example at the abandoned Empress mine, where the mafic rocks are sheared, and late northeast or northwest trending faults are offsetting the fracture filled veins. The dominant sulfides in the veins are pyrite, chalcopyrite, sphalerite, galena, and molybdenite. These sulfide-mineralized veins, contain gold mineralization, which is the typical mineralization style observed at the North zone and Hematite zone.

LOCAL GEOLOGY

The property is centered on the eastern part of the Terrace Bay batholith, which is a massive, medium grained granodiorite intrusion about 25km long by 8km wide. The granodiorite is typically grey whereas in proximity to fractures, veins and shears, it occurs as a pink to red granodiorite with a lower magnetic susceptibility (Magnus, 2016). This batholith is cut by late diabase and lamprophyre dikes which occur throughout the property. This batholith intruded the schreiber–Hemlo greenstone belt, which now borders the property on the surrounding topographic highs. The intrusion of this batholith caused contact metamorphism in the host rocks that extends 400m into the greenstone rocks. The greenstone rocks are intermediate to mafic and range from iron-rich tholeiitic basalts to andesite with pillow structures to calc-alkalic rocks (Independent Technical Report, 2017).

Mineralized Zones

North Zone

“The North zone is located in a stripped outcrop exposure of granodiorite crosscut by several parallel quartz veins with interstitial stockwork veining and alteration halos. The veins exposed on the surface have an average strike of 121° with dips between 26 and 41° (southwest). Pyrite, chalcopyrite and galena are present in veins and are disseminated in the altered granodiorite around the veins. The Resident Geologist Program staff collected and assayed grab samples of the sulphide-bearing granodiorite; these samples yielded a range of values from 131 up to 580 ppb Au, and 1 sample returned a value of 2377 ppb Au (Puumala et al. 2014). A sample of a quartz vein collected by Magnus in 2015 returned 287 ppb Au. A distinct zone of green altered granodiorite, oriented 018/85 (southeast), crosscuts the granodiorite and the stacked quartz veins, and has returned low gold values (W. Richards, prospector, personal communication, 2016).” (Magnus, 2016)

Hematite Zone

“The Hematite zone is a stripped exposure located to the southeast of the North zone. The zone is dominantly massive, unaltered, grey granodiorite with horizontal quartz veins occurring at the top of the outcrop. Several horizontal veins crosscut the granodiorite, range in width from 0.5 to 15 cm and consistently strike 210° with a near-horizontal dip of 5° (northwest). Several vertical quartz veins with black tourmaline along the vein walls occur at the south end of the outcrop. Veins in both orientations host sulphide minerals, such as pyrite and chalcopyrite, and a sample of a near-horizontal vein sampled by Magnus in 2015 returned 799 ppb Au. A distinct zone of dark red, highly altered granodiorite oriented 294/85 (northeast) crosscuts the granodiorite and veins, with a 15 cm wide calcite vein along its northern boundary. Samples collected by Magnus in 2015 of both the altered zone and the calcite vein yielded no discernable gold.” (Magnus, 2016)

2021 PROSPECTING PROGRAM

Summary

The program was completed in two phases. An initial phase of sampling was conducted by Steven Flank who was accompanied by prospector Wayne Richards. On the first phase, Steven Flank visited the property on July 4th and July 5th. He was guided around the property by local prospector Wayne Richard. Based on encouraging results from this sampling program a second prospecting program was initiated in the SE portion of the property around Sawmill Lake. A crew of 5 personnel mobilized from Thunder Bay to Jackfish Lake Cottages on September 28th, 2021 and demobilized from Terrace Bay to Thunder Bay on October 12th, 2021. A total of 13 days were spent in the field. The daily log of their activities is included in Appendix B. The objectives of the program were to prospect and sample around the known mineralization zones and focus the mapping efforts on a roughly 1km by 1km squared area on the claim, just south of the exclusion square on the claims.

312 geological stations were recorded utilizing the QField application using Samsung Tab A tablets. A sample database was setup in QField to capture predetermined fields consisting of sample ID, sample medium, lithology, structure, alteration, mineralization, photos and notes. A Garmin 64s handheld GPS was utilized to collect high accuracy waypoints at each station, as well as tracks.

A digital printout of the station database is included in Appendix C. Maps showing station and sample locations, as well as GPS tracks from each traverse are included in Appendix D. A total of 129 grab samples were collected during the program. Sample locations and results are included in Appendix E and assay certificates in Appendix F. All coordinates are recorded in NAD 83 UTM Zone 16N.

Sampling Procedures & QA/QC

Rock samples were collected by field personnel utilizing rock hammers and placed into poly bags labelled with a unique station ID and sample number. Field personnel recorded sample information in a digital data collector and recorded GPS coordinates, geological observations, and photographs at each sample location.

Field standards and blanks were inserted into the sample stream every 25th sample, alternating between standard and blank. All standards and blanks reported in the ALS analytical certificates and all field standard and blank QA/QC samples were within acceptable values.

Samples were transported by Bayside personnel to the ALS Chemex preparation laboratory in Thunder Bay, Ontario. ALS then ships sample pulps to ALS Chemex Vancouver for analysis. Au values were determined via fire assay with an ICP-AES finish. Any Au samples that were above the detection limits for this method were analyzed via fire assay with a gravimetric finish. Major and trace element geochemistry was analyzed via Aqua Regia digest followed by an ICP-MS finish.

Phase 1 Results

During the Phase 1 sampling program four mineralized zones were visited; Cliff Zone, North Zone, Hematite Zone and Creek Zone/John's showing. A description of the zones is summarized below.

Cliff Zone

The Cliff Zone is located approximately 250m east of Sawmill Lake and is accessed via a walking trail. Outcrop exposure of the mineral showings is along a cliff up to 10m tall that is oriented at 55 degrees. Historic sampling here has returned gold grades of up to 25.9 g/t (Sample MP-WR-13-06) within chalcopyrite and pyrite bearing quartz veins.

The terrain is hazardous due to talus, and vegetation along the cliff edge. The granite outcrop is also very unstable and fractured in places creating a hazard while sampling. Extra care must be taken not to disturb overlying rocks (Figure 4).

A total of 5 mineralized quartz veins were examined during the site visit. Red/pink granite hosts the veins which are variably mineralized and range in thickness from 1-20cm. Mineralization is comprised of pyrite, chalcopyrite, galena, sphalerite and arsenopyrite (e.g Figure 5, 6). A few examples of sulfide mineralized granite adjacent to the veins were noted but this relationship could be better understood with more detailed sampling; systematically moving away from veins to determine degree of alteration and mineralization. One cursory observation was that there is a zonation of sulfide mineralization and alteration as you traverse along the cliff edge. On the SW most exposure pyrite mineralization was noted in the quartz veins but as we traversed to the NE more evolved sulfide species were observed, including chalcopyrite, galena, arsenopyrite and sphalerite. A zone of strong carbonate alteration was noted in a rubble pile at the furthest extent of the zone which may also be important in the context of a widespread hydrothermal alteration system. This zonation should be further investigated.

Figure 4: Example of the Cliff Zone outcrop exposures.

Figure 5: Chalcopyrite, pyrite and arsenopyrite mineralized quartz vein at JK-SF-006.

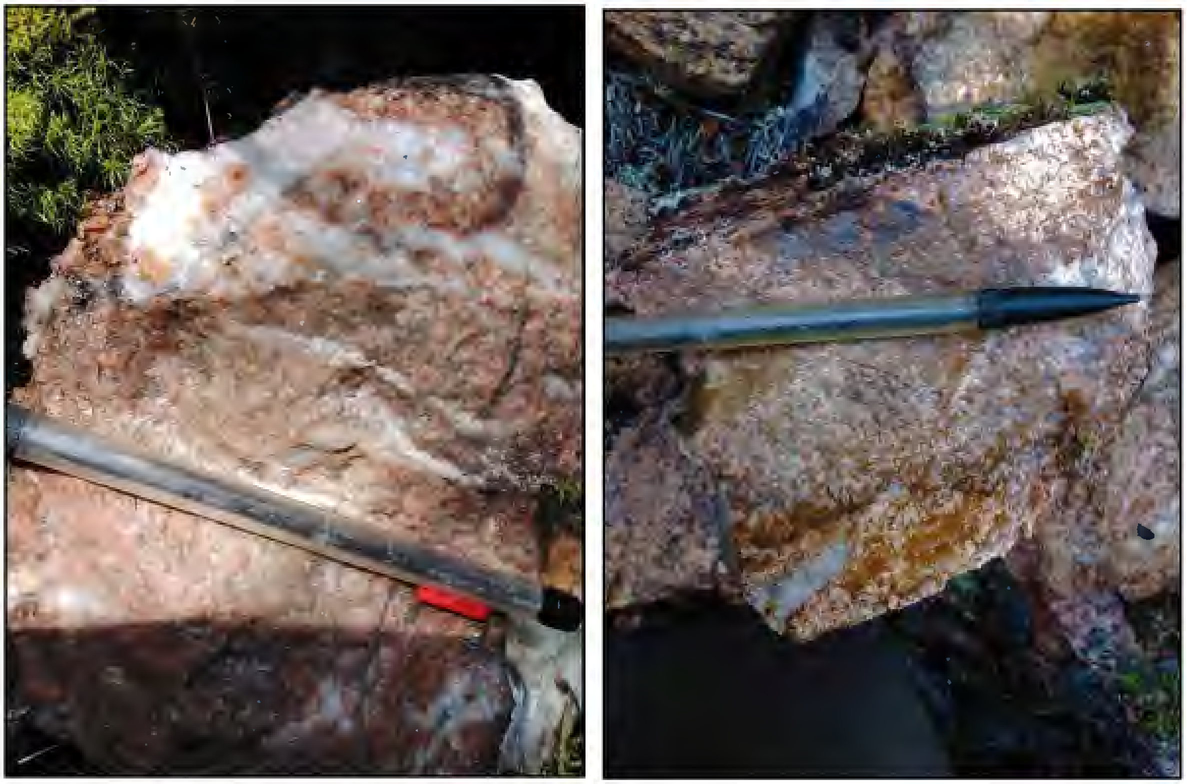

Figure 6: Quartz veining and pyrite mineralization in rubble pile on top of cliff zone (left). Ankerite alteration in granite found within same rubble pile. Both samples taken from station JK-SF-012.

Hematite Zone

The Hematite Zone was accessed via a short ATV trail from the Jackfish Cottage property. The trail leads to a stripped outcrop that is approximately 40m x 10m. The stripped outcrop is comprised of granite with a couple of stepped terraces and is similar in composition and texture to that observed at Cliff Zone. Granite is beige/pink in colour, generally massive and comprised of plagioclase, orthoclase, quartz and minor biotite. Shallowly dipping, narrow quartz veins terminate at a shear zone to the SE and pinch out to the NW. The zone was previously channel sampled by Santana Gold (VR12192 is one sample ID observed but these samples are not in the historic database). Veins are extensional with vein fibres oriented perpendicular to the contacts (Figure 8). All veining occupies a brittle structure that is 1.5m wide and dips shallowly to the NW. A hematite and carbonate altered shear zone causes granite to weather to rubble. Appears to display sinistral displacement evidenced by drag folds and displacement of the mineralized quartz vein. It displaces the vein by about 30cm. Sampled the vein where crack and seal textures are observed. 5% pyrite and 2% galena occupy cracks in the vein.

North Showing

The north showing is a 30m x 30m stripped outcrop of granite, similar to what was observed at the Hematite Zone (Figure 9). The stripping exposed strong, nearly stockwork type quartz veining throughout in

Figure 7: Quartz veining within brittle, shallowly dipping structure at Hematite zone (left). Carbonate/hematite altered shear zone on SE side of trench. Quartz veins terminate near top of picture at structure (right).

various orientations. Some appear to be vertical while others are flatter. Mineralization within veins consists of chalcopyrite and galena and the historical sample database indicates some high-grade samples including 11.69 g/t Au. This zone was drilled with hole JK-19-001, which aimed directly underneath the main mass of quartz veins but it failed to intersect mineralization. It is likely that the main controlling structure is shallowly dipping to the west, as observed at Hematite Zone and within some of the veins at this trench. The vertical veins observed may be interpreted as tension gashes off the main, flatter, structure. This would explain the lack of veining underneath the zone in the drill hole.

Disseminated mineralization within the granite host rock is comprised of chalcopyrite and pyrite and occurs adjacent to veins in silicified zones of the granite at JK-SF-015 (Figure 10). The veining here dips shallowly to the northwest.

Along the access trail that runs west of the showing, a strongly weathered and carbonate altered granite was observed (Figure 11). The rock is extremely vuggy with open pores that contain a combination of carbonate, biotite and pyrite/chalcopyrite. A historic sample here returned 50 ppb Au but no Cu assays were reported (MP16WPT1143).

Figure 8: Quartz vein with crack and seal textures along margins at Hematite showing (JK-SF-013). Vein fibres oriented perpendicular to vein suggest extensional type veining. Pyrite and galena mineralization noted.

Figure 9: Stripped outcrop at North showing (top). Channel sampling completed by Santana Resources across quartz veining (bottom).

Figure 10: Shallowly dipping quartz veins at JK-SF-015 (left). Disseminated py and cpy mineralization in weakly silicified granite adjacent to veining also at JK-SF-015 (right).

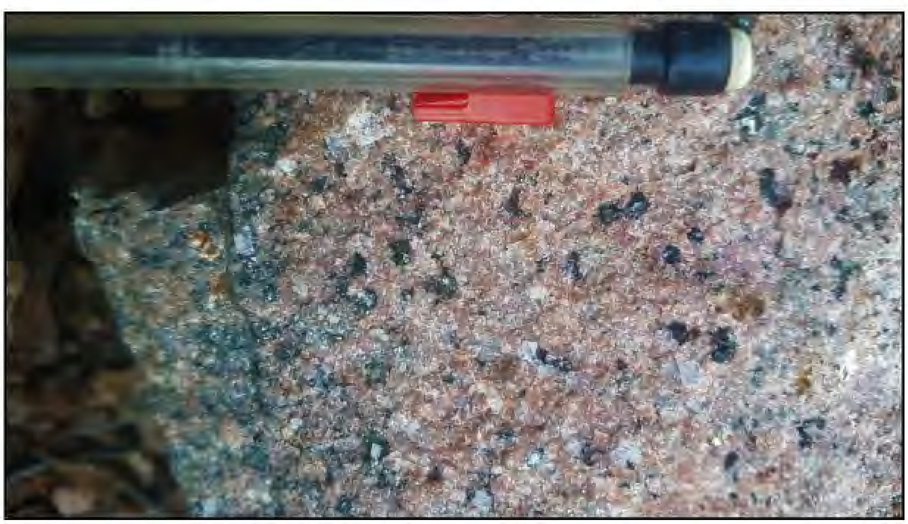

Figure 11: Vuggy, carbonate altered granite with biotite/calcite/pyrite/chalcopyrite in void spaces (JK-SF-016)

Northern Au Showings

On July 5th Steve Flank and Wayne Richards drove to 3 locations in the northern part of the property to examine the Adit, Creek and John showings. A map of their location is shown in Figure 12 below. In comparison to the geology of the previous day, we are working across the contact of the Terrace Bay batholith and an inlier of mafic volcanic rocks. All showings are located proximal to this contact which may be an important structural feature for gold mineralization in the area.

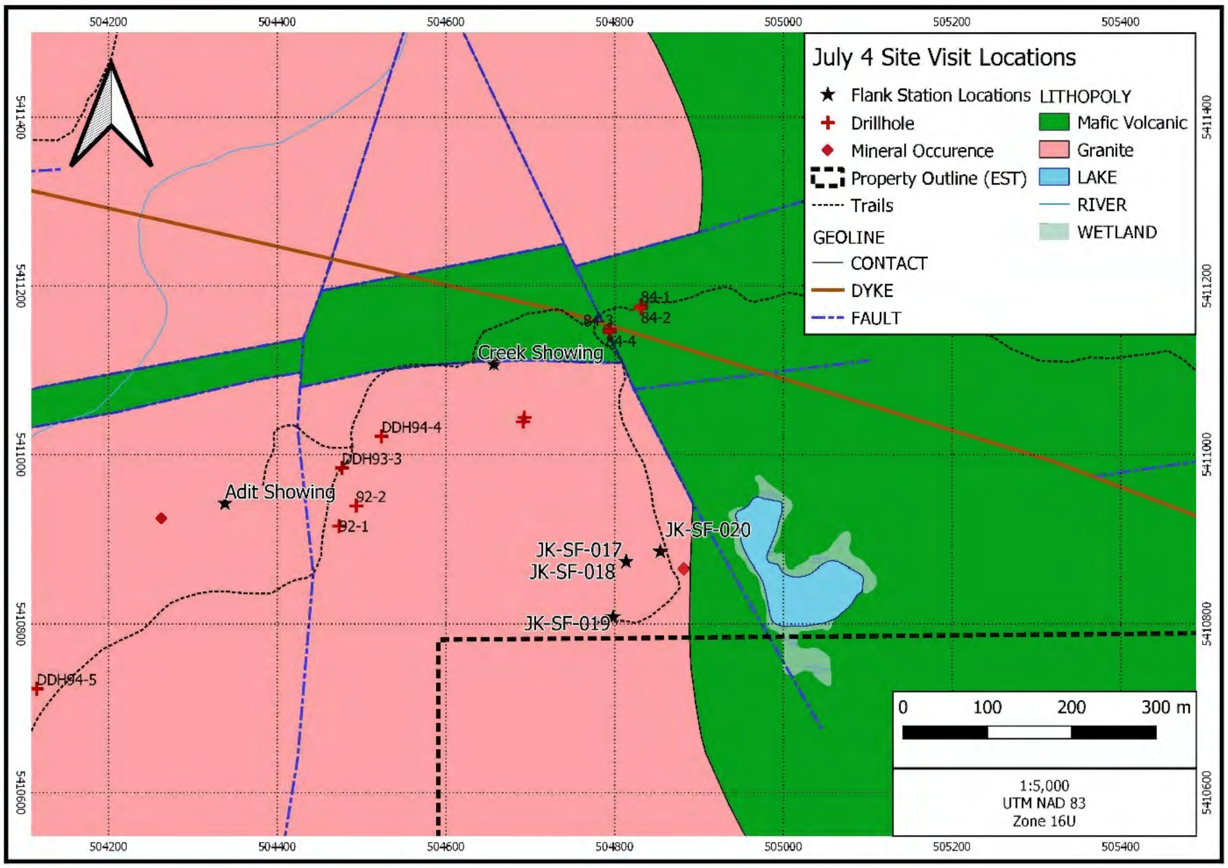

Figure 12: Map showing the locations of the Adit, Creek and Jon showings.

Adit Showing

The Adit showing is a 50m x 50m stripped outcrop located SE and above two adits where small scale gold mining took place historically (Figure 13). Fairly complex geology here and a review of the channel sampling and historic sampling did not seem to indicate strong mineralization.

The geology is quite variable with mica schists, granites, metasandstones, granite, gabbro, possibly syenite and abundant quartz veins observed. Strong folding is observed as open, z-shaped patterns in quartz veins and surrounding geology (Figure 14). Quartz veins are boudinaged in places, particularly when hosted within mica schist which is schistose and appears to accommodate most of the strain (Figure 13). A shallow WNW plunge is inferred on the hinges of the folded quartz veins. The granite observed at the Adit showing is different in composition and structure here compared to the previous locations visited. It's comprised of 60% white feldspar, 30% quartz and 10% biotite.

The complex structural geology here may be worth further investigating but first a review of the character of the gold bearing structure in the two adits below should be completed to determine if there is a relationship between this trench and the mineralization below.

Figure 13: Adit showing stripped outcrop, looking NW.

Figure 14: Quartz vein folded around mica schist and sandstone units (left). Boudinaged quartz vein in mica schist (right).

Creek Zone

The creek showing area is located in a small creek bed that is quite overgrown. The showing itself was not located although two boulders of sulfide bearing quartz veins were observed in the rubble of the creek bed (Figure 15). It appears that in recent time a flood may have collapsed portions of the bank and pushed boulders on top of the mineralized vein itself. Adjacent wall rock was comprised of crenulated, schistose mafic volcanics that strike 78 degrees and dip 78 degrees. 1% euhedral pyrite was observed in these volcanics.

Figure 15: Creek Zone rubble pile concealing apparent location of showing (left). Quartz mineralized float in creek bed (right)

John's Showing

A series of stripped outcrops were observed at John's Showing with variable geology. At JK-SF-017 a shear zone with a series of quartz veins striking 37 degrees and dipping 42 degrees to the NW was noted (Figure 16). Veins anastomose within shear zone and range in thickness from 5cm to 2m. Most appear bullish/white but did locate an 8cm wide vein with blebs of chalcopyrite and galena (Figure 17). Wall rock surrounding the vein is strongly sheared. Altered granite within the shear zone hosts the quartz veins described above. Pervasive ankerite alteration causes the rock to crumble easily. 2-3% c.g-m.g euhedral pyrite at location JK-SF-017 (Figure 18).

In total the shear zone here is about 3.5m wide overall, strikes 37 degrees and dips 42 degrees to the NW. Competent granite in the hanging wall shows evidence of multiple pulses of granitic material. Massive, pink granite veins cut an inclusion bearing granite that is weakly foliated. The foliation, defined by biotite alteration trends 200 degrees while inclusions are preferably oriented at 310 degrees. Narrow (<1cm wide) extensional quartz veins are oriented oblique to the contact of the pink granite dyke which they are hosted within.

Figure 16: Shear zone with quartz veining exposed at JK-SF-016

Further south, there is a lot of rubble covering the majority of the ground, apparently a relic of previous mining activities. The trenches that are exposed do not contain much sulfide mineralization, but the rubble pile does contain quartz veining with chalcopyrite, galena and native silver Figure 18.

A large, stripped outcrop on east side of Jon Showing was the last site visited. Here, granite is in contact with mafic volcanic rocks, observed to brecciate and melt into them (Figure 20). A prominent 2m wide calcite vein trends 248 degrees and is surrounded by a 50cm halo of carbonate alteration and in-situ brecciation.

Figure 17: Chalcopyrite and galena in sulfide bleb at JK-SF-016. Hosted within 10cm wide quartz vein.

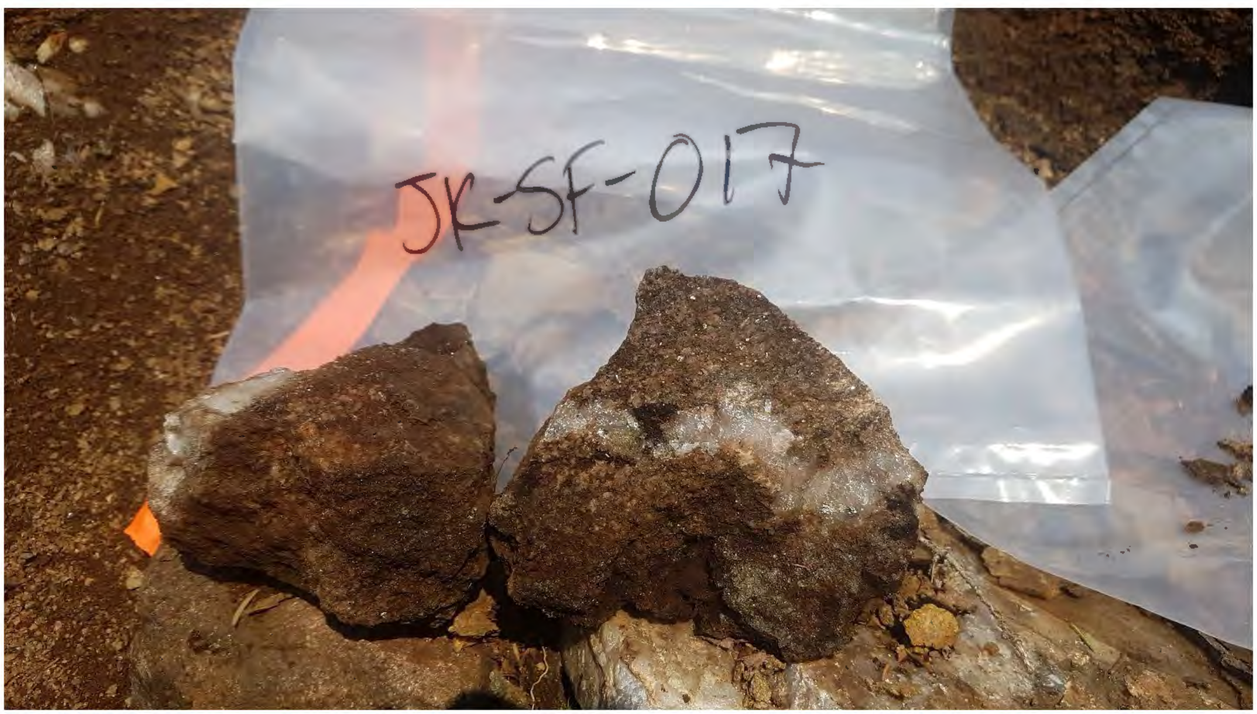

Figure 18: Ankerite altered granite host rock in adjacent to shear zone at JK-SF-018 (Note sample bag # is incorrect here).

Figure 19 Cpy, Ag and Gn mineralized quartz float in rubble pile at Jon showing.

Figure 20: Granite intruding and brecciating pillowed mafic volcanics at Jon showing North outcrop.

A total of 14 samples were collected for assay and elemental analysis. 6 of those results returned greater than 1 g/ton including one sample that returned 39.8 g/t Au from the North Zone trench area (Figure 4, Table 2).

Mineralization was confirmed at the North Zone (historic trench), and the Cliff Zone (historic grab samples). Anomalous mineralization was sampled at the Hematite Zone (historic trench).

Table 2: Significant results from Phase 1 sampling

Sample ID	Date	Sample Medium	Easting	Northing	Zone	Lithology	Au (ppm)
B731082	7/5/2021	Outcrop	504397	5408661	North	Granite	39.8
B731076	7/4/2021	Outcrop	505145	5408003	Cliff	Quartz Vein	13.65
B731078	7/4/2021	Outcrop	505172	5408016	Cliff	Quartz Vein	12.35
B731077	7/4/2021	Outcrop	505172	5408016	Cliff	Granite	5.81
B731079	7/4/2021	Subcrop	505160	5408029	Cliff	Quartz Vein	5.26
B731075	7/4/2021	Outcrop	505122	5408006	Cliff	Quartz Vein	1.165
B731081	7/4/2021	Float	505159	5408043	Cliff	Granite	0.605

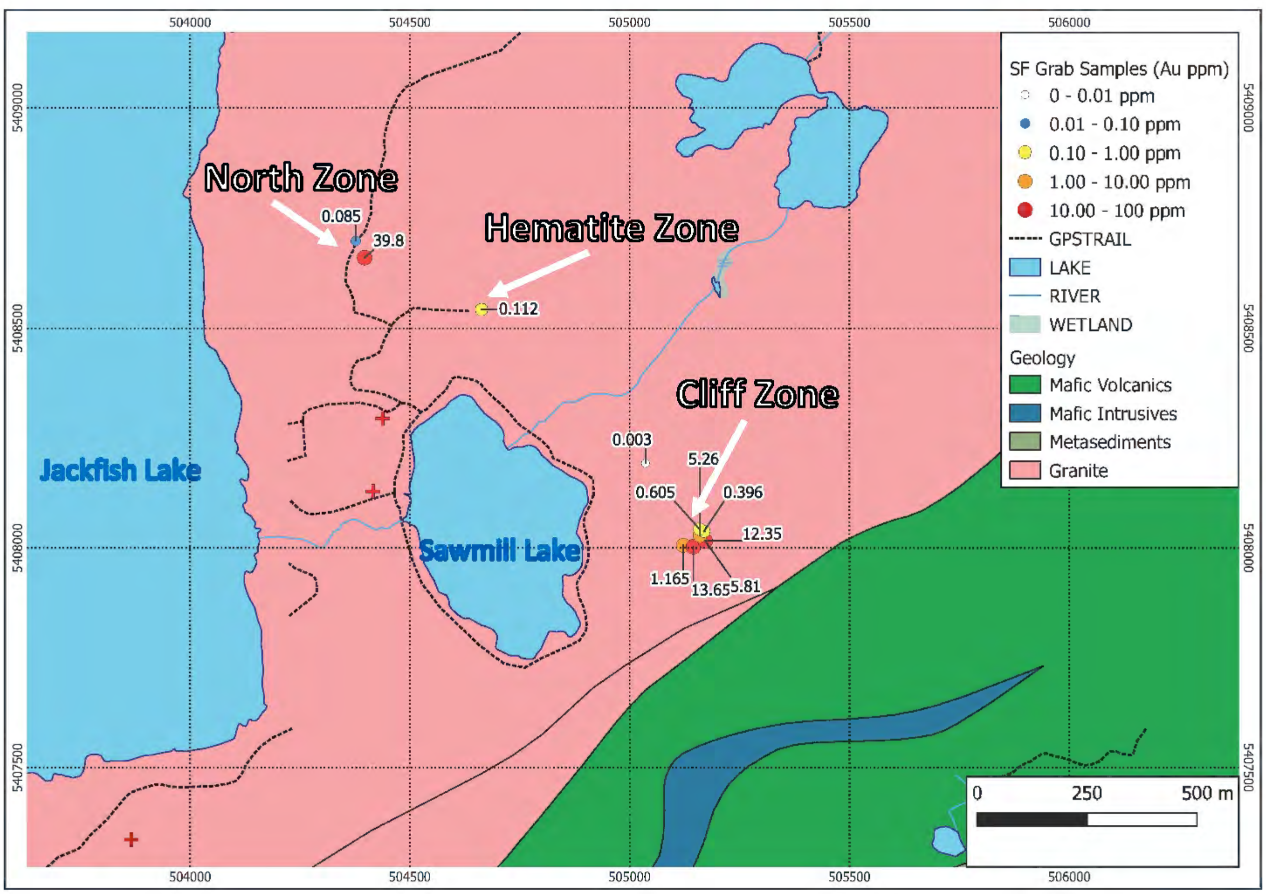

Figure 21: Significant results of phase 1 sampling program near Sawmill Lake.

Phase 2 Program

Based on the positive results from the first program, a follow up 2-week prospecting program was completed. On this prospecting program, the team focused on diligently exploring the south-eastern portion of the Terrace Bay Batholith across it's contact with volcanic rocks of the Terrace Bay-Schreiber Greenstone belt. The second area of focus was further north on the property proximal to the historic gold showing at Creek Zone.

A total of 129 grab samples were collected during the campaign. Sampling focused on focusing on quartz veins and sulfide mineralization hosted within the granite. Known areas of gold mineralization were prospected and hand stripped using grub hoes to get better exposure in these areas. Sampling resulted in 18 samples with gold assay results greater than 0.1 g/t, 6 samples returned between 0.5 and 1.0 g/t, and 3 samples returned with results greater than 1.0 g/t. These results are summarized in Table 3 and Figure 21 shows locations of anomalous samples.

Prospecting around the North and Hematite Zones did not uncover any new gold showings. A series of diabase dykes are found between the two showings and no additional areas of quartz veining in the granite were observed.

A traverse completed up a small creek running from Sawmill Lake to Moon Lake revealed the presence of intensely altered granites suggestive of a fault zone through the area. Sampling did not return any significant results in this area, and it is unlikely this structure is directly related to gold mineralization.

The best results were returned from the Cliff Zone area. Workers delineated a broad area proximal to the southern contact of the Terrace Bay Batholith where sporadic quartz veining, alteration and sulfide mineralization was observed. Strong mineralization is confined to an area measuring 175m x 90m, appearing to follow an escarpment that trends NE-SW (Figure 22). Within this area historic blasted pits were observed which appear to be previously unsampled in modern times. Given the amount of moss and tree growth in these areas, these pits could have been blasted during the early days of exploration in the region. Pits were located in proximity to JK-RA-027, JK-RA-030 and JK-ML-040 which returned anomalous to mid-grade gold mineralization.

A new area of anomalous gold mineralization was located on the Eastern margin of the Terrace Bay Batholith in the vicinity of station JK-SF-114 and 115. Up to 0.43 g/t Au was returned from a rubble pile of carbonate altered, silicified and pyrite bearing granite. The style of mineralization here is the same as observed in the Cliff Zone and it's also likely that this exposure was due to historic blasting. Only one day was spent in this area but given the results a return visit is warranted.

Table 3: Significant results from Phase 2 sampling

Station ID	Sample ID	Easting	Northing	Sample Medium	Lithology	Au (ppm)	Ag (ppm)	Cu (ppm)
JK-ML-082	D904025	505149	5408009	Outcrop	Granite	23.3	114	4210
JK-RA-043	D904005	504395	5407585	Float	Quartz Vein	7.78	13.9	199.5
JK-ML-040	D579963	505214	5408048	Outcrop	Granite	3.33	18.6	535
JK-SF-054	D579917	505224	5408050	Float	Quartz Vein	0.92	14.85	21.2
JK-RA-030	D579940	505097	5408060	Outcrop	Quartz Vein	0.863	2.13	4.5
JK-SF-052	D579915	505229	5408062	Outcrop	Granite	0.708	2.1	6.1
JK-RA-058	D579998	504999	5407644	Subcrop	Mafic Volcanic	0.682	1.59	8
JK-SF-053	D579916	505229	5408062	Outcrop	Granite	0.566	1.84	4
JK-RA-082	D904034	505360	5408382	Outcrop	Granite	0.562	1.19	1480
JK-SF-114	D579987	505918	5408908	Outcrop	Quartz Vein	0.438	4.53	2.6
JK-SF-051	D579912	505229	5408060	Outcrop	Granite	0.372	1.2	4.5
JK-SF-107	D579980	504995	5407638	Float	Granite	0.258	0.39	21
JK-RA-019	D579935	505010	5408037	Outcrop	Granite	0.253	0.45	4.5
JK-RA-057	D579997	505160	5407869	Subcrop	Granite	0.24	0.29	2.3
JK-SF-094	D579972	505108	5407962	Outcrop	Quartz Vein	0.221	6.09	4.3
JK-SF-106	D579979	504992	5407652	Outcrop	Granite	0.221	0.62	9
JK-SF-082	D579967	504860	5407555	Subcrop	Granite	0.196	0.17	30.9
JK-ML-076	D904023	505137	5407829	Float	Granite	0.192	0.26	4.5
JK-RA-041	D904004	504438	5407421	Outcrop	Quartz Vein	0.164	0.65	10.7
JK-SF-026	D579905	505217	5408896	Float	Quartz Vein	0.155	2.54	16.1
JK-ML-027	D579951	504843	5408631	Outcrop	Granite	0.149	0.5	2
JK-RA-033	D579942	505106	5408023	Outcrop	Granite	0.149	0.32	4.8
JK-RA-053	D904006	505139	5407825	Outcrop	Granite	0.128	0.65	2.9
JK-RA-069	D904012	504872	5411024	Outcrop	Quartz Vein	0.127	9.52	108.5
JK-RA-021	D579936	505094	5408065	Subcrop	Granite	0.112	0.32	1.5
JK-SF-115	D579988	505929	5408884	Subcrop	Granite	0.109	0.22	1.2

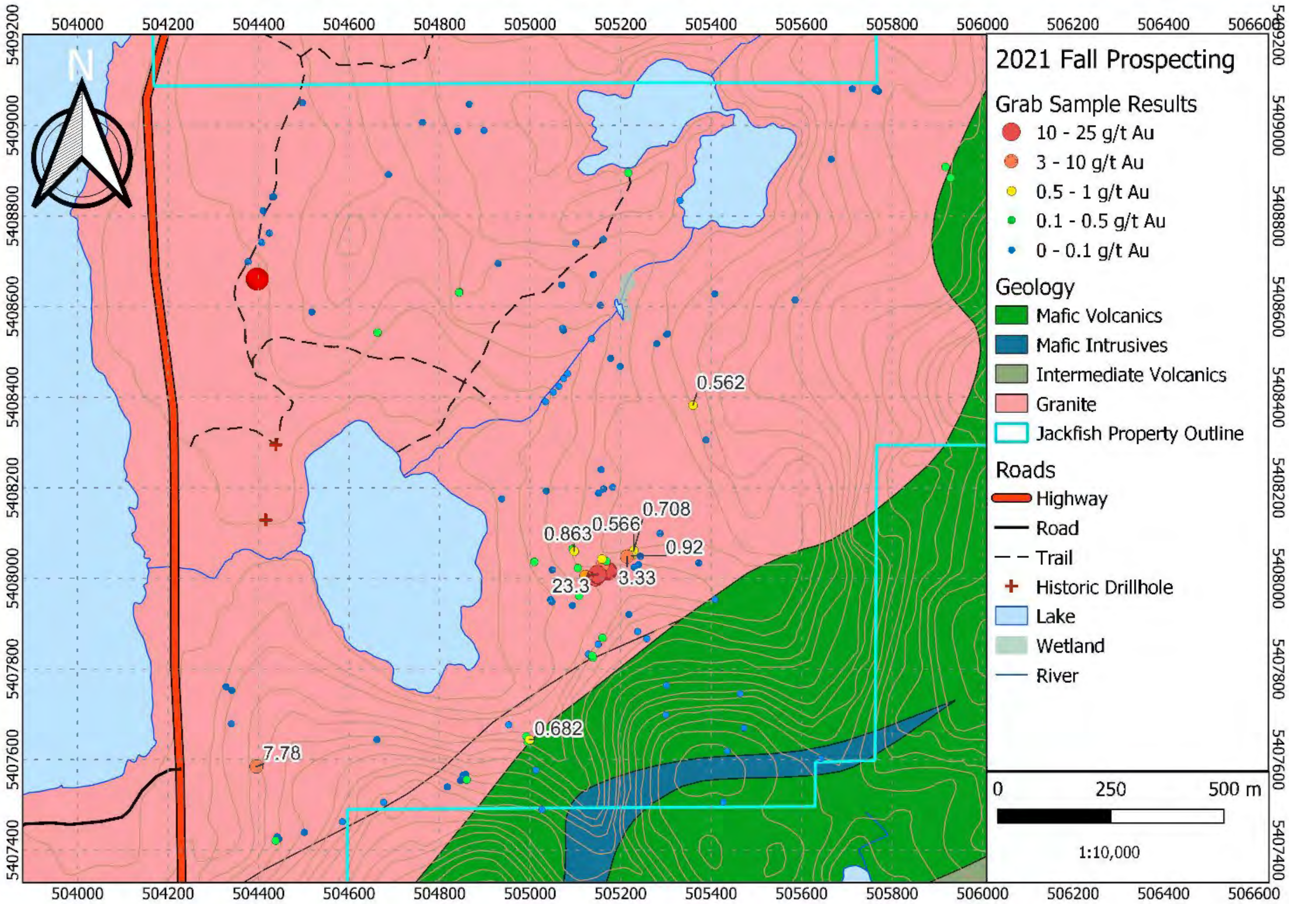

Figure 22: Significant results from the 2021 phase 2 prospecting program. Labels indicate phase 2 sample Au values (ppm).

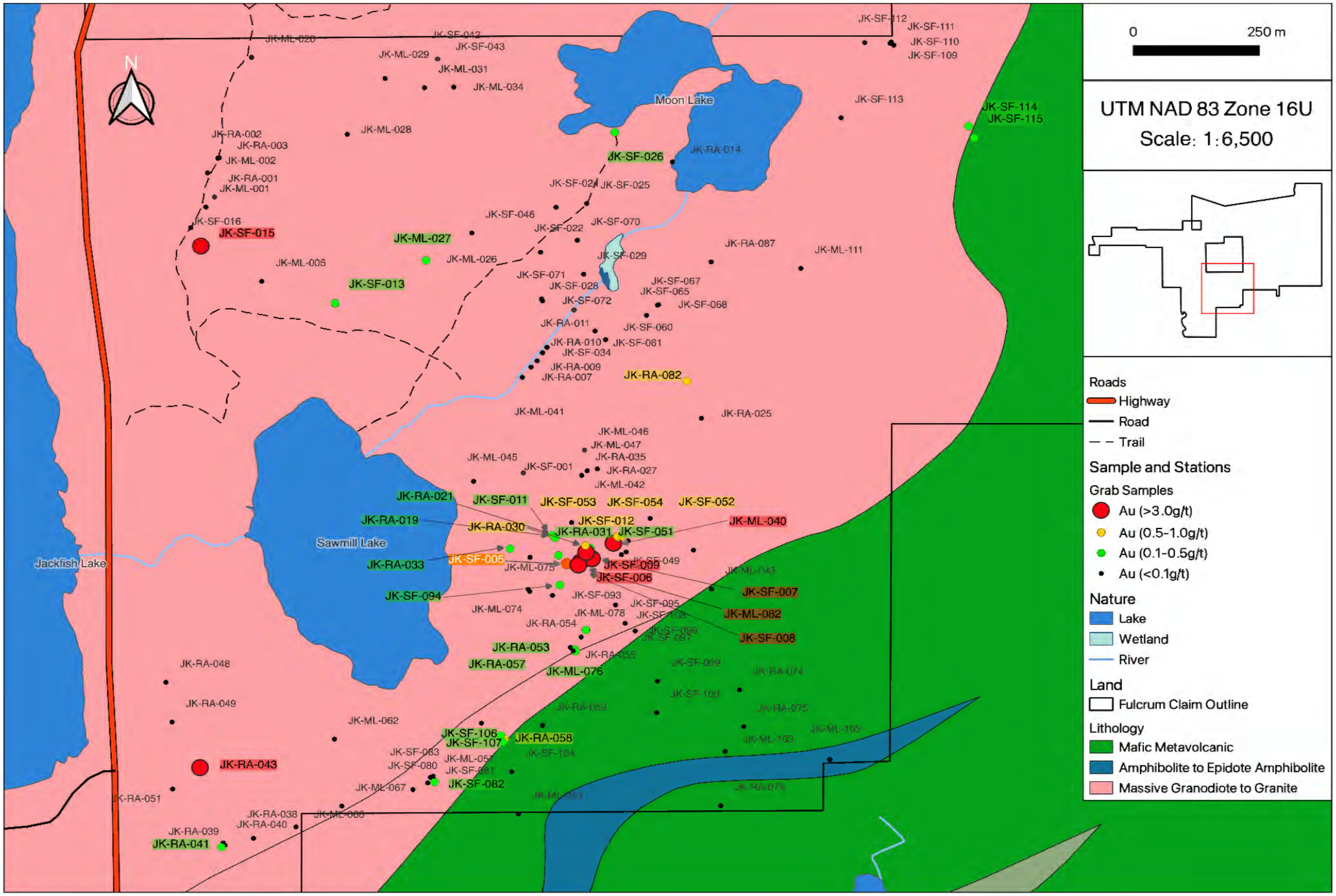

Figure 23: Combined results of the 2021 sampling program in the SE portion of the Jackfish Property.

CONCLUSIONS AND RECOMMENDATIONS

The 2021 prospecting program was successful in confirming the presence of historic Au mineralization on the Jackfish property near Sawmill Lake at the North and Cliff Zones. High grade gold mineralization is associated with pyrite-chalcopyrite-galena mineralization in quartz veins cutting granitic rocks of the Terrace Bay Batholith as well as within carbonate altered, sulfide bearing granite adjacent to vein systems.

This area has no historic record of modern geophysics or any drilling and represents an intriguing early-stage exploration prospect. Given the results of the 2021 program the following is recommended:

1. Additional prospecting along the contact of the Terrace Bay Batholith and the surrounding volcanic rocks. Particularly the eastern contact where anomalous gold samples were returned.
2. Establishment of a cut grid to cover the North Zone through to the Cliff Zone, terminating near the property boundary to the south and east.
3. Completion of an IP survey to identify areas of increased sulfide within the granite which appears to be related to quartz-carbonate alteration and gold mineralization
4. Trenching of any near surface anomalies where possible
5. Diamond drilling to test any anomalies at depth.

STATEMENT OF EXPENDITURES

Description	Cost
July 4-5 Truck Rental Costs	$180
July 4-5 Geologist	$1,500
July 4-5 UTV Rental	$400
July 4-5 Accomodations	$140
July 4-5 Fuel	$248
July 4-5 Assays	$1,101
Phase 2 Mob	$3,150
Phase 2 Demob	$3,150
Phase 2 Field Supplies	$250
Phase 2 Prospecting Team	$36,000
Phase 2 Assays	$9,440
Assessment Report	$4,000
Total	**$59,558**

Analysis Total	**$10,540**
Total Samples	**144**
Cost/Sample	**$73.20**

Claim Cell ID	# of Stations	# of Samples	Proportion of Stations	Proportion Cost	Samples Cost	Total Cost
307524	55	33	17.68488746	$8,668.78	$2,415.60	$11,084.38
139528	34	20	10.93247588	$5,358.88	$1,464.00	$6,822.88
144971	28	16	9.003215434	$4,413.20	$1,171.20	$5,584.40
247682	28	8	9.003215434	$4,413.20	$585.60	$4,998.80
294830	24	5	7.717041801	$3,782.74	$366.00	$4,148.74
122023	26	13	8.360128617	$4,097.97	$951.60	$5,049.57
240191	21	11	6.752411576	$3,309.90	$805.20	$4,115.10
191502	13	4	4.180064309	$2,048.98	$292.80	$2,341.78
228824	12	5	3.8585209	$1,891.37	$366.00	$2,257.37
210289	14	4	4.501607717	$2,206.60	$292.80	$2,499.40
294831	10	5	3.215434084	$1,576.14	$366.00	$1,942.14
335121	6	2	1.92926045	$945.68	$146.40	$1,092.08
291176	2	2	0.643086817	$315.23	$146.40	$461.63
281329	8	3	2.572347267	$1,260.91	$219.60	$1,480.51
127476	6	3	1.92926045	$945.68	$219.60	$1,165.28
203647	5	1	1.607717042	$788.07	$73.20	$861.27
318736	5	3	1.607717042	$788.07	$219.60	$1,007.67
283111	1	1	0.321543408	$157.61	$73.20	$230.81
247681	2	3	0.643086817	$315.23	$219.60	$534.83
247684	3	1	0.964630225	$472.84	$73.20	$546.04
144970	2	1	0.643086817	$315.23	$73.20	$388.43
127475	2		0.643086817	$315.23		$315.23
307523	1		0.321543408	$157.61		$157.61
307013	1		0.321543408	$157.61		$157.61
247683	1		0.321543408	$157.61		$157.61
233320	1		0.321543408	$157.61		$157.61
Total	**311**	**144**	**100**	**$49,018.00**	**$10,540.80**	**$59,558.80**

10. SIGNATURES

I, Steven D. Flank, of the City of Thunder Bay, in the Province of Ontario, do hereby certify that:

1. I am the President and Principal Geoscientist of Bayside Geoscience Inc., a geological consulting company based in Thunder Bay, Ontario.
2. I am a member in good standing with the Association of Professional Geoscientists of Ontario (#2695), residing at 124 Sherwood Drive, Thunder Bay, Ontario, P7B 6L1.
3. I attained an H.BSc. in Geology from Lakehead University in Thunder Bay, Ontario (2011) and an M.Sc. in Mineral Exploration from Laurentian University in Sudbury, Ontario (2017).
4. I have worked as an exploration geologist for over 10 years focusing on project generation and early-stage gold projects including shear zone hosted lode gold and intrusion related disseminated gold deposits and intrusion related Ni-Cu-PGE deposits.
5. I personally conducted and supervised work at the 2021 Prospecting Program at the Jackfish Property as described in this report.

Dated

December 9th, 2021

Thunder Bay, Ontario, Canada

____

Steven D. Flank, M.Sc., P.Geo.

1. REFERENCES

Magnus, S.J., and K. A. Arnold. 2016. "Project NW-16-003 and Project Unit 15-004. Geology and Mineral Potential of the Western Schreiber-Hemlo Greenstone Belt." Ontario Geological Survey Open File Report 6323 p. 11-1 to 11-7.

McKenzie J., Ronacher E., Farahani F. "Independent Technical Report", Jackfish Property, Ontario, 2017. Prepared for Sanatana Resources Inc. Prepared by Ronacher McKenzie Geoscience Inc. http://www.geologyontario.mndm.gov.on.ca/mndmfiles/afri/data/imaging/20000017310/20000017310_01.pdf

APPENDIX A: CLAIM DETAILS

Claim ID	Claim Type	Expiry Date	HOLDER
337090	BCMC	2022-05-07	(100) WAYNE LARRY RICHARDS
337091	BCMC	2022-05-07	(100) WAYNE LARRY RICHARDS
337092	SCMC	2022-05-07	(100) WAYNE LARRY RICHARDS
336508	SCMC	2021-07-03	(50) JAMES MARK HAMEL, (50) WAYNE LARRY RICHARDS
341575	SCMC	2021-12-09	(50) JAMES MARK HAMEL, (50) WAYNE LARRY RICHARDS
341576	SCMC	2021-07-03	(50) JAMES MARK HAMEL, (50) WAYNE LARRY RICHARDS
339099	SCMC	2022-03-03	(100) WAYNE LARRY RICHARDS
102707	SCMC	2022-02-02	(100) WAYNE LARRY RICHARDS
102708	SCMC	2022-02-02	(100) WAYNE LARRY RICHARDS
102709	SCMC	2022-02-02	(100) WAYNE LARRY RICHARDS
106235	SCMC	2021-12-09	(50) JAMES MARK HAMEL, (50) WAYNE LARRY RICHARDS
106254	SCMC	2021-07-03	(50) JAMES MARK HAMEL, (50) WAYNE LARRY RICHARDS
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103106	SCMC	2021-10-01	(100) WAYNE LARRY RICHARDS
103107	SCMC	2021-10-01	(100) WAYNE LARRY RICHARDS
106904	BCMC	2021-12-27	(100) SANATANA RESOURCES INC.
103758	SCMC	2022-03-18	(50) WAYNE LARRY RICHARDS, (50) FRANCINE RICHARDS
110004	BCMC	2022-06-07	(100) SANATANA RESOURCES INC
113125	SCMC	2022-02-02	(100) WAYNE LARRY RICHARDS
113704	BCMC	2022-04-08	(50) JAMES MARK HAMEL, (50) WAYNE LARRY RICHARDS
109964	SCMC	2022-02-02	(100) WAYNE LARRY RICHARDS
112281	BCMC	2022-04-21	(100) MICHEL P. DORVAL
112282	BCMC	2022-04-21	(100) MICHEL P. DORVAL
115450	BCMC	2021-11-03	(100) WAYNE LARRY RICHARDS
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122292	BCMC	2022-04-21	(100) MICHEL P. DORVAL
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127476	BCMC	2022-02-02	(100) WAYNE LARRY RICHARDS
123323	BCMC	2022-03-18	(50) WAYNE LARRY RICHARDS, (50) FRANCINE RICHARDS
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131247	BCMC	2021-12-09	(50) JAMES MARK HAMEL, (50) WAYNE LARRY RICHARDS
130628	BCMC	2024-05-15	(100) RUDOLF WAHL
133940	BCMC	2021-12-09	(100) WAYNE LARRY RICHARDS
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137214	BCMC	2022-04-21	(100) MICHEL P. DORVAL
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145785	SCMC	2021-07-03	(50) JAMES MARK HAMEL, (50) WAYNE LARRY RICHARDS
147061	SCMC	2021-12-09	(50) JAMES MARK HAMEL, (50) WAYNE LARRY RICHARDS
148939	BCMC	2022-03-03	(100) WAYNE LARRY RICHARDS
149370	BCMC	2021-12-09	(100) WAYNE LARRY RICHARDS
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149373	BCMC	2021-12-09	(100) WAYNE LARRY RICHARDS
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160743	BCMC	2024-05-15	(100) RUDOLF WAHL
166072	BCMC	2024-05-15	(100) RUDOLF WAHL
168728	BCMC	2021-12-09	(100) WAYNE LARRY RICHARDS
170146	BCMC	2022-04-16	(100) SANATANA RESOURCES INC

Claim ID	Claim Type	Expiry Date	HOLDER
170147	BCMC	2021-11-03	(100) WAYNE LARRY RICHARDS
170176	BCMC	2022-05-07	(100) WAYNE LARRY RICHARDS
171055	SCMC	2021-10-01	(100) WAYNE LARRY RICHARDS
171056	SCMC	2021-10-01	(100) WAYNE LARRY RICHARDS
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170591	BCMC	2022-02-02	(100) WAYNE LARRY RICHARDS
171184	BCMC	2022-04-21	(100) MICHEL P. DORVAL
173783	SCMC	2021-10-01	(100) WAYNE LARRY RICHARDS
177518	SCMC	2021-03-03	(100) WAYNE LARRY RICHARDS
182496	BCMC	2022-02-02	(100) WAYNE LARRY RICHARDS
184891	SCMC	2022-03-13	(100) WAYNE LARRY RICHARDS
187308	SCMC	2022-03-18	(50) WAYNE LARRY RICHARDS, (50) FRANCINE RICHARDS
189822	SCMC	2021-10-01	(100) WAYNE LARRY RICHARDS
188425	SCMC	2021-10-01	(100) WAYNE LARRY RICHARDS
191037	SCMC	2022-02-02	(100) WAYNE LARRY RICHARDS
191502	SCMC	2022-02-02	(100) WAYNE LARRY RICHARDS
193480	SCMC	2022-05-07	(100) WAYNE LARRY RICHARDS
192693	BCMC	2021-12-27	(100) SANATANA RESOURCES INC.
195337	BCMC	2024-05-15	(100) RUDOLF WAHL
195984	SCMC	2021-12-09	(50) JAMES MARK HAMEL, (50) WAYNE LARRY RICHARDS
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199402	BCMC	2022-07-15	(100) SANATANA RESOURCES INC.
199475	BCMC	2021-12-11	(100) SANATANA RESOURCES INC.
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225462	BCMC	2024-05-15	(100) RUDOLF WAHL
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236346	BCMC	2022-04-21	(100) MICHEL P. DORVAL
236689	BCMC	2022-03-18	(50) WAYNE LARRY RICHARDS, (50) FRANCINE RICHARDS
237151	SCMC	2022-02-02	(100) WAYNE LARRY RICHARDS
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238531	BCMC	2022-04-21	(100) MICHEL P. DORVAL
238532	BCMC	2021-12-09	(50) JAMES MARK HAMEL, (50) WAYNE LARRY RICHARDS
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249231	SCMC	2021-12-09	(50) JAMES MARK HAMEL, (50) WAYNE LARRY RICHARDS
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249123	SCMC	2021-07-03	(50) JAMES MARK HAMEL, (50) WAYNE LARRY RICHARDS
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Claim ID	Claim Type	Expiry Date	HOLDER
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256709	BCMC	2022-04-21	(100) MICHEL P. DORVAL
257436	BCMC	2022-04-21	(100) MICHEL P. DORVAL
259258	SCMC	2022-02-02	(100) WAYNE LARRY RICHARDS
261907	BCMC	2022-03-16	(100) SANATANA RESOURCES INC.
261360	BCMC	2024-05-15	(100) RUDOLF WAHL
261977	BCMC	2021-12-09	(50) JAMES MARK HAMEL, (50) WAYNE LARRY RICHARDS
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267329	BCMC	2022-02-02	(100) WAYNE LARRY RICHARDS
266484	BCMC	2022-04-21	(100) MICHEL P. DORVAL
268806	BCMC	2024-05-15	(100) RUDOLF WAHL
268807	BCMC	2024-05-15	(100) RUDOLF WAHL
269425	BCMC	2021-12-09	(50) JAMES MARK HAMEL, (50) WAYNE LARRY RICHARDS
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303967	BCMC	2022-02-12	(100) SANATANA RESOURCES INC.
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307013	BCMC	2022-06-07	(100) SANATANA RESOURCES INC.
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307524	SCMC	2022-02-02	(100) WAYNE LARRY RICHARDS
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315967	BCMC	2024-05-15	(100) RUDOLF WAHL
318736	SCMC	2022-03-30	(50) JAMES MARK HAMEL, (50) WAYNE LARRY RICHARDS
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326467	BCMC	2022-06-07	(100) SANATANA RESOURCES INC.
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327794	SCMC	2021-07-03	(50) JAMES MARK HAMEL, (50) WAYNE LARRY RICHARDS
335121	BCMC	2022-02-02	(100) WAYNE LARRY RICHARDS
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341864	BCMC	2022-04-21	(100) MICHEL P. DORVAL
342749	BCMC	2022-03-18	(50) WAYNE LARRY RICHARDS, (50) FRANCINE RICHARDS
334169	BCMC	2021-11-03	(100) WAYNE LARRY RICHARDS
334219	BCMC	2022-06-27	(100) OREN KRAVCHIK
332816	SCMC	2021-12-09	(50) JAMES MARK HAMEL, (50) WAYNE LARRY RICHARDS
332243	BCMC	2024-05-15	(100) RUDOLF WAHL
334168	BCMC	2021-11-03	(100) WAYNE LARRY RICHARDS

APPENDIX B: DAILY WORK LOGS

Date	Team	Station ID	Sample ID	Notes
2021-09-29	Megan Landman |Geologist|, Rami Abou-Shamalah |Geologist|	JK-ML-003 JK-ML-004 JK-RA-004	D579945 D579946 D579947 D579948	Location: Kellyn Objective: Given a tour of previously trenched areas and a history of the property by the local prospector Wayne Richards. Visited a mineralized zone with both teams, and then transacted the northern part of the Jackfish Lake Property Notes: The land has steep elevation climbs and dense forest. The samples were taken on topographical highs, with little to no overburden.
2021-09-30	Megan Landman |Geologist|, Cameron Mitchell |Field Assistant|	JK-ML-006 - JK-ML-019, JK-ML-021 - JK-ML-023	D579948	Location: Kellyn Objective: transact around the previous day, fill in the gaps and find any mineralized outcrops Notes: Filled in the gap in the previous day, and took over 13 station points, and 1 good sample of a mineralized outcrop.
2021-10-01	Megan Landman |Geologist|, Steven Flank |Geologist|, Dan Flank |Field Assistant	JK-ML-024 JK-ML-025 JK-ML-030a JK-ML-032 JK-ML-033 JK-ML-035, JK-SF-035-JK-SF-041, JK-SF-044 JK-SF-045 JK-SF-047	D579949 D579951 D579952 D579953 D579954 D579955, D579909 D579910 D579911	Location: Jackfish Lake, north of Sawmill Lake Objective: Continue to cover the land east of the previous 2 samples Notes: The area had lots of outcrops, the team took lots of samples and stations. Granites in this area were more magnetized than previous. Also noted white granite varieties and took measurements of the dyke that runs narrowingly |relatively| through the property.
2021-10-02	Megan Landman |Geologist|, Steven Flank |Geologist|, Dan Flank |Field Assistant	JK-ML-038, JK-SF-048 JK-SF-055 JK-SF-056	D579961 D579962 D579963 D579956 D579964 D579957, D579914 D579913 D579912 D579915 D579916 D579917	Location: Jackfish Lake, east of Sawmill Lake, and south of the river Objective: Exploring new areas, and mapping the targeted area of the project, which is the intensified squared area south of the exclusion zone on the property. Notes: Found mineralized float samples, took a few samples of quartz veining, and identified and sampled mineralized quartz outcrops, that contained disseminated pyrite
2021-10-03	Megan Landman |Geologist|, Rami Abou-Shamalah |Geologist|	JK-ML-044 JK-ML-048 JK-ML-049	D579958 D579959 D579960	Location: Jackfish Lake, east of Sawmill Lake, and south of the river Objective: cover the unmissed area between the river and the 2 transacts more south of the river. Notes: Took the prospecting route that Wayne Richards had developed over the years. Although it's not absolutely amazingly well-maininted it provides great access to parts of the party that would otherwise take a while to get to. During this transact the crew went over rocky terrain. In spite of these hurdles, good rusty, ankerite altered granites were observed and noted. In addition, the granites were mineralized.
2021-10-04	Megan Landman |Geologist|, Rami Abou-Shamalah |Geologist|, Cameron Mitchells |Field Assistant	JK-ML-051 JK-ML-052 JK-ML-054 JK-ML-055 JK-ML-056	D904006 D904007	Location: Jackfish Lake, the southern extend of the property claim outline Objective: Walk up the power-line which gives good exposure to outcrops that are on the property, then walk down the property, intersecting the cliff zone, and down the topographical highs to make notes of what we see The power-line runs on the topographical. high, which the topographical highs surrounding the property are mafic volcanics, and down the topographical highs, towards jackfish lake, are the granites. As the team walked up the power-line, typical non-mineralized granites were observed, there was a few spots of rusty granites. As the team transacted down the 'hill' there was mineralized areas, and especially the cliff zone, were highly mineralization sulfide was associated with the quartz vein, which the crew sampled and look around.
2021-10-05	Megan Landman |Geologist|, Cameron Mitchell |Field Assistant|	JK-ML-058 JK-ML-059 JK-ML-060 JK-ML-061 JK-ML-063 JK-ML-064 JK-ML-065 JK-ML-068	D904033 D904008 D904020	Location: Jackfish Lake, the southern extend of the property claim outline Objective: transact between the previous route, along the powerline, and the route of the other team, which is west of Sawmill Lake Went up the topographical highs, and west of the Cliff zone, to find perhaps another mineralized zone proximal to Cliff and follow-up on the mineralization along the outcrop of the previous days. This section seemed dry compared to the last, but 3 samples were taken: Sulfur pocket sample, and a sample of rusty granite that was ankerite replaced.
2021-10-06	Megan Landman |Geologist|, Cameron Mitchell |Field Assistant|	JK-ML-069 JK-ML-070 JK-ML-071 JK-ML-072 JK-ML-073		Location: Jackfish Lake, north-west most of the square intensified area Objective: Cover the west-most section of the squared area, follow-up on the previous 2 transacts in the area Cameron's arm was injured so the team took a more relaxed day of taking proximal samples, and completed administrative duties by uploading GPS and cleaning data, back at the cottage
2021-10-07	Megan Landman |Geologist|, Rami Abou-Shamalah |Geologist|, Cameron Mitchells |Field Assistant	JK-ML-077 JK-ML-079 JK-ML-080 JK-ML-081	D904022 D904021 D904023 D904024 D904025 D904006 D579995 D579996 D579997 D579998 D579999	Location: Jackfish Lake, southeast of Sawmill Lake Objective: complete a covering of the mapping area and explore unexplored areas Cover the area missed south of the river. There the team split apart and Cameron and Rami visited a mineralized river spot, with historical gold findings. There was floats near the outcrop with quartz and lots of sulfide mineralization. Took 2 samples of That. Along that same transact, we intersected mineralized mafic volcanics with disseminated 1-2% pyrite euhedral crystals. Megan resampled good looking mineralized granite.
2021-10-08	Megan Landman |Geologist|, Rami Abou-Shamalah |Geologist|			Location: Kellyn. Observe the property, familiarize ourselves with the land, and view the previous trenching,
2021-10-09	Megan Landman |Geologist|, Dan Flank |Field Assistant|	JK-ML-083 JK-ML-084 JK-ML-086 JK-ML-088 JK-ML-091 JK-ML-092 JK-ML-093 JK-ML-094 JK-ML-095 JK-ML-096 JK-ML-097	D904026 D904027 D904028 D904029	Location: Kellyn Objective: map and prospect the area between the 2 known mineralized and highly trenched areas Granites in this area were more magnetized than normal. In addition, the team found a contact between pillows and the granites. Mapped and sample various mafic rocks, such as diorite, basalt, diabase.
2021-10-10	Megan Landman |Geologist|, Rami Abou-Shamalah |Geologist|	JK-ML-098 JK-ML-099 JK-ML-100 JK-ML-101 JK-ML-102 JK-ML-104 JK-RA-076 JK-RA-077 JK-RA-079 JK-RA-080	D904030 D904032 D904017 D904018 D904019	Location: Jackfish Lake, southeast of Sawmill Lake Objective: complete a covering of the mapping area and explore unexplored areas Notes: took the route along Sawmill Lake with the intention of transacting up the topographical high and sampling along the way. Then, to go northward along the power-line, and then transact again down the topographical high on a seperate line. The weather was raining which made the steep terrain difficult and a slow endavour. Inspite of this, the team gathered 10 data points, and 5 samples.
2021-10-11	Megan Landman |Geologist|, Rami Abou-Shamalah |Geologist|	JK-ML-106 JK-ML-107 JK-ML-108 JK-ML-109 JK-ML-110 JK-ML-112 JK-ML-113 JK-RA-081 JK-RA-082 JK-RA-083 JK-RA-084 JK-RA-085 JK-RA-086	D904036 D904034 D904035	Location: Jackfish Lake, around the river, north east of Sawmill Lake Objective: complete a covering of the mapping area and explore unexplored areas Notes: made a transact around the previous transacts around the river, filling in the missing spots. Also visited previous historically blasted areas. Took many stations, but nothing extraordinary in terms of mineralization caught our attention enough to sample.

Date	Team	Station ID	Sample ID	Notes
2021-09-29	Steven Flank |Geologist|, Daniel Flank |Field Assistant|, Cameron Mitchell | Field Assistant|	JK-SF-020 JK-SF-021 JK-SF-023	D579902 D579903 D579904 D579905	Location: Kellyn Objective: Given a tour of previously trenched areas and a history of the property by the local prospector Wayne Richards. Visited a mineralized zone with both teams, and then transacted the northern part of the Jackfish Lake Property Resampled the mineralized zones
2021-09-30	Steven Flank |Geologist|, Daniel Flank |Field Assistant|, Rami Abou-Shamalah |Geologist|	JK-RA-005 JK-RA-006 JK-RA-008 JK-RA-012 JK-RA-013 JK-RA-015 JK-RA-016 JK-SF-027 JK-SF-030 JK-SF-031 JK-SF-032 JK-SF-033	D579930 D579931 D579932 D579933 D579934 D579906 D579907 D579908	Location: Jackfish Lake Objective: Following the river upstream and transact down Notes: Beginning at the pathway from Jackfish cottages to the route around Sawmill, to get to the river. Then followed the river pathway ustream to the lake north-east. Took plentiful of samples and outcrops and made good observations of the mineralization trend in the river valley, which seemed to end near the northeast lake.
2021-10-01	Rami Abou-Shamalah |Geologist|, Cameron Mithcell | Field Assistant|	JK-RA-017 JK-RA-018 JK-RA-020 JK-RA-023 JK-RA-024 JK-RA-026 JK-RA-028 JK-RA-029	D579935 D579936 D579937 D579938 D579939	Location: Jackfish Lake, east of Sawmill Lake, and south of the previous river transact Objective: Walk out structures searching for Outcrop. Notes: The team traversed through tough terrain, made elevation gains of 500m or more and saw an overview of the mapping property. Noted a historically previously exploded area using dynamite. Also noted a few different varieties of granites, and familiarized ourselves with the different types of mineralizations.
2021-10-02	Rami Abou-Shamalah |Geologist|, Cameron Mithcell | Field Assistant|	JK-RA-032 JK-RA-034	D579940 D579941 D579942 D579943	Location: Jackfish Lake, east of Sawmill Lake, same location as the previous day Objective: Fill in a smaller transact within the semi-circle of the previous day, and do more detailed search around the exploded mineralized parts Notes: Somewhat of a shorter transact because so much time was spent digging and taking detailed photographs. Also happened to find another location that was clearly blasted and we dug that out, and took more samples
2021-10-03	Steven Flank |Geologist|, Cameron Mitchell | Field Assistant|	JK-SF-057 JK-SF-058 JK-SF-059 JK-SF-062 JK-SF-063 JK-SF-066 JK-SF-069 JK-SF-073 JK-SF-074 JK-SF-075 JK-SF-076 JK-SF-077	D579918 D579919 D579920 D579921 D579922 D579923 D579924 D579926	Location: Jackfish Lake, the upstream river from Sawmill Lake to the northeastern Lake Objective: Take a wider more expansive transact around the previous transact upstream the river. Notes: Though we took more of a distance from the river than the last route, we still experienced mineralization of the granites proximal to the river. There was very rusty granites, Sulfur pockets, hematite replacement of the granites was common in this area.
2021-10-04	Steven Flank |Geologist|, Daniel Flank |Field Assistant|			Notes: Administrative work back at Thunder Bay
2021-10-05	Rami Abou-Shamalah |Geologist|, Dan Flank |Field Assistant|	JK-RA-036 JK-RA-037 JK-RA-042	D579991 D579944 D904003 D904004 D904005	Location: Jackfish Lake, West of Sawmill Lake Objective: Checkout west of Sawmill Lake, on the satellite images it seems barren of outcrop and flat, but needs groundproofing Notes: The team took the route east of Sawmill Lake until the end of it, walked around the southern tip of the Lake, and continued on westward, noting any outcrops and taking samples along the way. On the way back, north back to the cottage, now west of Sawmill Lake, there was a very nice quartz vein / float, with the mineralized galena, and strong sulfide mineralization. No VG was noted but samples are interesting. The team also noted many topographical highs with lots of outcrop that were not visible on the satellite
2021-10-06	Rami Abou-Shamalah |Geologist|, Dan Flank |Field Assistant|	JK-RA-044 JK-RA-045 JK-RA-046 JK-RA-047 JK-RA-050 JK-RA-052	D579992 D579993 D579994	Location: Jackfish Lake, West of Sawmill Lake, westmost portion of the squared mapping area Objective: Follow-up on the previous day, and map the unexplored areas Notes: The team continued to map the area west of Sawmill Lake. There we noted many diffrent outcrop clusters of Mafic Volcanics and granites interspersed togethor. It was suprising given the lack of mafics on the geological map. The area was thoroughly mapped and the area west of Sawmill was now mapped. We noted many outcrops, and took as much as we could given the time. Mineralization of granites was few, and surely enough there was also lots of dry land near the topographical lows and sediment-abundance of the Sawmill Lake.
2021-10-07	Steven Flank |Geologist|, Daniel Flank |Field Assistant|	JK-SF-078 JK-SF-079	D579965 D579966 D579967 D579968	Location: Jackfish Lake, southeast of the river Objective: Stay in the vicinity of Team 1 and map in the general close area. Notes: found trailsite outcrop of granite, about 15m north of contact with diabase, unaltered and non mineralized. In addition, about 30% amphibole rich sample with a late pegmatite vein that contacts the granite parallel to foliation.
2021-10-08	Steven Flank |Geologist|, Daniel Flank |Field Assistant|			Location: Kellyn. Observe the property, familiarize ourselves with the land, and view the previous trenching,
2021-10-09	Steven Flank |Geologist|, Rami Abou-Shamalah |Geologist|	JK-RA-062 JK-RA-063 JK-RA-065 JK-RA-066 JK-SF-086 JK-SF-087 JK-SF-088	D904001 D904009 D904010 D904011 D904012 D904013 D904014 D904015 D904016 D579969 D579990 D579970	Location: Kellyn Objective: map and prospect the area between the 2 known mineralized and highly trenched areas Notes: There is a historical gold sample running in the river that we were sampling near. We could not find it, but still managed to take good samples on the riverbed, of rusty granite and quartz veins, and on the walls of the valley created by the now quiet river. In addition, the team transacted away from the river, noted an old drillhole collar, and took many samples of mineralized granites. Granite was ankeritic altered along the river valley, and patches of rusty granitic were noted, as well.
2021-10-10	Steven Flank |Geologist|, Daniel Flank |Field Assistant|	JK-SF-090 JK-SF-091 JK-SF-092 JK-SF-098 JK-SF-101 JK-SF-102 JK-SF-103 JK-SF-105	D579971 D579972 D579973 D579974 D579976 D579977 D579989 D579978 D579979 D579980 D579981	Location: Jackfish Lake, southeast of Sawmill Lake Objective: to transact up the topographical highs Notes: Check out the mineralization along the topo highs going up the mountain. Noted mineralized granites, and took many samples along the way. Noted that mineralization of granites was very localized. Rnaging from not mineralized and weakly altered, to rusted and strongly ankeritic alteration.
2021-10-11	Steven Flank |Geologist|, Daniel Flank |Field Assistant|		D579982 D579983 D579984 D579985 D579986 D579987 D579988	Location: Jackfish Lake, visited the north-east-most portion of the mapping area Objective: visit hard to access and underexplored area Notes: took a car for quite the length along a moderately mainted prospecting route through the property, along the south part of the exclusion zone to the property until we reached the north-east portion of the property. took 2 samples of 2cm wide quartz veins embedded in altered granites. with 1% pyrite along the contact margins.

APPENDIX C: STATION DESCRIPTIONS

Station ID	Easting	Northing	Elevation	Lithology	Lith Mod	Minz #1	(%)	Minz #2	(%)	Notes
JK-SF-001	505036	5408193	215	Granite						Stockwork area. Stepped outcrop approximately 25m long and approximately 5m tall.
JK-SF-002	505052	5408231	217	Diorite						Granite in contact with thin veneer of either diorite or mafic volcanic. Qtz flooding observed throughout granite and mafic unit.
JK-SF-003	505072	5408243	216	Granite						Same ridge. Station taken at last zone of qtz veining before it transitions to a brick red, hem altered granite. No sulfide noted.
JK-SF-004	505023	5408162	224	Granite						White-beige granite with pervassive silica alteration. Silica alteration observed as smokey grey cherty overprint of granite.
JK-SF-005	505122	5408006	218	Quartz Vein		Pyrite	2			grey granite. Granite is same texture and compostion as those observed in the Stockwork area.
JK-SF-006	505145	5408003	231	Quartz Vein		Chalcopyrite	20	Galena	1	10cm wide qtz vein with heavy cpy and galena minz. Cuts sericite altered granites. Multiple narrow veins subparallel appear more bullish.
JK-SF-007	505172	5408016	231	Granite		Pyrite	5			notebook
JK-SF-009	505160	5408029	225	Quartz Vein		Galena	2	Pyrite	1	Rubble pile of qtz within granite. Ds galena and pyrite. Should run for sure. Sulfides are in crack-seal textures in veins. Sampled
JK-SF-010	505177	5408017	240	Granite						Station describes typical granite near qtz veins. Red colour with 30% amphibole, 45% alkali feldspar, 35% qtz. Jointing is prominent here and hosts qtz veins in places. Brittle defm
JK-SF-011	505169	5408038	201	Granite		Pyrite	3	Arsenopyrite	1	Bottom of cliff face. 10cm wide subhorizontal qtz vein with py+asp in stockwork veining. Granite looks silicified as well.
JK-SF-012	505159	5408043	233	Granite		Chalcopyrite	1	Pyrite	2	Rubble pile on top of cliff face. Silicified and carbonatized (ankerite) granite with ds cpy-py-sph minz. Some samples here show ductile deformation. Strongest alteration seen so far.
JK-SF-013	504663	5408543	201	Granite		Pyrite	5	Galena	2	Stripped outcrop of granite with a couple of stepped terraces. Granite is beige/pink in colour, generally massive and comprised of plagioclase, orthoclase, quartz and minor biotite. Shallowly dipping, narrow quartz veins terminate at a shear zone to the SE and pinch out to the NW. Previously channel sampled by Santana Gold (VR12192 is one sample ID observed). Veins are extensional with vein fibres oriented perpendicular to the contacts. All veining occupies a brittle structure that is 1.5m wide and dips shallowly to the NW. A hematite and carbonate altered shear zone causes granite to weather to rubble. Appears to display sinistral displacement eidenced by drag folds and displacement of the mineralized quartz vein. It displaces the vein by about 30cm. Sampled the vein where crack and seal textures are observed. 5% pyrite and 2% galena occupy cracks in the vein.
JK-SF-014	504412	5408665	202	Granite						30m x 30m stripped outcrop of granite, as observed at Hematite Zone. Lots of quartz veining throughout in various orientations. Some appear to be vertical while others are flatter. Mineralization within veins consists of chalcopyrite and galena. The historical sample database indicates some high grade samples including 11.69g/t Au (MP15WPT1037). A drill casing located 5m south east of the trench is unlabelled but confirmed to be JK-19-01. This hole aimed to test directly under the quartz veining but failed to intersect any mineraliztion. Need to consider the possibility of a shallow structure with splay structures radiating out vertically. These veins may not have great vertical extent but if we can follow a potential shallow plunge of this mineralization we could have more success.
JK-SF-015	504397	5408661	208	Granite		Pyrite	2	Chalcopyrite	1	silicified granite adjacent to quartz veins. Not so much in the veins themselves. Veins appear to dip shallowly to the west.
JK-SF-016	504377	5408699	202	Granite		Pyrite	2	Chalcopyrite	0.5	Strangely weathered granite beside trail near trenches. Appears vuggy with open pores partly filled with carbonate, biotite and euhedarl py +/-cpy. Looks like it could be part of a shear zone. Chlorite on broken surfaces with slickenlines.
JK-SF-017	504813	5410873	329	Quartz Vein		Chalcopyrite	2	Galena	2	Stripped outcrop exposing shear zone with a series of quartz veins striking 37 degrees and dipping 42 degrees to the NW. Veins anastomose within shear zone and range in thickness from 5cm to 2m. Most appear bullish/white but did locate an 8cm wide vein with blebs of chalcopyrite and galena. Wall rock surrounding the vein is strongly sheared.
JK-SF-018	504813	5410873	329	Granite						018. Pervassive ankerite alteration causes the rock to crumble easily. 2-3% c.g-m.g euhedral pyrite.
JK-SF-019	504798	5410808	325	Quartz Vein		Chalcopyrite	2	Silver	1	Largely covered by blasted rock which contains boulders and rubble of quartz, calcite and wall rock. Observed one piece of rubble which contained 2% total chalcopyrite, native Ag and Galena. Note a shear zone in chlorite schist in this location with Az= 240.
JK-SF-020	504854	5410885	331	Granite						Large stripped outcrop on east side of Jon Showing. Granite is in contact with mafic volcanic rocks, observed to brecciate and melt itnto them. 2m wide calcite vein trends 248 degrees and is surrounded by a 50cm halo of carbonate alteration and in-situ brecciation.
Adit Showing	504338	5410942	330							

Station ID	Easting	Northing	Elevation	Lithology	Lith Mod	Minz #1	(%)	Minz #2	(%)	Notes
JK-ML-003	504431	5408842	211	Mafic Volcanic		Pyrite	3			Mafic volc unit becomes strongly foliated/schistose |1-2m thick unit| near contact with granite.
JK-ML-004	504555	5408635	227	Gabbro						
JK-ML-006	504448	5408836	214	Mafic Volcanic		Pyrite	1			Qtz-feldspar vein 3cm wide
JK-ML-007	504502	5408840	220	Granite						Regular ol granite
JK-ML-008	504515	5408788	216	Granite						Granite
JK-ML-009	504497	5408758	214	Gabbro		Pyrite	5			Old trench
JK-ML-010	504473	5408746	213	Granite						Granite with 1cm or smalller qtz veins. All unmineralized
JK-ML-011	504530	5408742	219	Granite						Qtz feldspar dykw 2cm
JK-ML-012	504587	5408799	225	Granite						Granite
JK-ML-013	504678	5408845	232	Diabase		Pyrite	1			Diabase magnetic
JK-ML-014	504628	5408750	239	Gabbro						Pervasive qtz veins, all 100/85ish-. Heavy epidote alt
JK-ML-015	504607	5408711	236	Gabbro						Diabase
JK-ML-016	504610	5408653	229	Granite						Below diabase sill
JK-ML-017	504632	5408570	223	Granite						Granite
JK-ML-018	504552	5408551	222	Granite						Granite weak mag
JK-ML-019	504452	5408596	207	Granite						Granite
JK-ML-021	504638	5408984	220	Granite						Weak mag
JK-ML-022	504654	5408980	224	Syenite		Pyrite	5			High potential for gold mineralization
JK-ML-023	504505	5408911	214	Granite						Granite
JK-ML-024	504738	5408596	210	Granite						Set of subparallel qtz veins.........granite is magnetic
JK-ML-025	504844	5408627	226	Gabbro		Pyrite	2			Enclave within granite host. Fine grained.
JK-ML-030a	504818	5409014	241	Granite						Granite
JK-ML-032	504847	5408974	251	Granite						Granite
JK-ML-033	504892	5409024	256	Diabase		Pyrite	1			Contact with granite
JK-ML-035	504926	5408719	236	Granite						Might be contact w mafic volcanic or diabase
JK-ML-038	505125	5408037	239	Granite						Bit rusty
JK-ML-044	504950	5408186	208	Gabbro						Natrolite alt.
JK-ML-048	505274	5408233	234	Granite						Granite dry
JK-ML-049	505158	5408331	232	Mafic Volcanic						Dry granite contact w basalt|?| Fol. is measured for granite... fault features
JK-ML-051	504563	5407438	270	Granite						Qtz vein network- most prominent trend 240 deg
JK-ML-052	504963	5407518	282	Diorite		Pyrite	1			Increasing frequency of intermediate/mafic boulders... trace py
JK-ML-054	505047	5407503	276	Mafic Volcanic		Pyrite	3	Chalcopyrite	1	Same unit as ML 53
JK-ML-055	505041	5407516	269	Granite						Dry granite
JK-ML-056	504964	5407597	244	Granite						Dry granite
JK-ML-058	504632	5407747	207	Granite						Granite boulder
JK-ML-059	504494	5407676	226	Granite						Minor fracture set
JK-ML-060	504610	5407678	223	Granite						Dry granite
JK-ML-061	504622	5407666	222	Granite						Dry vein dry granite
JK-ML-063	504564	5407542	257	Granite						Dry granite with 295 fracture set
JK-ML-064	504506	5407506	259	Granite						Dry granite - weak mag
JK-ML-065	504561	5407446	269	Granite						Pegmatite dike
JK-ML-068	504736	5407601	239	Granite						Weakly hematite altered
JK-ML-069	504440	5409063	210	Granite						Dry granite
JK-ML-070	504263	5408905	210	Granite						Dry granite
JK-ML-071	504345	5408921	216	Granite						Dry granite
JK-ML-072	504359	5408857	210	Granite						Dry granite w repeating fracture set
JK-ML-073	504365	5408767	204	Granite						Dry granite
JK-ML-077	505151	5407847	223	Mafic Volcanic		Pyrite	1			check samples for circular mineral
JK-ML-079	505112	5407894	214	Mafic Volcanic		Pyrite	1	Magnetite	1	Sharp contact with granite. Mafic volcanic is highly magnetic
JK-ML-080	505096	5407925	218	Quartz Vein		Pyrite	1			Granite with multiple parallel quartz veins, 1-5cm thick. Co occurs with black mineral through longitudinal section
JK-ML-081	505110	5407996	234	Granite		Pyrite	1			Trace py in granite
JK-ML-083	504713	5411170	304	Mafic Volcanic	Pillowed	Pyrite	1			Contact w pillow basalt |East| and granite |west|
JK-ML-084	504743	5411176	309	Mafic Volcanic		Pyrite	2			Highly magnetic . Contact with granite enclaves observed ten metres away
JK-ML-086	504751	5411330	318	Diorite						Diorite
JK-ML-088	504790	5411398	320	Mafic Volcanic						Seems to be alternating layers of basalt and diorite/ granodiorite
JK-ML-091	504693	5411500	306	Granite						Mafic clasts in granite
JK-ML-092	504631	5411416	300	Mafic Volcanic		Pyrite	0			Trace py in fine grained basalt
JK-ML-093	504595	5411392	286	Mafic Volcanic						Foliated schistose mafic volcanic. Unmineralized
JK-ML-094	504556	5411356	272	Granite						Looks rusty but lacks mineralization
JK-ML-095	504385	5411227	258	Diorite						Mixing of basalt and diorite. Basalt enclaves in diorite |or granodiorite| host
JK-ML-096	504419	5411172	265	Diorite						Pure diorite unmineralized with large fracture through outcrop |SE/NW|
JK-ML-097	504450	5411128	271	Mafic Volcanic		Pyrite	1			Basalt mineralized w pyrite
JK-ML-098	505166	5407941	228	Granite						Dry granite
JK-ML-099	505279	5407892	235	Granite						Dry granite with weak hematite alteration
JK-ML-100	505368	5407856	251	Granite						Dry granite
JK-ML-101	505467	5407777	267	Mafic Volcanic		Pyrite	1			Mafic volcanic subcrop surrounded by boulders of same lithology. Trace pyrite
JK-ML-102	505472	5407710	321	Mafic Volcanic						Stockwork vein system in mafic unit
JK-ML-104	505360	5407501	366	Mafic Volcanic	Pillowed					North is up |younging direction|
JK-ML-106	505286	5408413	240	Granite						Dry granite
JK-ML-107	505400	5408404	265	Granite						Dry granite
JK-ML-108	505427	5408389	270	Mafic Volcanic	Dyke	Pyrite	2			Contact between volcanic unit and granite. Volcanic unit is altered, highly featured, and magnetic. Contact somewhat obscured by cliff face and over burden
JK-ML-109	505525	5408423	281	Granite						Dry granite, unaltered, high standing outcrop
JK-ML-110	505541	5408515	283	Granite						Rust pervasive through unit - appears as if pyrite has oxidized out
JK-ML-112	505552	5408720	255	Mafic Volcanic						Strongly magnetic enclave|?| Of volcanic unit surrounded by granite on either side. Possibly mafic dike
JK-ML-113	505431	5408665	247	Granite						Dry granite
JK-RA-004	504544	5408622	230	Gabbro						Peak elevation relative to surrounding terrain. Purple staining, magnetic weakly overall, magnetite phenocrystz, diabase
JK-RA-005	504987	5408399	191	Granite						Granite no mineralization, massive, boring
JK-RA-006	505012	5408369	188	Granite						Typical massive granite, angular boulders found in creek bed. Quartz megacrysts in a potassium enriched granite
JK-RA-008	505037	5408404	203	Granite						Granite typical with out any indicators of mineralization
JK-RA-012	505122	5408529	218	Syenite						On the northern side of the creek, a relied topography, strongly ankerite and sericite weathered shear indicator with strong fractures shallOw dipping localized and concordant to the creek direction
JK-RA-013	505264	5408710		Granite						Typical granite
JK-RA-015	505302	5408902	251	Granite						Granitic altered with chlorite perchance, rotably more salmon and purple amorpbous groundmass
JK-RA-016	505271	5408888	248	Granite						White granitic with smoky quartz vein
JK-RA-017	505012	5408033	211	Diabase	Dyke	Pyrite	3	Sphalerite	2	4inch wide mafic dike shallow dipping subparallel contacting weakly altered granite,sulfide mineralization contains pyrite,chalco euhedral
JK-RA-018	505012	5408036	213	Granite		Pyrite	1			Chlorite altered w/ trace sulfides
JK-RA-020	505071	5408015	223	Granite						Pink granite
JK-RA-023	505316	5408189	241	Granite						Purple to blue coloredgroundmass no mineralization
JK-RA-024	505407	5408279	266	Granite						Granite neither completely salmon nor white but a mix between the two 50/50
JK-RA-026	505191	5408170	243	Granite						Salmon granite
JK-RA-028	505092	5408146	228	Granite						Dadk blue purple groundmass chl alt
JK-RA-029	505038	5407727	203	Diorite		Pyrite	1	Pyrrhotite	1	Looks ultra mafic, black to dark blue groundmass with epidote altered feldspar? Acicular euhedral hornblendes
JK-RA-032	505098	5408061	234	Quartz Vein		Pyrite	1			4 inch milky quartz rusted strongly at contact with granitic host, mineralization present
JK-RA-034	505185	5408046	242	Diabase		Pyrite	2			Rusted and purple stained angular boulder 1mx2m trace mineralization
JK-RA-036	504487	5407607	238	Granite						White granite w/ 25 % mafic comp, crossset fractured
JK-RA-037	504494	5407500	255	Diabase						Basalt to diabase host with granite dike fracturing consistent with region direction
JK-RA-042	504390	5407570	232	Diabase						Almost perpendicular late fracturing cross-sets, the verticle fracture defines contact between granite and volcanic. Volcanics are rusty with purple staining but no mineralizattion
JK-RA-044	504446	5407958	200	Diabase						30x30m outcrop of massive, purple stained, basalt to diabase,

Station ID	Easting	Northing	Elevation	Lithology	Lith Mod	Minz #1	(%)	Minz #2	(%)	Notes
JK-RA-045	504370	5407905	201	Granite						White granite, no minerlization, massive
JK-RA-046	504327	5407778	213	Granite						Whit granite host with micro to coarse quartz veining parallel system, trending north south
JK-RA-047	504386	5407857	211	Diabase		Pyrite	1			Mineralized basalt
JK-RA-050	504374	5407511	224	Granite						Chlorite altered white granite , massive, weakly fractured
JK-RA-052	504295	5407678	209	Diabase						Blobby patches of larger than usual grain sized granites with prominent red color alteration in a very fine graindd mafic volcanic
JK-RA-062	504700	5411100	322	Gabbro		Pyrite	1			Chlorite alterite gabbro, trace sulfides, quartz coarse veins throughout and granitic dikes gradationally in tbe gabbro with feldspar phenos
JK-RA-063	504667	5411057	293	Mafic Volcanic		Pyrite	1			Greenstone mafics with felsic veining and later quartz veinz
JK-RA-065	504734	5411111	297	Gabbro						Gabbro just meters from the fault, felsic veining, south dipping veins are between 3 to 7 inches wide an ereas other vein system smaller
JK-RA-066	504783	5411089	312	Gabbro						Gabbro host with early N-S trending felsic veining offset by a later foliated,
JK-RA-067	504853	5411055	332	Gabbro		Pyrite	1	Chalcopyrite	1	Chlorite altered gabbro with feldspar phenocrysts euhedral salmon to orangey colored, looks porphyritic
JK-RA-076	505383	5407512	369	Mafic Volcanic						Massive basalt, patchy rust, barren quartz veining
JK-RA-077	505329	5407500	371	Mafic Volcanic	Lapilli Tuff					Lapilli tuff on the powerline, weakly trending north west, patchy rust
JK-RA-079	505645	5407619	327	Melagabbro		Pyrite	1			Bazalt host with carbonate veinz trending same as pillowz, rusty stringers with asaociated pyrite
JK-RA-080	505639	5407629	309	Mafic Volcanic		Pyrite	1			Moderately to strong folition, a 20m stretch, trending pallel to creek direcfion, of rusted mafic, foliated, contacting rusted but nonmineralized granite
JK-RA-081	505111	5408316	219	Syenite						Massive, nonaltered quartz and feldspar syenite
JK-RA-082	505360	5408382	249							
JK-RA-083	505431	5408384	299	Granite						Mix of white and pink granite with fine grained biotite clusters and medium grained biotite sheets
JK-RA-084	505505	5408389	282	Granite						Pink granite, weakly alt, amphiboles, medium grain biotite sheets
JK-RA-085	505535	5408544	281	Granite						Weakly patchy rusted pink granite
JK-RA-086	505589	5408663		Granite						White, K depleted granite, massive
JK-SF-020	504866	5408520	210	Granite						Ridge on side of hill which was mostly boulders. M.g granite. Red-pink. Qtz-plag-k-spar-bt. Very weak sericite.
JK-SF-021	504941	5408578	225	Granite						Low lying moss covered oc on snowmobile trail. Poor exposure but looks like typical granite. Non mineralized.
JK-SF-023	505129	5408694	240	Granite						Series of outcrops on east side of trail. Generally all msv granite. No sulfide or qtz veining.
JK-SF-027	504848	5408629	229	Gabbro	Dyke					F.g msv diabase in secondary creek. Magnetic. Guesses on trend based on jointing of outcrop.
JK-SF-030	505241	5408694	228	Granite						Brick red granite with prominent qtz crystals. Feldspar groundmass is red, crystal structure appears to be destroyed, giving rock an anhedral appearance.
JK-SF-031	505358	5408886	239	Gabbro	Dyke					Poorly exposed diabase dyke on shore of Moon Lake
JK-SF-032	505404	5408985		Granite						Lakeside oc of white granite-granodiorite.
JK-SF-033	505319	5408945	239	Gabbro						F.g diabase dyke adjacent to granite.
JK-SF-035	504843	5408621		Gabbro						Second oc of gabbro or maf volcanic, same as ML-025. 10% biotite and 5% k-spar. Appears to trend roughly N-S
JK-SF-036	504652	5408722	230	Granite						50m long white granite ridge trends around 140 degrees. Located 40m from gabbro ridge to the west. Contact lies between.
JK-SF-037	504641	5408788	224	Diabase						M.g subophitic diabase dyke. Within 10m of south contact with granite.
JK-SF-038	504678	5408876		Granite						First oc of granite near diabase. Red-orange due to hem altn. Hornfelsed by diabase?
JK-SF-039	504702	5408893	235	Diabase						Diabase dyke in contact with granite. 2 50cm wide blocks of granite within dyke. Looks like it lines up with other diabase to the SW.
JK-SF-040	504668	5408874	221	Diabase						M.g diabase on trend with sf 039. Likely centre of dyke.
JK-SF-041	504843	5409074		Granite						White unaltered granite from here to 50m west.
JK-SF-044	505021	5408948		Granite						Grey-white granite all along this topo high. Lots of outcrop but nothing of interest.
JK-SF-045	504998	5408762	250	Granite						Series of rugged outcrops of red granite. Possible diabase alteration?
JK-SF-047	504911	5408597	226	Granite						White granite with 2cm wide bull qtz vein.
JK-SF-048	505039	5408044	231	Granite						Unaltered granite ridge trends roughly N-S. Prospected 40m along and no veins o4 minz.
JK-SF-055	505322	5408097	237	Granite						Weakly foliated granite. Note a thin layer of ankerite alteration at surface.
JK-SF-056	505431	5407959	223	Granite						30m long oc of red granite. Found the odd narrow qv but not worth sampling. Approaching contact with volcanics.
JK-SF-057	505006	5408258	205	Granite						Pink-white granite with 3-5cm 3ide qtz-tourmaline vein. Tourm forms along margins of vein and within shear fabric.
JK-SF-058	505159	5408433	228	Granite						Ridge oc of red granite. Minor sub cm scale qtz vein observed looks bullish.
JK-SF-059	505205	5408419	221	Mafic Volcanic						Small enclave of maf volcanics within granite. Strongly foliated with slickenkines comprised of chlorite. Not continuous.
JK-SF-062	505203	5408497	233	Diabase						F.g grey diabase with c.g plag phenocrysts. Magnetic.
JK-SF-063	505220	5408501	233	Granite						Granite at contact with diabase to south. Sharp contact trends roughly E-W
JK-SF-066	505288	5408520	244	Diabase						Narrow diabase dyke poorly exposed. Trends E-W between granite exposure on either side.
JK-SF-069	505227	5408641	231	Granite						Small oc of white granite on shore of beaver pond/creek. Looks like tonalite here.
JK-SF-073	505029	5408520	227	Granite						Outcrop on weat side of ravine. Lithology point for map.
JK-SF-074	504914	5408426	213	Granite						White unmineralized granite.
JK-SF-075	504574	5408404	208	Granite						Unmineralized white-pink granite.
JK-SF-076	504466	5408508	213	Diabase						High standing ridge of diabase south of trench access trail.
JK-SF-077	504430	5408522	201	Granite						Trailside outcrop of granite about 15m north of contact with diabase. Unaltered, not mineralized.
JK-SF-078	504751	5407480	312	Granite						Amphibole rich (30%), foliated granite. Foliation defined by amphibole orientation. Late pegmatite vein cuts granite roughly parallel to foliation.
JK-SF-079	504763	5407487	304	Diabase						Narrow diabase dyke exposed along edge of oc. F.g and moderately magnetic
JK-SF-086	504644	5411032	284	Diabase						Diabase dyke intruding gneissic granite. F,g chilled, with blocks of granite in dyke.
JK-SF-087	504740	5411105	306	Diabase						Small ridge of diabase near contact with gabbro-granite. Massive, weakly magnetic.
JK-SF-088	504852	5410987		Mafic Volcanic						Outcrop exposed along creek bed. Msv mafic volcanic with numerous felsic-aplitic dykes cross cutting.
JK-SF-090	504969	5407941	191	Granite						10m long oc exposed in creek bed. Hard to sample but looks like red granite, non mineralized.
JK-SF-091	505040	5407972	197	Granite						Low lying oc of unaltered granite with a narrow qtz vein along face. Oc is too rounded to sample with hammer. No minz noted, not altered
JK-SF-092	505050	5407999	203	Granite						Small ridge of unmineralized unaltered granite.
JK-SF-098	505289	5407786		Granite						Walked up about 100m of similar white, unaltered granite.
JK-SF-101	505295	5407669		Mafic Volcanic						First outcrop of mafic volcanic south of granite. Grey, massive, foliated.
JK-SF-102	505071	5407562	233	Mafic Volcanic						Massive mafic volcanic in creek bed. Outcrop or huge boulder.
JK-SF-103	505067	5407592	236	Mafic Volcanic						Definate outcrop of msv mafic volcanics. Good control pt for map.
JK-SF-105	505007	5407577	250	Diorite						Granitic outcrop that is more mafic than typical granite. Cut by narrow diffuse red veins. 45% amphibole, 40% plag, 15% qtz

Station_ID	Alteration	Alt Intensity	Alt. Style	Alteration #2	Alt Intensity	Alt. Style
JK-SF-001	Silica	Strong	Veins			
JK-SF-002	Silica	Moderate	Pervassive	Chlorite	Weak	Pervassive
JK-SF-003	Silica	Strong	Veins			
JK-SF-004	Silica	Strong	Pervassive			
JK-SF-005						
JK-SF-006	Sericite	Moderate	Pervassive			
JK-SF-007	Sericite	Moderate	Pervassive			
JK-SF-009						
JK-SF-010	Hematite	Weak	Pervassive			
JK-SF-011	Silica	Moderate	Veins			
JK-SF-012	Silica	Moderate	Veins	Ankerite	Moderate	Pervassive
JK-SF-013	Ankerite	Moderate	Pervassive	Hematite	Moderate	Pervassive
JK-SF-014	Silica	Moderate	Veins			
JK-SF-015	Silica	Strong	Veins			
JK-SF-016	Ankerite	Strong	Pervassive	Chlorite	Weak	Fracture Filling
JK-SF-017						
JK-SF-018	Ankerite	Moderate	Pervassive			
JK-SF-019						
JK-SF-020						
Adit Showing						

Station ID	Alteration	Alt Intensity	Alt #1 Style	Alteration #2	Alt #2 Int.	Alt #2 Style
JK-ML-003						
JK-ML-004	Chlorite	Strong	Pervassive	Epidote	Moderate	Patchy
JK-ML-006	Hematite	Moderate	Fracture Controlled	Chlorite	Moderate	Pervassive
JK-ML-007						
JK-ML-008						
JK-ML-009	Sericite	Weak	Patchy			
JK-ML-010						
JK-ML-011						
JK-ML-012						
JK-ML-013	Epidote	Weak	Fracture Controlled	Hematite	Strong	Pervassive
JK-ML-014	Epidote	Strong	Fracture Controlled			
JK-ML-015	Epidote	Strong	Fracture Controlled	Hematite	Weak	Fracture Controlled
JK-ML-016	Hematite	Weak	Fracture Controlled	Sericite	Moderate	Pervassive
JK-ML-017						
JK-ML-018						
JK-ML-019						
JK-ML-021						
JK-ML-022	Hematite	Strong	Patchy	Chlorite	Weak	Patchy
JK-ML-023	Sericite	Moderate	Patchy			
JK-ML-024						
JK-ML-025	Sericite	Moderate	Fracture Controlled			
JK-ML-030a						
JK-ML-032						
JK-ML-033						
JK-ML-035						
JK-ML-038						
JK-ML-044	Chlorite	Weak	Pervassive	Ankerite	Weak	Pervassive
JK-ML-048						
JK-ML-049	Sericite	Moderate	Pervassive	Ankerite	Moderate	Massive
JK-ML-051						
JK-ML-052	Sericite	Moderate	Pervassive			
JK-ML-054						
JK-ML-055						
JK-ML-056						
JK-ML-058						
JK-ML-059						
JK-ML-060						
JK-ML-061						
JK-ML-063						
JK-ML-064						
JK-ML-065						
JK-ML-068	Hematite	Weak	Patchy			
JK-ML-069						
JK-ML-070						
JK-ML-071						
JK-ML-072						
JK-ML-073						
JK-ML-077	Chlorite	Weak	Fracture Controlled			
JK-ML-079	Chlorite	Weak				
JK-ML-080						
JK-ML-081						
JK-ML-083	Hematite	Strong	Fracture Controlled			
JK-ML-084	Sericite	Moderate	Surficial			
JK-ML-086						
JK-ML-088						
JK-ML-091						
JK-ML-092	Sericite	Weak	Surficial			
JK-ML-093	Sericite	Weak	Pervassive			
JK-ML-094						
JK-ML-095						
JK-ML-096	Sericite	Weak	Surficial			
JK-ML-097	Sericite	Weak	Surficial			
JK-ML-098						
JK-ML-099	Hematite	Weak	Pervassive			
JK-ML-100						
JK-ML-101	Hematite	Weak	Pervassive			
JK-ML-102	Hematite	Moderate	Fracture Controlled			
JK-ML-104	Hematite	Weak	Massive			
JK-ML-106						
JK-ML-107						
JK-ML-108	Sericite	Moderate	Pervassive			
JK-ML-109						
JK-ML-110						
JK-ML-112	Sericite	Moderate	Pervassive			
JK-ML-113						
JK-RA-004	Chlorite	Moderate	Pervassive	Epidote	Weak	Patchy
JK-RA-005						
JK-RA-006						
JK-RA-008						
JK-RA-012	Sericite	Strong	Pervassive			
JK-RA-013						
JK-RA-015	Sericite	Moderate	Pervassive			

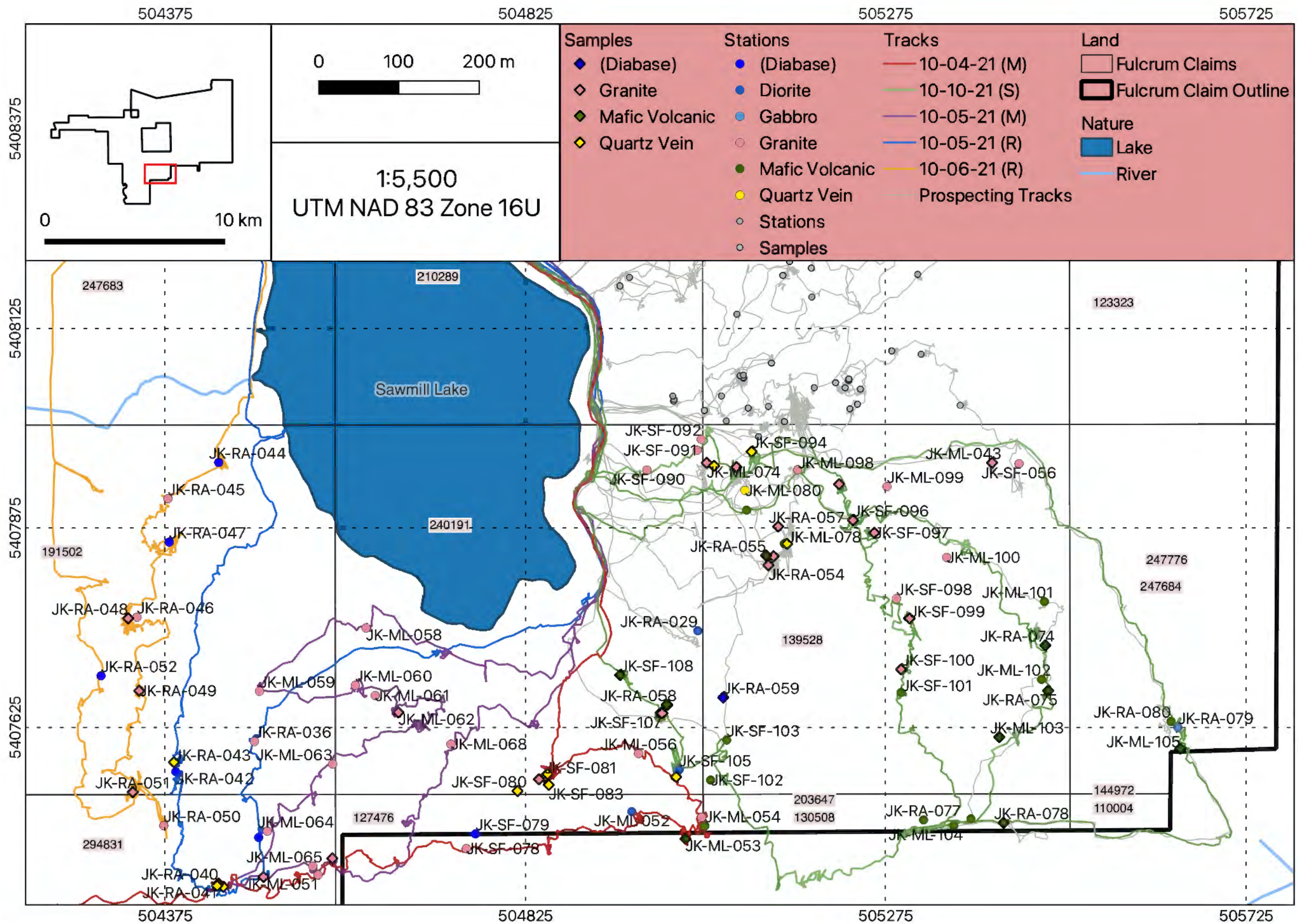
Station ID	Alteration	Alt Intensity	Alt #1 Style	Alteration #2	Alt #2 Int.	Alt #2 Style
JK-RA-016						
JK-RA-017			Massive			
JK-RA-018	Chlorite	Weak	Massive			
JK-RA-020						
JK-RA-023	Chlorite	Moderate	Massive			
JK-RA-024						
JK-RA-026						
JK-RA-028	Chlorite	Moderate	Massive			
JK-RA-029	Epidote	Moderate	Massive			
JK-RA-032	Hematite	Moderate	Massive			
JK-RA-034						
JK-RA-036	Hematite	Weak	Massive			
JK-RA-037						
JK-RA-042						
JK-RA-044						
JK-RA-045						
JK-RA-046	Hematite	Weak	Massive			
JK-RA-047						
JK-RA-050	Chlorite	Weak	Massive			
JK-RA-052	Hematite	Weak	Massive			
JK-RA-062						
JK-RA-063	Chlorite	Moderate	Massive	Value		
JK-RA-065						
JK-RA-066						
JK-RA-067	Chlorite	Moderate	Massive			
JK-RA-076	Silica	Weak	Massive			
JK-RA-077	Epidote	Moderate	Massive			
JK-RA-079	Silica	Weak	Massive			
JK-RA-080	Epidote	Weak	Massive			
JK-RA-081						
JK-RA-082						
JK-RA-083	Chlorite	Weak	Massive			
JK-RA-084	Ankerite	Weak	Patchy	Silica	Weak	Massive
JK-RA-085	Ankerite	Weak	Massive			
JK-RA-086						
JK-SF-020						
JK-SF-021						
JK-SF-023						
JK-SF-027						
JK-SF-030	Hematite	Strong	Pervassive			
JK-SF-031						
JK-SF-032						
JK-SF-033						
JK-SF-035	Biotite	Moderate	Pervassive			
JK-SF-036						
JK-SF-037						
JK-SF-038	Hematite	Moderate	Pervassive			
JK-SF-039						
JK-SF-040						
JK-SF-041						
JK-SF-044						
JK-SF-045						
JK-SF-047						
JK-SF-048						
JK-SF-055	Ankerite	Weak	Surficial			
JK-SF-056	Hematite	Weak	Pervassive			
JK-SF-057						
JK-SF-058	Hematite	Weak	Pervassive			
JK-SF-059	Chlorite	Weak	Pervassive			
JK-SF-062						
JK-SF-063						
JK-SF-066						
JK-SF-069						
JK-SF-073						
JK-SF-074						
JK-SF-075						
JK-SF-076						
JK-SF-077						
JK-SF-078						
JK-SF-079						
JK-SF-086						
JK-SF-087						
JK-SF-088						
JK-SF-090						
JK-SF-091						
JK-SF-092						
JK-SF-098						
JK-SF-101						
JK-SF-102						
JK-SF-103						
JK-SF-105	Hematite	Moderate	Pervassive			

Station ID	Structure #1	Azimuth	Dip	Const.	Generation	Structure #2	Azimuth	Dip	Const.	Generation
JK-SF-001	Vein	6								
JK-SF-002										
JK-SF-003										
JK-SF-004										
JK-SF-005	Vein	98	52							
JK-SF-006	Vein	172	35							
JK-SF-007										
JK-SF-009										
JK-SF-010	Fracture	145	51							
JK-SF-011	Vein	359	5							
JK-SF-012										
JK-SF-013	Vein	40	12	Quartz		Shear	300			
JK-SF-014										
JK-SF-015	Vein	200	38	Quartz						
JK-SF-016										
JK-SF-017	Vein	37	42	Quartz		Shear	37	42		
JK-SF-018										
JK-SF-019										
JK-SF-020	Vein	248		Calcite		Foliation	10			
Adit Showing										

Station ID	Structure #1	Azimuth	Dip	Const.	Generation	Structure #2	Azimuth	Dip	Const.	Generation
JK-ML-003	Contact	185	42			Foliation	185	42		
JK-ML-004										
JK-ML-006	Vein	165	85							
JK-ML-007										
JK-ML-008										
JK-ML-009										
JK-ML-010	Vein	350	65			Vein	350	65		
JK-ML-011	Vein	280	55							
JK-ML-012										
JK-ML-013										
JK-ML-014	Vein	100	85							
JK-ML-015	Vein	300	85							
JK-ML-016										
JK-ML-017										
JK-ML-018										
JK-ML-019										
JK-ML-021										
JK-ML-022										
JK-ML-023										
JK-ML-024	Vein	325	88							
JK-ML-025										
JK-ML-030a										
JK-ML-032										
JK-ML-033	Contact	263	65							
JK-ML-035										
JK-ML-038										
JK-ML-044										
JK-ML-048										
JK-ML-049	Foliation	300	78			Contact	280	81		
JK-ML-051	Vein	20	60			Vein	240	80	Quartz	
JK-ML-052										
JK-ML-054										
JK-ML-055										
JK-ML-056										
JK-ML-058										
JK-ML-059	Fracture	220	85							
JK-ML-060	Fracture	305	80							
JK-ML-061	Vein	210	84							
JK-ML-063	Fracture	295	81							
JK-ML-064										
JK-ML-065	Vein	20	72							
JK-ML-068										
JK-ML-069										
JK-ML-070										
JK-ML-071										
JK-ML-072	Fracture	120	78							
JK-ML-073										
JK-ML-077										
JK-ML-079	Contact	30								
JK-ML-080	Vein	358	88							
JK-ML-081	Vein	40								
JK-ML-083	Contact	300	85		4	Vein	318	80	Feldspar	3
JK-ML-084										
JK-ML-086										
JK-ML-088										
JK-ML-091										
JK-ML-092										
JK-ML-093	Foliation	91	10							
JK-ML-094	Vein	10	90							
JK-ML-095										
JK-ML-096	Fracture	120								
JK-ML-097										
JK-ML-098										
JK-ML-099										
JK-ML-100										
JK-ML-101										
JK-ML-102	Vein	270	55							
JK-ML-104										
JK-ML-106										
JK-ML-107										
JK-ML-108	Contact	315	90			Fracture	296	84		
JK-ML-109										
JK-ML-110										
JK-ML-112	Contact	340	90							
JK-ML-113										
JK-RA-004										
JK-RA-005										
JK-RA-006										
JK-RA-008										
JK-RA-012	Fault	55	31							
JK-RA-013										
JK-RA-015										

Station ID	Structure #1	Azimuth	Dip	Const.	Generation	Structure #2	Azimuth	Dip	Const.	Generation
JK-RA-016	Vein	90	63							
JK-RA-017	Contact	18	8		3					
JK-RA-018										
JK-RA-020										
JK-RA-023										
JK-RA-024										
JK-RA-026										
JK-RA-028										
JK-RA-029										
JK-RA-032	Vein	22	66							
JK-RA-034										
JK-RA-036	Vein	342	30			Vein	80	84		
JK-RA-037	Contact	240	75			Fracture	214	76		
JK-RA-042	Contact	300	79			Fracture	11	32		
JK-RA-044										
JK-RA-045										
JK-RA-046	Vein	352	72							
JK-RA-047										
JK-RA-050										
JK-RA-052										
JK-RA-062										
JK-RA-063	Vein	250	70							
JK-RA-065	Vein	68	66			Vein	180	69		
JK-RA-066	Vein	90	66		2	Foliation	150	90		
JK-RA-067	Vein	36	60							
JK-RA-076										
JK-RA-077		287	90							
JK-RA-079	Foliation	40	72							
JK-RA-080	Foliation	250	80							
JK-RA-081										
JK-RA-082										
JK-RA-083	Vein	350	90							
JK-RA-084	Fracture	238	72		2	Fracture	296	40		3
JK-RA-085										
JK-RA-086										
JK-SF-020										
JK-SF-021										
JK-SF-023										
JK-SF-027	Contact	75								
JK-SF-030										
JK-SF-031										
JK-SF-032										
JK-SF-033										
JK-SF-035	Foliation	357	90		3					
JK-SF-036										
JK-SF-037										
JK-SF-038										
JK-SF-039	Contact	66	80		5					
JK-SF-040										
JK-SF-041										
JK-SF-044										
JK-SF-045										
JK-SF-047	Vein	320	68							
JK-SF-048										
JK-SF-055	Foliation	215	71							
JK-SF-056										
JK-SF-057	Vein	348	70		4					
JK-SF-058	Vein	2	78		4					
JK-SF-059										
JK-SF-062										
JK-SF-063	Contact	78								
JK-SF-066										
JK-SF-069										
JK-SF-073										
JK-SF-074										
JK-SF-075										
JK-SF-076										
JK-SF-077	Foliation	12	85							
JK-SF-078	Foliation	249	83		2					
JK-SF-079	Contact	110			5					
JK-SF-086										
JK-SF-087										
JK-SF-088										
JK-SF-090										
JK-SF-091	Vein	199	54		3					
JK-SF-092										
JK-SF-098										
JK-SF-101	Foliation	210	85							
JK-SF-102										
JK-SF-103	Foliation	12	78		2					
JK-SF-105										

APPENDIX D: MAPS



504375
504825
505275
505725
5408375
5408125
5407875
5407625
0
10 km
0
100
200 m
1:5,500
UTM NAD 83 Zone 16U
Samples
(Diabase)
Granite
Mafic Volcanic
Quartz Vein
Stations
(Diabase)
Diorite
Gabbro
Granite
Mafic Volcanic
Quartz Vein
Stations
Samples
Tracks
10-04-21 (M)
10-10-21 (S)
10-05-21 (M)
10-05-21 (R)
10-06-21 (R)
Prospecting Tracks
Land
Fulcrum Claims
Fulcrum Claim Outline
Nature
Lake
River
Sawmill Lake
247683
210289
123323
240191
191502
247776
247684
139528
127476
294831
203647
130508
144972
110004
JK-RA-044
JK-RA-045
JK-RA-047
JK-RA-048
JK-RA-046
JK-RA-052
JK-RA-049
JK-RA-036
JK-RA-043
JK-RA-042
JK-RA-051
JK-RA-050
JK-RA-040
JK-RA-041
JK-ML-058
JK-ML-059
JK-ML-060
JK-ML-061
JK-ML-062
JK-ML-063
JK-ML-068
JK-ML-064
JK-ML-065
JK-ML-051
JK-SF-092
JK-SF-091
JK-SF-090
JK-SF-094
JK-ML-074
JK-ML-080
JK-ML-098
JK-ML-043
JK-SF-056
JK-ML-099
JK-SF-096
JK-RA-057
JK-ML-078
JK-SF-097
JK-RA-055
JK-RA-054
JK-ML-100
JK-SF-098
JK-ML-101
JK-SF-099
JK-RA-029
JK-RA-074
JK-SF-108
JK-SF-100
JK-ML-102
JK-SF-101
JK-RA-059
JK-RA-058
JK-RA-075
JK-SF-107
JK-SF-103
JK-ML-103
JK-RA-080
JK-RA-079
JK-ML-105
JK-ML-056
JK-SF-105
JK-SF-081
JK-SF-080
JK-SF-083
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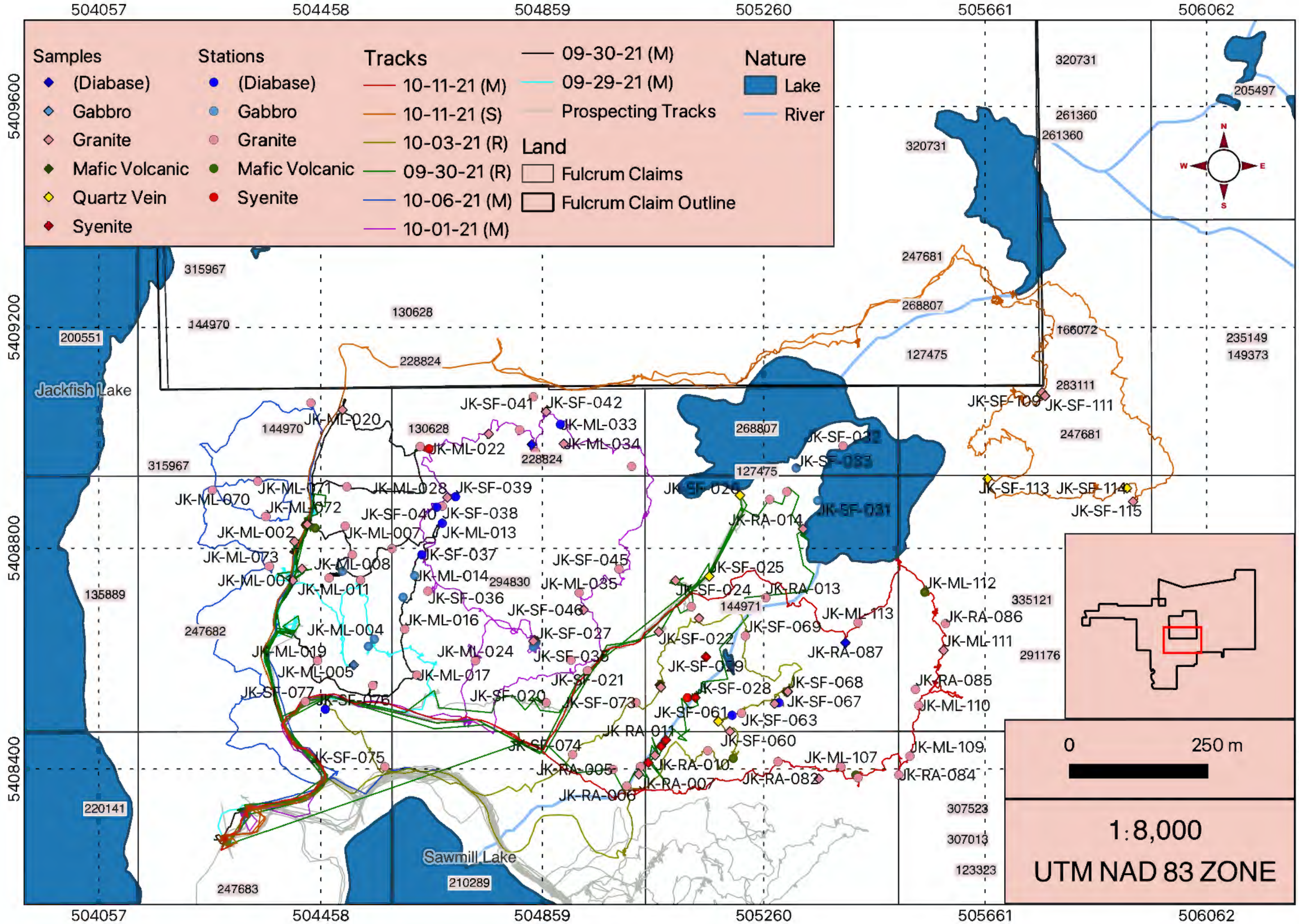
JK-SF-078
JK-ML-053



Samples
(Diabase)
Gabbro
Granite
Mafic Volcanic
Quartz Vein
Syenite
Stations
(Diabase)
Gabbro
Granite
Mafic Volcanic
Syenite
Tracks
10-11-21 (M)
10-11-21 (S)
10-03-21 (R)
09-30-21 (R)
10-06-21 (M)
10-01-21 (M)
09-30-21 (M)
09-29-21 (M)
Prospecting Tracks
Land
Fulcrum Claims
Fulcrum Claim Outline
Nature
Lake
River
504057
504458
504859
505260
505661
506062
5409600
5409200
5408800
5408400
Jackfish Lake
Sawmill Lake
0
250 m
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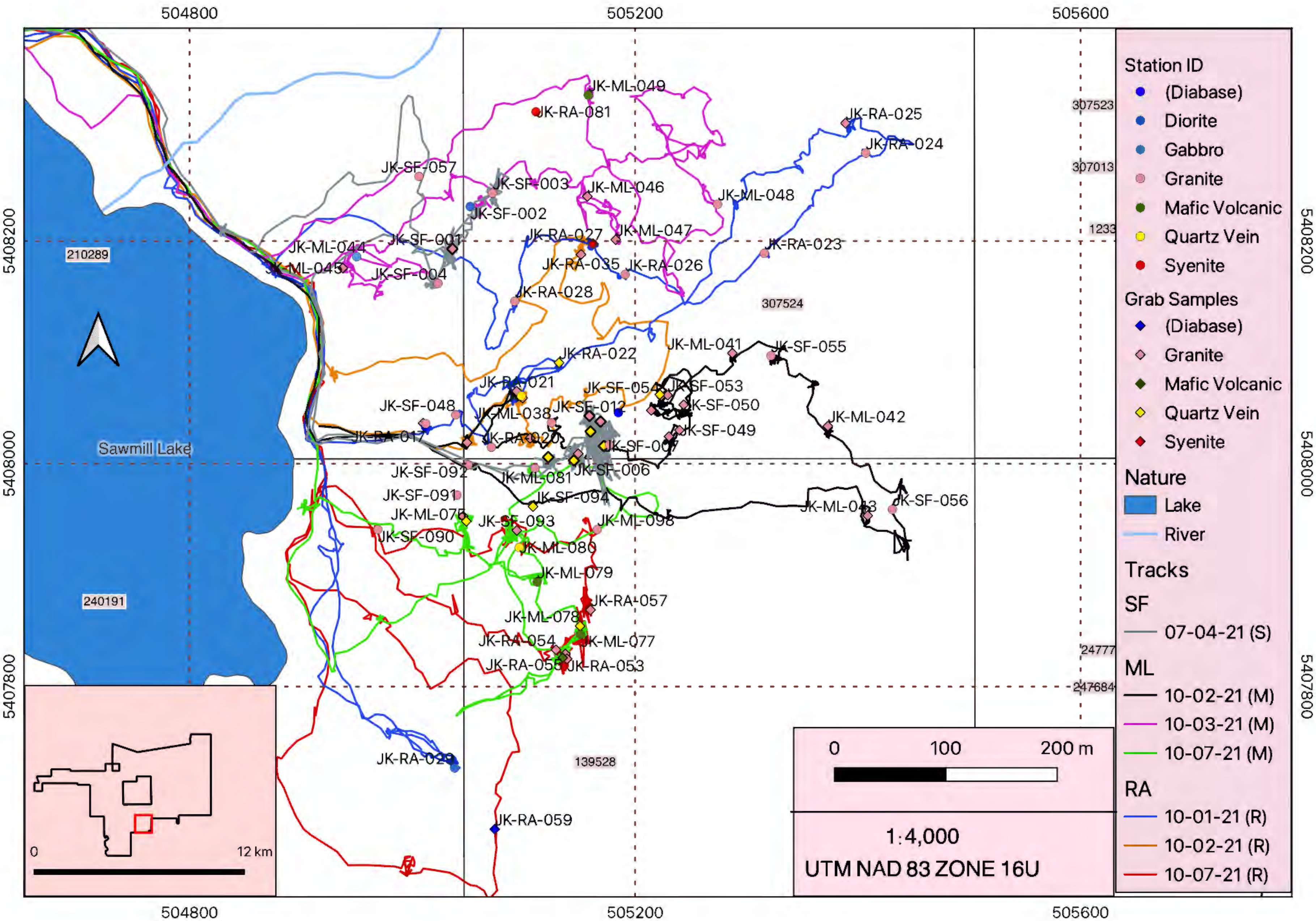
UTM NAD 83 ZONE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139528
Sawmill Lake
JK-ML-049
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JK-RA-025
JK-RA-024
JK-SF-057
JK-SF-003
JK-ML-046
JK-ML-048
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JK-RA-023
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JK-ML-045
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JK-SF-050
JK-ML-042
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JK-SF-092
JK-ML-081
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Diorite
Gabbro
Granite
Mafic Volcanic
Quartz Vein
Syenite
Grab Samples
(Diabase)
Granite
Mafic Volcanic
Quartz Vein
Syenite
Nature
Lake
River
Tracks
SF
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ML
10-02-21 (M)
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RA
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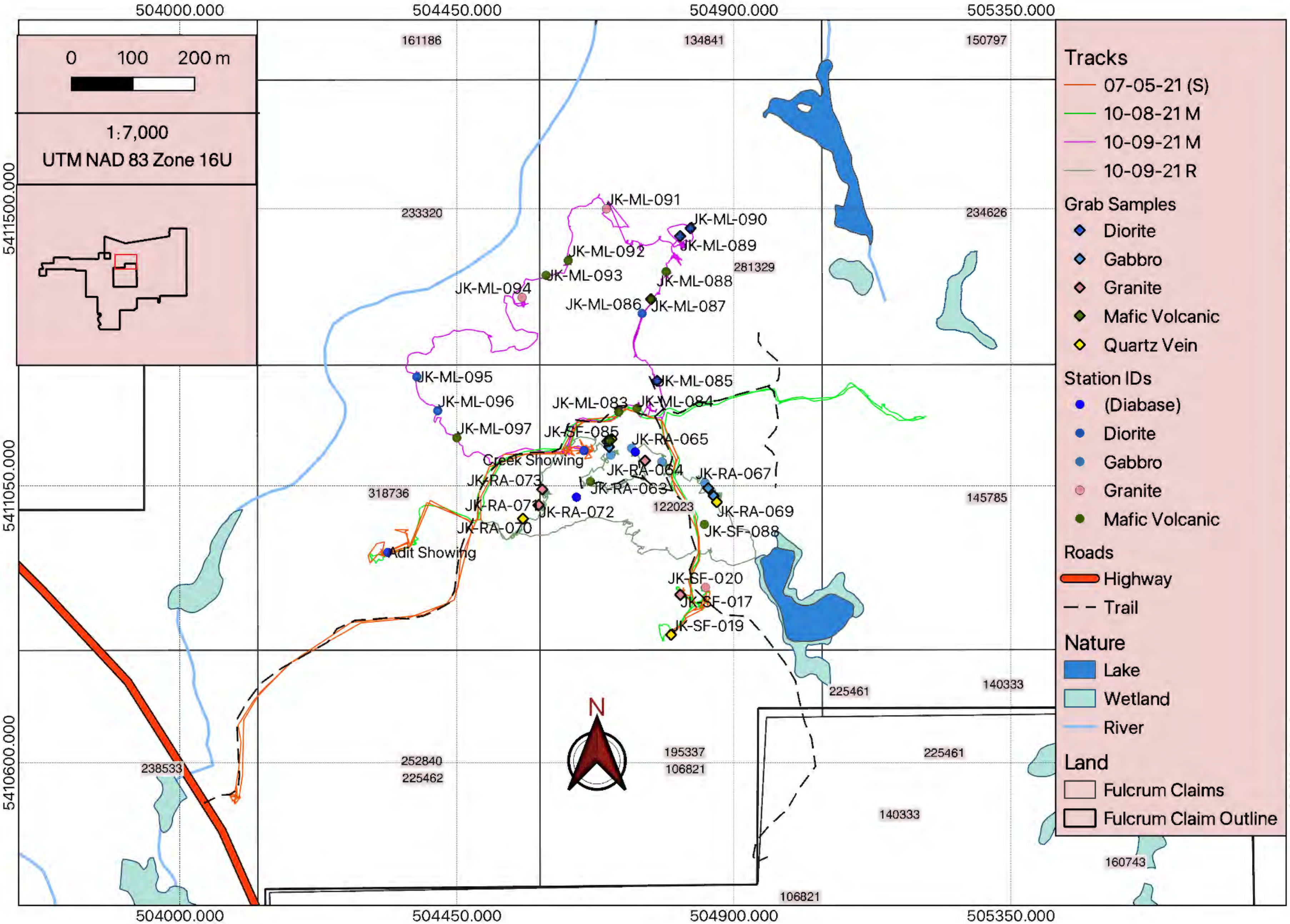
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JK-ML-097
JK-SF-085
JK-RA-065
Creek Showing
JK-RA-064
JK-RA-067
JK-RA-073
JK-RA-063
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Adit Showing
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N
Tracks
07-05-21 (S)
10-08-21 M
10-09-21 M
10-09-21 R
Grab Samples
Diorite
Gabbro
Granite
Mafic Volcanic
Quartz Vein
Station IDs
(Diabase)
Diorite
Gabbro
Granite
Mafic Volcanic
Roads
Highway
Trail
Nature
Lake
Wetland
River
Land
Fulcrum Claims
Fulcrum Claim Outline

APPENDIX E: SAMPLE LOCATIONS AND AU RESULTS

Station_ID	Sample_ID	Date	Sample_Med	Easting	Northing	Lithology	Au (Best)	Au-ICP21	Au-GRA21
JK-SF-001	B731074	7/4/2021	Outcrop	505036	5408193	Granite	0.003	0.003	
JK-SF-005	B731075	7/4/2021	Outcrop	505122	5408006	Quartz Vein	1.165	1.165	
JK-SF-006	B731076	7/4/2021	Outcrop	505145	5408003	Quartz Vein	13.65	>10.0	13.65
JK-SF-007	B731077	7/4/2021	Outcrop	505172	5408016	Granite	5.81	5.81	
JK-SF-008	B731078	7/4/2021	Outcrop	505172	5408016	Quartz Vein	12.35	>10.0	12.35
JK-SF-009	B731079	7/4/2021	Subcrop	505160	5408029	Quartz Vein	5.26	5.26	
JK-SF-011	B731080	7/4/2021	Outcrop	505169	5408038	Granite	0.396	0.396	
JK-SF-012	B731081	7/4/2021	Float	505159	5408043	Granite	0.605	0.605	
JK-SF-013	B731083	7/5/2021	Outcrop	504663	5408543	Granite	0.112	0.112	
JK-SF-015	B731082	7/5/2021	Outcrop	504397	5408661	Granite	39.8	>10.0	39.8
JK-SF-016	B731084	7/5/2021	Subcrop	504377	5408699	Granite	0.085	0.085	
JK-SF-017	B731085	7/5/2021	Outcrop	504813	5410873	Quartz Vein	0.233	0.233	
JK-SF-018	B731086	7/5/2021	Outcrop	504813	5410873	Granite	0.005	0.005	
JK-SF-019	B731087	7/5/2021	Float	504798	5410808	Quartz Vein	0.046	0.046	

Station ID	Sample ID	Date	Sample Medium	Easting	Northing	Elevation	Lithology	Au ICP21 (ppm)	Au GRA21 (ppm)
JK-ML-001	D579945	2021-09-29	Outcrop	504407	5408741	197	Granite	0.061	
JK-ML-002	D579946	2021-09-29	Outcrop	504410	5408812	205	Granite	0.008	
JK-ML-005	D579947	2021-09-29	Outcrop	504518	5408588	220	Gabbro	0.017	
JK-ML-020	D579948	2021-09-30	Outcrop	504497	5409050	209	Granite	0.014	
JK-ML-026	D579949	2021-10-01	Outcrop	504845	5408633	228	Granite	0.014	
JK-ML-027	D579951	2021-10-01	Outcrop	504843	5408631		Granite	0.149	
JK-ML-028	D579952	2021-10-01	Outcrop	504687	5408892	225	Granite	0.003	
JK-ML-029	D579953	2021-10-01	Outcrop	504762	5409007		Granite	0.001	
JK-ML-031	D579954	2021-10-01	Outcrop	504840	5408988	249	Diabase	0.001	
JK-ML-034	D579955	2021-10-01	Subcrop	504898	5408989	254	Granite	0.004	
JK-ML-037	D579961	2021-10-02	Outcrop	505049	5408019	218	Granite	0.004	
JK-ML-039	D579962	2021-10-02	Outcrop	505230	5408025	226	Granite	0.001	
JK-ML-040	D579963	2021-10-02	Outcrop	505214	5408048	243	Granite	3.33	
JK-ML-041	D579956	2021-10-02	Outcrop	505287	5408099	244	Granite	0.052	
JK-ML-042	D579964	2021-10-02	Outcrop	505373	5408034	237	Granite	0.013	
JK-ML-043	D579957	2021-10-02	Outcrop	505409	5407954	221	Granite	0.004	
JK-ML-045	D579958	2021-10-03	Outcrop	504938	5408176	201	Granite	0.001	
JK-ML-046	D579959	2021-10-03	Subcrop	505157	5408240	233	Granite	0.054	
JK-ML-047	D579960	2021-10-03	Outcrop	505183	5408201	245	Granite	0.004	
JK-ML-053	D904006	2021-10-04	Outcrop	505026	5407490	286	Mafic Volcanic	0.001	
JK-ML-057	D904007	2021-10-04	Outcrop	504852	5407565	253	Quartz Vein	0.053	
JK-ML-062	D904033	2021-10-05	Outcrop	504662	5407644	236	Granite	0.001	
JK-ML-066	D904008	2021-10-05	Outcrop	504585	5407463	279	Granite	0.007	
JK-ML-067	D904020	2021-10-05	Outcrop	504676	5407506	288	Granite	0.001	
JK-ML-074	D904022	2021-10-07	Outcrop	505046	5407953	219	Granite	0.027	
JK-ML-075	D904021	2021-10-07	Outcrop	505048	5407948	208	Quartz Vein	0.001	
JK-ML-076	D904023	2021-10-07	Float	505137	5407829	216	Granite	0.192	
JK-ML-078	D904024	2021-10-07	Outcrop	505151	5407854	229	Quartz Vein	0.009	
JK-ML-082	D904025	2021-10-07	Outcrop	505149	5408009	226	Granite	23.3	23.3
JK-ML-085	D904026	2021-10-09	Outcrop	504775	5411221	316	Diorite	0.057	
JK-ML-087	D904027	2021-10-09	Subcrop	504765	5411353	323	Mafic Volcanic	0.034	
JK-ML-089	D904028	2021-10-09	Subcrop	504813	5411456	322	Diorite	0.003	
JK-ML-090	D904029	2021-10-09	Subcrop	504830	5411468	336	Diorite	0.006	
JK-ML-103	D904030	2021-10-10	Subcrop	505436	5407619	353	Mafic Volcanic	0.001	
JK-ML-105	D904032	2021-10-10	Outcrop	505643	5407602	324	Mafic Volcanic	0.001	
JK-ML-111	D904036	2021-10-11	Outcrop	505586	5408615	295	Granite	0.004	
JK-RA-001	D579927	2021-09-29	Outcrop	504424	5408762	207	Granite	0.001	
JK-RA-002	D579928	2021-09-29	Outcrop	504431	5408842	205	Quartz Vein	0.001	
JK-RA-003	D579929	2021-09-29	Outcrop	504434	5408843	213	Granite	0.002	
JK-RA-007	D579930	2021-09-30	Subcrop	505034	5408390	188	Granite	0.001	
JK-RA-009	D579931	2021-09-30	Outcrop	505051	5408411	212	Syenite	0.001	
JK-RA-010	D579932	2021-09-30	Outcrop	505063	5408424	201	Granite	0.011	
JK-RA-011	D579933	2021-09-30	Outcrop	505083	5408452	217	Syenite	0.001	
JK-RA-014	D579934	2021-09-30	Outcrop	505331	5408835	239	Granite	0.001	
JK-RA-019	D579935	2021-10-01	Outcrop	505010	5408037	207	Granite	0.253	
JK-RA-021	D579936	2021-10-01	Subcrop	505094	5408065	222	Granite	0.112	
JK-RA-022	D579937	2021-10-01	Subcrop	505132	5408091	241	Quartz Vein	0.001	
JK-RA-025	D579938	2021-10-01	Outcrop	505389	5408306	259	Granite	0.001	
JK-RA-027	D579939	2021-10-01	Subcrop	505163	5408198	239	Syenite	0.005	
JK-RA-030	D579940	2021-10-02	Outcrop	505097	5408060	228	Quartz Vein	0.863	
JK-RA-031	D579941	2021-10-02	Outcrop	505099	5408059	226	Granite	0.106	
JK-RA-033	D579942	2021-10-02	Outcrop	505106	5408023	241	Granite	0.149	
JK-RA-035	D579943	2021-10-02	Outcrop	505151	5408188	242	Granite	0.003	
JK-RA-038	D579991	2021-10-05	Outcrop	504501	5407439	255	Granite	0.001	
JK-RA-039	D579944	2021-10-05	Subcrop	504445	5407425	247	Quartz Vein	0.001	
JK-RA-040	D904003	2021-10-05	Subcrop	504441	5407430		Granite	0.076	
JK-RA-041	D904004	2021-10-05	Outcrop	504438	5407421	245	Quartz Vein	0.164	
JK-RA-043	D904005	2021-10-05	Float	504395	5407585	225	Quartz Vein	7.78	
JK-RA-048	D579992	2021-10-06	Outcrop	504328	5407761	198	Granite	0.001	
JK-RA-049	D579993	2021-10-06	Subcrop	504340	5407679	225	Granite	0.001	
JK-RA-051	D579994	2021-10-06	Outcrop	504341	5407541	220	Granite	0.043	
JK-RA-053	D904006	2021-10-07	Outcrop	505139	5407825	226	Granite	0.128	
JK-RA-054	D579995	2021-10-07	Subcrop	505129	5407833	228	Granite	0.026	
JK-RA-055	D579996	2021-10-07	Outcrop	505135	5407826	223	Mafic Volcanic	0.011	
JK-RA-057	D579997	2021-10-07	Subcrop	505160	5407869	227	Granite	0.24	
JK-RA-058	D579998	2021-10-07	Subcrop	504999	5407644	219	Mafic Volcanic	0.682	

Station ID	Sample ID	Date	Sample Medium	Easting	Northing	Elevation	Lithology	Au ICP21 (ppm)	Au GRA21 (ppm)
JK-RA-059	D579999	2021-10-07	Outcrop	505074	5407672	235	Diabase	0.001	
JK-RA-060	D904001	2021-10-09	Outcrop	504697	5411113	296	Gabbro	0.002	
JK-RA-061	D904009	2021-10-09	Outcrop	504694	5411122	301	Granite	0.001	
JK-RA-064	D904010	2021-10-09	Outcrop	504756	5411091	312	Granite	0.001	
JK-RA-068	D904011	2021-10-09	Outcrop	504867	5411034	329	Gabbro	0.002	
JK-RA-069	D904012	2021-10-09	Outcrop	504872	5411024	329	Quartz Vein	0.127	
JK-RA-070	D904013	2021-10-09	Outcrop	504557	5410997	275	Quartz Vein	0.002	
JK-RA-071	D904014	2021-10-09	Outcrop	504583	5411018	271	Quartz Vein	0.001	
JK-RA-072	D904015	2021-10-09	Outcrop	504583	5411019	280	Granite	0.004	
JK-RA-073	D904016	2021-10-09	Outcrop	504589	5411044	286	Granite	0.013	
JK-RA-074	D904017	2021-10-10	Outcrop	505464	5407746	292	Mafic Volcanic	0.001	
JK-RA-075	D904018	2021-10-10	Outcrop	505473	5407670	338	Mafic Volcanic	0.001	
JK-RA-078	D904019	2021-10-10	Subcrop	505427	5407507	369	Mafic Volcanic	0.001	
JK-RA-082	D904034	2021-10-11	Outcrop	505360	5408382	249	Granite	0.562	
JK-RA-087	D904035	2021-10-11	Outcrop	505408	5408628	250	Diabase	0.008	
JK-SF-022	D579902	2021-09-29	Outcrop	505070	5408648	229	Granite	0.004	
JK-SF-024	D579903	2021-09-29	Outcrop	505101	5408741	239	Granite	0.002	
JK-SF-025	D579904	2021-09-29	Float	505162	5408749	247	Quartz Vein	0.005	
JK-SF-026	D579905	2021-09-29	Float	505217	5408896	241	Quartz Vein	0.155	
JK-SF-028	D579906	2021-09-30	Outcrop	505136	5408529	226	Syenite	0.002	
JK-SF-029	D579907	2021-09-30	Outcrop	505156	5408603	224	Syenite	0.013	
JK-SF-034	D579908	2021-09-30	Outcrop	505074	5408441		Syenite	0.001	
JK-SF-042	D579909	2021-10-01	Outcrop	504866	5409047	249	Quartz Vein	0.005	
JK-SF-043	D579910	2021-10-01	Outcrop	504866	5409047	249	Granite	0.004	
JK-SF-046	D579911	2021-10-01	Subcrop	504934	5408688	231	Granite	0.024	
JK-SF-049	D579914	2021-10-02	Subcrop	505240	5408030		Granite	0.004	
JK-SF-050	D579913	2021-10-02	Outcrop	505244	5408053	237	Granite	0.02	
JK-SF-051	D579912	2021-10-02	Outcrop	505224	5408060	249	Granite	0.372	
JK-SF-052	D579915	2021-10-02	Outcrop	505224	5408061	242	Granite	0.708	
JK-SF-053	D579916	2021-10-02	Outcrop	505229	5408062		Granite	0.566	
JK-SF-054	D579917	2021-10-02	Float	505222	5408062	233	Quartz Vein	0.92	
JK-SF-060	D579918	2021-10-03	Outcrop	505199	5408468	227	Granite	0.005	
JK-SF-061	D579919	2021-10-03	Subcrop	505178	5408486	228	Quartz Vein	0.001	
JK-SF-065	D579920	2021-10-03	Outcrop	505280	5408518	247	Granite	0.004	
JK-SF-067	D579921	2021-10-03	Outcrop	505302	5408539	235	Granite	0.001	
JK-SF-068	D579922	2021-10-03	Outcrop	505304	5408540	241	Granite	0.001	
JK-SF-070	D579923	2021-10-03	Outcrop	505143	5408673	240	Granite	0.009	
JK-SF-071	D579924	2021-10-03	Outcrop	505072	5408552	228	Mafic Volcanic	0.055	
JK-SF-072	D579926	2021-10-03	Subcrop	505074	5408548	230	Granite	0.001	
JK-SF-080	D579965	2021-10-07	Outcrop	504817	5407540	264	Quartz Vein	0.001	
JK-SF-081	D579966	2021-10-07	Outcrop	504846	5407553	256	Granite	0.004	
JK-SF-082	D579967	2021-10-07	Subcrop	504860	5407555	244	Granite	0.196	
JK-SF-083	D579968	2021-10-07	Outcrop	504857	5407568	249	Quartz Vein	0.001	
JK-SF-084	D579969	2021-10-09	Outcrop	504701	5411126	285	Quartz Vein	0.006	
JK-SF-085	D579990	2021-10-09	Outcrop	504698	5411123	287	Mafic Volcanic	0.005	
JK-SF-089	D579970	2021-10-09	Outcrop	504858	5411046	276	Gabbro	0.008	
JK-SF-093	D579971	2021-10-10	Outcrop	505094	5407940	203	Granite	0.001	
JK-SF-094	D579972	2021-10-10	Outcrop	505108	5407962	211	Quartz Vein	0.221	
JK-SF-095	D579973	2021-10-10	Outcrop	505219	5407921	228	Granite	0.001	
JK-SF-096	D579974	2021-10-10	Subcrop	505238	5407883	245	Granite	0.025	
JK-SF-097	D579976	2021-10-10	Outcrop	505258	5407867	250	Granite	0.001	
JK-SF-099	D579977	2021-10-10	Outcrop	505302	5407763	288	Granite	0.001	
JK-SF-100	D579989	2021-10-10	Outcrop	505300	5407699	321	Granite	0.002	
JK-SF-104	D579978	2021-10-10	Subcrop	505013	5407577	250	Quartz Vein	0.001	
JK-SF-106	D579979	2021-10-10	Outcrop	504992	5407652	219	Granite	0.221	
JK-SF-107	D579980	2021-10-10	Float	504995	5407638	216	Granite	0.258	
JK-SF-108	D579981	2021-10-10	Outcrop	504953	5407677	204	Mafic Volcanic	0.004	
JK-SF-109	D579982	2021-10-11	Outcrop	505763	5409079	293	Quartz Vein	0.001	
JK-SF-110	D579983	2021-10-11	Outcrop	505765	5409082		Granite	0.012	
JK-SF-111	D579984	2021-10-11	Outcrop	505770	5409076		Granite	0.066	
JK-SF-112	D579985	2021-10-11	Subcrop	505712	5409081	289	Chlorite Schist	0.001	
JK-SF-113	D579986	2021-10-11	Outcrop	505666	5408926	280	Quartz Vein	0.001	
JK-SF-114	D579987	2021-10-11	Outcrop	505918	5408908	307	Quartz Vein	0.438	
JK-SF-115	D579988	2021-10-11	Subcrop	505929	5408884	305	Granite	0.109	

APPENDIX F: ASSAY CERTIFICATES

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 604 984 0221 Fax: +1 604 984 0218
www.alsglobal.com/geochemistry

To: BAYSIDE GEOSCIENCE
124 SHERWOOD DRIVE
THUNDER BAY ON P7B 6L1

Finalized Date: 15-AUG-2021
This copy reported on
17-AUG-2021
Account: BGCETTMQ

CERTIFICATE TB21189640

Project: Jackfish-Kellyn

This report is for 14 samples of Rock submitted to our lab in Thunder Bay, ON, Canada on 21-JUL-2021.

The following have access to data associated with this certificate:

STEVEN FLANK EDWARD SLOWLEY	JAMES FRANKLIN	RYAN MEE

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-21	Sample logging - ClientBarCode
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize up to 250g 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-MS61	48 element four acid ICP-MS	
Ag-OG62	Ore Grade Ag - Four Acid	
ME-OG62	Ore Grade Elements - Four Acid	ICP-AES
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES
Au-GRA21	Au 30g FA-GRAV finish	WST-SIM

This is the Final Report and supersedes any preliminary report with this certificate number.Results apply to samples as submitted.All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:
Saa Traxler, General Manager, North Vancouver

ALS Canada Ltd.

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North Vancouver BC V7H 0A7
Phone: +1 604 984 0221 Fax: +1 604 984 0218
www.alsglobal.com/geochemistry

To: BAYSIDE GEOSCIENCE
124 SHERWOOD DRIVE
THUNDER BAY ON P7B 6L1

Finalized Date: 15-AUG-2021
Account: BGCETTMQ

Project: Jackfish-Kellyn

CERTIFICATE OF ANALYSIS TB21189640

Sample Description	Method	WEI-21	Au-ICP21	Au-GRA21	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Recvd Wt.	Au	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs
	Units	kg	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
	LOD	0.02	0.001	0.05	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05
B731074		1.50	0.003		0.09	2.70	0.3	70	0.30	1.17	0.04	<0.02	14.90	1.2	20	0.73
B731075		1.16	1.165		8.28	0.18	0.6	90	0.05	1.20	0.27	0.45	3.96	1.5	29	0.21
B731076		1.06	>10.0	13.65	45.6	1.49	0.6	80	0.21	41.3	1.30	1.67	7.89	74.5	16	0.20
B731077		1.87	5.81		36.5	3.28	0.8	410	0.36	34.2	0.94	0.45	21.7	13.5	23	0.18
B731078		1.57	>10.0	12.35	47.3	1.70	0.8	260	0.22	38.6	0.35	1.17	9.71	9.2	18	0.43
B731079		1.10	5.26		18.20	0.31	0.7	190	<0.05	15.95	0.04	0.18	1.32	1.0	38	0.05
B731080		1.73	0.396		1.35	6.66	0.2	670	1.14	0.66	1.85	0.08	36.1	7.2	27	1.24
B731081		1.76	0.605		2.25	4.78	0.6	950	0.55	0.56	1.09	0.22	37.1	7.9	25	0.34
B731082		1.30	0.112		0.38	5.75	0.3	740	1.22	0.08	0.98	0.10	23.5	2.8	21	0.47
B731083		1.43	>10.0	39.8	77.3	0.69	0.3	580	0.21	38.3	0.15	0.99	8.82	16.3	28	0.34
B731084		1.38	0.085		0.41	9.08	0.3	4050	1.78	0.67	1.57	0.08	103.0	6.6	30	0.39
B731085		0.99	0.233		>100	0.37	<0.2	300	0.23	304	0.14	0.76	5.53	1.4	23	0.34
B731086		0.88	0.005		0.92	7.88	0.7	1540	2.67	1.98	0.79	0.24	127.0	21.7	84	2.78
B731087		2.20	0.046		47.3	0.03	0.8	230	0.13	99.7	0.47	0.12	107.0	9.4	21	0.07

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THUNDER BAY ON P7B 6L1

Finalized Date: 15-AUG-2021
Account: BGCETTMQ

Project: Jackfish-Kellyn

CERTIFICATE OF ANALYSIS TB21189640

Sample Description	Method / Analyte / Units / LOD	ME-MS61 Cu ppm 0.2	ME-MS61 Fe % 0.01	ME-MS61 Ga ppm 0.05	ME-MS61 Ge ppm 0.05	ME-MS61 Hf ppm 0.1	ME-MS61 In ppm 0.005	ME-MS61 K % 0.01	ME-MS61 La ppm 0.5	ME-MS61 Li ppm 0.2	ME-MS61 Mg % 0.01	ME-MS61 Mn ppm 5	ME-MS61 Mo ppm 0.05	ME-MS61 Na % 0.01	ME-MS61 Nb ppm 0.1	ME-MS61 Ni ppm 0.2
B731074		6.0	0.57	5.38	0.05	0.7	0.007	0.43	6.8	2.9	0.13	55	0.16	1.43	1.1	4.2
B731075		2.3	0.42	0.64	<0.05	0.1	<0.005	0.05	1.8	0.6	0.02	66	2.52	0.06	0.1	2.4
B731076		3600	8.08	3.65	<0.05	0.4	0.069	0.13	3.7	2.0	0.05	100	223	0.97	0.2	121.0
B731077		2680	2.77	9.52	0.05	0.9	0.116	0.27	10.3	2.1	0.05	120	68.1	2.29	0.6	20.7
B731078		2550	2.89	5.01	<0.05	0.4	0.290	0.31	4.4	2.0	0.06	83	24.4	0.98	0.3	14.3
B731079		106.5	0.67	0.83	<0.05	0.1	0.008	0.04	0.6	0.2	<0.01	46	14.35	0.22	0.1	1.6
B731080		18.4	1.12	16.35	0.10	2.0	0.022	1.10	16.4	7.2	0.13	208	0.98	4.37	2.3	13.6
B731081		13.7	1.54	14.15	0.10	1.4	0.015	0.56	16.9	2.4	0.16	281	9.25	3.19	1.1	11.3
B731082		23.0	1.08	17.35	0.09	1.7	0.016	1.19	11.1	8.1	0.28	177	0.42	3.30	1.4	9.6
B731083		3.4	1.60	2.41	0.06	0.4	0.005	0.18	4.1	2.7	0.03	52	65.1	0.26	0.3	12.9
B731084		17.2	1.60	22.8	0.16	3.0	0.017	0.50	43.8	11.3	0.55	343	0.35	7.35	7.2	10.5
B731085		3500	0.94	0.98	0.05	0.1	0.280	0.06	2.6	1.6	0.09	88	1.73	0.19	0.1	5.5
B731086		49.8	3.61	17.50	0.19	3.4	0.033	0.82	57.8	13.0	1.18	1010	45.9	5.30	2.2	62.0
B731087		60.6	2.00	0.81	0.19	0.1	0.008	0.01	35.1	0.4	0.01	64	6.69	0.01	1.8	4.6

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124 SHERWOOD DRIVE
THUNDER BAY ON P7B 6L1

Finalized Date: 15-AUG-2021
Account: BGCETTMQ

Project: Jackfish-Kellyn

CERTIFICATE OF ANALYSIS TB21189640

Sample Description	Method	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
	Units	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOD	10	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02
B731074		70	1.6	18.8	<0.002	<0.01	0.08	1.4	<1	0.2	38.1	0.08	0.22	1.23	0.050	0.09
B731075		20	131.5	2.2	<0.002	0.08	0.15	0.2	<1	<0.2	41.5	<0.05	4.49	0.24	0.006	<0.02
B731076		90	466	4.4	<0.002	7.92	0.11	0.8	1	<0.2	2070	<0.05	25.9	0.84	0.011	0.03
B731077		280	2180	7.8	<0.002	2.01	0.17	1.5	1	0.3	3370	<0.05	15.70	1.57	0.028	0.05
B731078		150	961	10.0	<0.002	1.92	0.11	1.0	<1	0.2	1395	<0.05	16.55	0.75	0.019	0.04
B731079		40	2820	1.1	<0.002	0.19	0.12	0.1	2	<0.2	118.0	<0.05	7.60	0.16	0.005	0.02
B731080		560	40.3	31.9	<0.002	0.47	0.19	3.3	<1	0.5	378	0.16	0.83	2.41	0.097	0.15
B731081		350	36.0	16.1	<0.002	0.68	0.13	2.2	<1	0.3	317	0.08	1.74	3.02	0.045	0.07
B731082		350	5.3	33.0	<0.002	0.14	0.09	2.9	<1	0.5	941	0.10	0.21	2.54	0.072	0.11
B731083		30	5720	6.0	<0.002	1.48	0.13	0.4	4	<0.2	46.5	<0.05	56.4	0.52	0.014	0.06
B731084		740	27.3	13.0	<0.002	0.62	0.09	3.6	<1	0.4	424	0.14	0.40	34.6	0.119	0.07
B731085		70	3260	2.1	<0.002	0.48	0.05	0.6	5	0.2	32.0	<0.05	22.1	0.35	0.011	0.07
B731086		2060	22.0	25.7	0.002	1.44	0.07	12.3	1	0.5	508	0.08	0.23	6.87	0.195	0.19
B731087		2150	662	0.5	<0.002	1.34	0.11	0.5	2	<0.2	812	<0.05	6.31	215	0.028	<0.02

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124 SHERWOOD DRIVE
THUNDER BAY ON P7B 6L1

Finalized Date: 15-AUG-2021
Account: BGCETTMQ

Project: Jackfish-Kellyn

CERTIFICATE OF ANALYSIS TB21189640

Sample Description	Method Analyte Units LOD	ME-MS61 U ppm 0.1	ME-MS61 V ppm 1	ME-MS61 W ppm 0.1	ME-MS61 Y ppm 0.1	ME-MS61 Zn ppm 2	ME-MS61 Zr ppm 0.5	Ag-OG62 Ag ppm 1
B731074		0.2	13	0.4	1.9	9	26.6	
B731075		0.2	2	0.7	0.7	64	3.9	
B731076		0.7	4	1.0	2.4	136	19.0	
B731077		0.6	11	2.7	3.0	36	35.9	
B731078		0.3	8	1.1	1.4	65	17.0	
B731079		0.2	1	0.5	0.3	9	4.4	
B731080		0.5	32	8.0	4.6	16	76.5	
B731081		0.5	14	5.3	3.8	26	54.0	
B731082		0.4	36	7.4	3.2	24	60.3	
B731083		0.2	7	1.4	1.0	4	12.9	
B731084		4.0	19	5.2	19.9	37	125.0	
B731085		0.1	6	1.2	1.1	14	6.9	96
B731086		1.1	63	2.5	17.9	58	159.0	
B731087		3.9	3	3.5	41.9	3	19.0	

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CERTIFICATE OF ANALYSIS TB21189640

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

REEs may not be totally soluble in this method.

Applies to Method: ME-MS61

LABORATORY ADDRESSES

Processed at ALS Thunder Bay located at 645 Norah Crescent, Thunder Bay, ON, Canada

Applies to Method: CRU-31, CRU-QC, LOG-21, PUL-31, PUL-QC, SPL-21, WEI-21

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Applies to Method: Ag-OG62, Au-GRA21, Au-ICP21, ME-MS61, ME-OG62

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To: BAYSIDE GEOSCIENCE
124 SHERWOOD DRIVE
THUNDER BAY ON P7B 6L1

Finalized Date: 3-DEC-2021
Account: BGCETTMQ

CERTIFICATE TB21288637

Project: Jackfish-Kellyn

This report is for 136 samples of Rock submitted to our lab in Thunder Bay, ON, Canada on 25-OCT-2021.

The following have access to data associated with this certificate:

STEVEN FLANK EDWARD SLOWLEY	JAMES FRANKLIN	RYAN MEE

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-21	Sample logging - ClientBarCode
LOG-23	Pulp Login - Rcvd with Barcode
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize up to 250g 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Ag-OG62	Ore Grade Ag - Four Acid	
ME-OG62	Ore Grade Elements - Four Acid	ICP-AES
Cu-OG62	Ore Grade Cu - Four Acid	
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES
Au-GRA21	Au 30g FA-GRAV finish	WST-SIM
ME-MS61	48 element four acid ICP-MS	

This is the Final Report and supersedes any preliminary report with this certificate number.Results apply to samples as submitted.All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:
Saa Traxler, General Manager, North Vancouver

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CERTIFICATE OF ANALYSIS TB21288637

Sample Description — Method	WEI-21	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
LOD	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
D579901	0.04	0.02	7.57	2.5	890	0.97	0.03	1.77	0.03	28.6	4.3	25	0.41	28.4	2.62
D579902	0.97	0.01	7.85	0.6	890	1.33	0.03	1.61	0.03	51.3	6.2	41	1.29	1.3	1.71
D579903	1.94	0.04	4.34	0.7	390	0.68	0.05	0.84	0.04	23.8	3.6	36	1.47	4.9	0.95
D579904	0.90	0.11	1.49	3.0	70	0.33	0.32	0.64	0.03	17.45	3.2	37	0.16	7.5	0.62
D579905	1.85	2.54	2.18	0.3	260	0.33	4.68	0.21	0.04	10.65	1.3	40	0.38	16.1	0.52
D579906	1.24	0.05	3.13	1.6	110	1.03	0.23	2.28	0.04	5.76	1.7	88	2.58	14.4	2.35
D579907	1.24	<0.01	7.22	0.8	270	2.03	0.20	2.65	0.14	22.0	37.0	713	2.96	2.3	6.22
D579908	1.49	0.02	8.89	7.2	200	1.36	0.11	0.25	<0.02	53.0	10.8	32	1.55	1.8	2.54
D579909	1.88	0.01	3.64	0.5	350	0.81	0.04	0.10	<0.02	19.55	0.9	30	1.59	1.3	0.73
D579910	2.56	0.20	3.66	0.8	360	0.99	0.31	0.27	0.03	22.6	3.4	42	1.43	4.7	1.40
D579911	1.12	0.18	7.54	0.6	410	1.33	0.18	1.22	0.09	54.5	4.3	28	1.66	3.2	1.58
D579912	1.45	1.20	7.03	1.2	680	1.33	0.26	1.15	0.16	44.4	5.9	29	0.79	4.5	1.56
D579913	1.67	0.05	6.77	0.4	770	1.49	0.06	2.13	0.17	40.7	4.2	28	1.61	13.1	1.29
D579914	0.84	0.01	5.84	0.4	800	1.21	0.02	1.79	0.10	35.6	3.9	31	2.40	0.9	1.40
D579915	1.15	2.10	6.76	1.0	840	1.24	1.56	0.42	0.11	50.5	8.9	28	0.82	6.1	1.88
D579916	1.67	1.84	6.71	0.8	650	1.18	0.76	0.90	0.17	45.1	6.8	26	0.80	4.0	1.59
D579917	1.71	14.85	1.22	1.4	4050	0.15	22.3	1.52	1.15	10.45	2.0	30	0.15	21.2	0.86
D579918	1.35	0.09	6.25	0.7	500	1.34	0.12	1.02	0.07	37.9	4.0	27	1.08	4.1	1.27
D579919	1.92	0.02	0.66	0.3	140	0.15	0.02	0.07	<0.02	2.67	0.6	30	0.45	1.0	0.40
D579920	1.23	0.21	5.96	0.2	190	1.02	0.54	0.88	0.04	37.4	5.5	30	1.17	5.1	1.30
D579921	1.03	0.03	1.90	0.6	70	0.40	0.39	0.12	0.02	12.75	1.9	24	1.10	2.9	0.66
D579922	1.18	0.04	1.07	1.0	40	0.62	0.30	0.13	<0.02	12.15	2.9	53	1.62	1.5	0.93
D579923	1.67	0.04	7.68	0.5	710	1.64	0.09	1.34	0.07	52.3	6.2	31	2.58	3.6	1.66
D579924	2.16	0.07	2.58	0.8	570	0.38	0.04	0.33	0.05	13.15	2.8	41	0.62	13.6	0.75
D579925	0.04	0.56	7.70	17.9	1280	0.91	0.18	4.66	0.68	20.3	17.3	31	1.97	792	4.42
D579926	1.11	0.01	7.37	0.5	1330	1.46	0.02	2.31	0.20	34.2	5.1	41	3.00	1.6	1.82
D579927	0.73	0.01	4.57	0.6	140	0.90	0.05	0.10	<0.02	18.85	0.6	12	1.20	1.4	0.95
D579928	1.67	0.01	0.43	0.5	60	0.09	0.01	1.87	0.06	3.75	0.9	27	0.33	2.0	0.41
D579929	1.27	0.05	5.97	0.3	290	1.13	0.04	1.04	0.06	34.6	3.4	28	0.41	13.1	1.16
D579930	2.03	<0.01	6.53	0.4	600	1.37	0.03	2.05	0.03	39.0	5.7	32	2.44	1.8	1.30
D579931	1.90	0.06	6.93	2.6	590	1.49	0.10	5.60	0.13	166.0	6.0	21	2.22	6.5	2.09
D579932	1.85	0.01	6.89	0.4	1200	1.37	0.05	1.02	0.02	6.23	4.1	30	4.21	1.0	1.48
D579933	2.56	0.01	6.04	0.2	550	1.39	0.03	4.93	<0.02	31.9	9.0	25	1.41	0.6	2.01
D579934	1.10	0.02	7.32	0.8	880	1.61	0.06	1.69	0.09	50.4	5.4	22	2.35	1.5	1.59
D579935	0.87	0.45	4.26	0.7	970	0.78	0.15	0.37	0.03	21.6	4.5	23	0.56	4.5	1.56
D579936	2.08	0.32	5.32	0.6	300	0.48	0.24	0.64	0.12	26.9	7.1	22	0.28	1.5	1.60
D579937	1.60	<0.01	0.97	0.3	80	0.12	0.01	0.08	0.02	2.60	0.8	29	0.26	1.4	0.53
D579938	0.42	0.01	2.95	0.5	390	0.62	0.01	0.33	0.02	12.00	1.7	20	1.19	1.2	0.77
D579939	1.23	0.05	5.39	3.7	720	1.13	0.21	0.75	0.06	43.8	6.9	30	1.46	4.6	1.63
D579940	1.54	2.13	0.50	0.6	990	0.16	0.64	0.10	0.02	2.10	2.6	33	0.20	4.5	0.74

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Project: Jackfish-Kellyn

CERTIFICATE OF ANALYSIS TB21288637

Sample Description	Method / Analyte / Units / LOD	ME-MS61 Ga ppm 0.05	ME-MS61 Ge ppm 0.05	ME-MS61 Hf ppm 0.1	ME-MS61 In ppm 0.005	ME-MS61 K % 0.01	ME-MS61 La ppm 0.5	ME-MS61 Li ppm 0.2	ME-MS61 Mg % 0.01	ME-MS61 Mn ppm 5	ME-MS61 Mo ppm 0.05	ME-MS61 Na % 0.01	ME-MS61 Nb ppm 0.1	ME-MS61 Ni ppm 0.2	ME-MS61 P ppm 10	ME-MS61 Pb ppm 0.5
D579901		13.85	0.19	2.0	0.024	1.92	15.3	3.0	0.41	630	4.51	3.35	6.6	15.3	390	3.5
D579902		21.5	0.24	2.3	0.022	1.97	22.9	16.3	0.64	313	0.26	3.75	4.4	17.0	500	10.4
D579903		11.60	0.16	1.0	0.015	0.99	10.7	9.7	0.22	192	0.80	2.03	2.0	10.2	300	5.9
D579904		3.98	0.15	0.4	<0.005	0.10	7.4	1.5	0.05	122	8.55	1.01	1.3	6.2	160	10.0
D579905		6.24	0.11	0.7	<0.005	0.17	5.2	2.2	0.08	75	0.34	1.52	0.9	4.0	130	181.5
D579906		11.95	0.15	1.1	0.016	1.01	2.5	49.3	0.22	438	0.57	0.02	1.8	9.5	430	11.9
D579907		21.9	0.15	2.4	0.048	1.02	9.3	30.7	1.25	469	0.33	0.01	6.5	134.5	1500	3.4
D579908		25.1	0.15	2.5	0.024	1.59	30.1	18.2	0.48	78	0.19	0.02	4.9	20.0	560	4.1
D579909		9.30	0.12	1.1	0.011	0.99	9.0	4.3	0.15	49	0.41	1.65	1.0	5.6	140	7.0
D579910		9.37	0.05	1.1	0.012	0.96	10.2	4.2	0.15	67	1.13	1.85	1.1	8.4	180	12.8
D579911		21.8	0.08	2.3	0.026	1.39	25.0	10.1	0.21	362	0.58	4.79	2.5	12.0	540	6.1
D579912		22.2	0.07	2.3	0.024	1.44	20.3	10.9	0.34	355	2.06	4.07	2.6	14.7	490	24.6
D579913		20.4	0.07	2.4	0.022	1.98	17.5	11.6	0.25	244	0.39	3.38	2.5	13.7	530	30.6
D579914		17.25	0.07	1.9	0.019	1.66	15.1	12.6	0.34	356	0.20	2.45	2.1	12.8	400	12.0
D579915		19.85	0.06	2.1	0.027	1.17	24.4	7.9	0.17	301	33.9	4.07	1.9	14.1	530	94.8
D579916		19.90	0.07	2.1	0.022	1.22	22.1	8.1	0.25	321	4.20	4.13	2.3	13.4	470	35.4
D579917		3.88	0.06	0.3	0.009	0.06	4.3	0.7	0.01	209	13.45	0.92	0.3	4.3	1970	2140
D579918		19.70	0.07	1.9	0.018	1.49	17.3	11.0	0.38	230	0.72	3.20	3.1	11.4	390	16.2
D579919		2.28	<0.05	0.2	<0.005	0.35	1.2	1.6	0.04	56	0.42	0.02	0.3	1.9	40	1.4
D579920		17.45	0.06	2.0	0.021	0.84	17.2	3.9	0.35	218	1.12	3.59	2.9	13.0	420	18.7
D579921		4.85	<0.05	0.6	0.006	0.33	6.0	2.1	0.13	53	0.47	0.94	1.0	5.3	120	1.8
D579922		5.36	<0.05	0.7	0.013	0.46	4.9	3.2	0.20	84	0.44	0.03	1.0	8.2	290	1.1
D579923		22.4	0.07	2.2	0.023	1.70	23.7	11.4	0.44	336	1.18	3.77	2.5	14.7	540	9.0
D579924		7.15	0.05	0.8	0.007	0.24	5.3	4.3	0.28	182	0.96	1.77	0.9	5.9	240	5.5
D579925		17.40	0.07	1.6	0.110	1.54	10.0	17.9	1.63	862	16.10	2.55	3.0	16.1	890	24.2
D579926		27.8	0.08	2.1	0.034	2.27	15.1	14.0	0.56	509	0.36	2.39	3.1	16.7	500	24.5
D579927		9.59	<0.05	0.7	0.006	0.83	10.4	63.4	0.07	39	0.15	0.05	1.2	4.0	40	3.0
D579928		1.05	<0.05	0.1	<0.005	0.08	1.7	3.9	0.14	236	0.87	0.15	0.2	4.1	90	1.3
D579929		14.70	0.06	1.9	0.015	0.40	16.2	6.6	0.45	215	1.20	4.43	3.0	14.1	490	6.5
D579930		19.15	0.06	2.1	0.019	1.70	16.9	12.2	0.46	308	0.19	2.55	4.0	14.8	430	6.7
D579931		18.75	0.16	2.5	0.035	1.30	67.5	26.8	0.91	927	0.35	0.03	4.4	14.9	490	3.8
D579932		20.3	<0.05	1.9	0.029	1.80	2.7	8.7	0.44	141	0.49	2.54	4.6	13.0	420	4.7
D579933		21.2	0.07	2.5	0.026	1.69	11.1	17.2	0.43	455	0.22	0.04	4.3	22.0	480	5.5
D579934		21.9	0.08	2.4	0.022	2.20	23.0	20.8	0.56	339	0.40	3.45	4.1	14.1	450	12.4
D579935		11.40	<0.05	1.3	0.013	0.90	10.3	5.7	0.22	119	16.60	2.28	1.2	9.4	280	11.8
D579936		12.40	0.05	1.1	0.005	0.22	12.5	1.0	0.17	362	10.50	4.12	0.9	9.2	280	6.2
D579937		2.94	<0.05	0.2	<0.005	0.12	1.2	0.9	0.15	108	0.45	0.27	0.3	4.3	20	2.2
D579938		8.42	<0.05	0.9	0.009	0.58	5.6	7.7	0.21	118	0.49	1.51	1.2	5.6	160	4.3
D579939		16.45	0.06	1.7	0.018	1.32	19.9	7.6	0.30	324	0.37	2.50	4.2	22.9	720	6.8
D579940		1.96	<0.05	0.2	<0.005	0.15	1.0	0.8	0.03	62	51.4	0.22	0.2	4.2	40	47.8

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To: BAYSIDE GEOSCIENCE
124 SHERWOOD DRIVE
THUNDER BAY ON P7B 6L1

Finalized Date: 3-DEC-2021
Account: BGCETTMQ

Project: Jackfish-Kellyn

CERTIFICATE OF ANALYSIS TB21288637

Sample Description	Method Analyte Units LOD	ME-MS61 Rb ppm 0.1	ME-MS61 Re ppm 0.002	ME-MS61 S % 0.01	ME-MS61 Sb ppm 0.05	ME-MS61 Sc ppm 0.1	ME-MS61 Se ppm 1	ME-MS61 Sn ppm 0.2	ME-MS61 Sr ppm 0.2	ME-MS61 Ta ppm 0.05	ME-MS61 Te ppm 0.05	ME-MS61 Th ppm 0.01	ME-MS61 Ti % 0.005	ME-MS61 Tl ppm 0.02	ME-MS61 U ppm 0.1	ME-MS61 V ppm 1
D579901		44.9	<0.002	0.01	0.35	6.7	1	1.9	207	0.45	<0.05	3.37	0.191	0.22	1.4	32
D579902		54.2	<0.002	0.01	0.07	4.0	1	0.8	768	0.29	<0.05	4.20	0.160	0.27	0.7	34
D579903		47.2	<0.002	0.01	0.06	2.0	1	0.5	183.0	0.13	<0.05	2.59	0.079	0.19	0.6	21
D579904		3.8	<0.002	0.12	0.21	0.9	1	<0.2	77.7	<0.05	0.06	2.29	0.027	0.10	0.9	9
D579905		5.4	<0.002	0.06	0.05	0.9	1	0.2	58.8	0.06	0.96	1.18	0.029	0.03	0.2	8
D579906		55.4	<0.002	0.01	3.08	4.2	1	0.4	52.4	0.10	<0.05	2.05	0.100	0.29	0.7	43
D579907		46.8	<0.002	<0.01	0.73	31.5	1	0.6	56.6	0.25	<0.05	3.15	0.235	0.20	1.7	186
D579908		68.3	<0.002	<0.01	0.15	3.9	1	0.7	63.7	0.33	<0.05	5.24	0.162	0.34	1.5	34
D579909		30.8	<0.002	0.02	0.06	1.7	1	0.4	265	0.06	<0.05	1.97	0.041	0.14	0.3	18
D579910		26.1	<0.002	0.37	0.50	1.5	1	0.3	312	0.07	0.09	2.01	0.038	0.10	0.2	15
D579911		46.0	<0.002	0.18	0.18	4.1	<1	0.5	327	0.16	0.19	4.28	0.101	0.19	0.5	39
D579912		40.1	<0.002	0.25	0.21	3.6	1	0.6	357	0.16	1.01	3.45	0.099	0.15	0.7	30
D579913		55.5	<0.002	0.04	0.18	4.0	<1	0.6	381	0.18	0.05	3.23	0.118	0.24	0.5	37
D579914		48.5	<0.002	0.01	0.13	3.6	1	0.6	498	0.12	<0.05	2.92	0.104	0.20	0.4	34
D579915		34.2	<0.002	0.42	0.16	3.8	1	0.6	276	0.11	2.00	2.89	0.079	0.12	1.4	27
D579916		34.9	<0.002	0.39	0.13	3.4	<1	0.5	313	0.12	1.47	3.67	0.088	0.13	0.6	26
D579917		2.3	<0.002	0.20	0.25	0.7	2	<0.2	1695	<0.05	9.89	5.93	0.011	0.02	21.0	3
D579918		48.9	<0.002	0.02	0.07	3.0	<1	0.6	295	0.18	0.05	5.02	0.100	0.18	1.1	30
D579919		12.4	<0.002	0.01	0.05	0.4	1	<0.2	7.9	<0.05	<0.05	0.36	0.014	0.05	0.1	6
D579920		30.8	<0.002	0.01	0.06	3.0	<1	0.5	205	0.19	0.11	3.04	0.111	0.12	0.7	33
D579921		21.5	<0.002	<0.01	0.06	1.3	1	0.2	54.1	0.06	0.11	0.80	0.034	0.07	0.2	14
D579922		27.2	<0.002	<0.01	0.07	3.2	1	0.3	16.0	0.05	0.10	0.73	0.067	0.12	0.4	22
D579923		59.4	<0.002	0.12	0.07	3.9	1	0.6	523	0.16	0.11	3.73	0.118	0.23	0.8	33
D579924		7.9	<0.002	0.10	0.08	1.3	1	0.2	170.0	0.05	0.10	2.48	0.041	0.05	0.3	11
D579925		41.4	0.039	0.57	2.60	15.9	1	1.6	469	0.19	0.19	2.29	0.297	0.30	1.4	143
D579926		57.0	<0.002	0.01	0.10	5.1	1	1.0	446	0.14	<0.05	3.01	0.126	0.25	0.5	64
D579927		32.1	<0.002	<0.01	0.17	0.8	1	0.2	38.1	0.09	<0.05	1.76	0.040	0.15	0.3	15
D579928		4.3	<0.002	0.01	0.05	0.8	1	<0.2	44.5	<0.05	<0.05	0.25	0.009	0.02	<0.1	4
D579929		11.5	<0.002	0.25	0.06	3.0	1	0.5	380	0.19	<0.05	2.62	0.112	0.06	0.8	25
D579930		44.5	<0.002	0.01	0.09	3.3	<1	0.6	346	0.26	<0.05	2.83	0.134	0.19	0.6	29
D579931		22.1	<0.002	0.06	0.36	4.6	<1	0.7	406	0.30	0.07	3.25	0.155	0.22	0.7	41
D579932		61.3	<0.002	0.05	0.11	4.0	<1	0.8	286	0.33	<0.05	3.48	0.119	0.24	0.5	41
D579933		21.1	<0.002	0.01	0.25	3.0	<1	0.7	99.6	0.31	<0.05	2.54	0.155	0.19	0.8	32
D579934		75.8	<0.002	<0.01	0.07	3.5	1	0.6	761	0.29	<0.05	4.32	0.143	0.34	0.8	31
D579935		28.6	<0.002	0.51	0.10	2.4	1	0.4	4360	0.08	0.72	1.62	0.061	0.10	0.4	22
D579936		7.7	<0.002	0.77	0.08	1.6	<1	0.2	162.0	0.06	0.46	1.88	0.036	0.03	0.3	6
D579937		3.2	<0.002	<0.01	0.05	0.6	1	<0.2	115.0	<0.05	<0.05	0.20	0.017	0.02	<0.1	9
D579938		17.7	<0.002	0.01	0.06	1.5	1	0.3	242	0.07	<0.05	1.76	0.047	0.06	0.4	14
D579939		38.3	<0.002	0.05	0.15	3.6	<1	0.6	387	0.20	0.10	2.99	0.101	0.14	0.7	37
D579940		4.6	<0.002	0.21	0.08	0.6	1	<0.2	78.4	<0.05	2.08	0.22	0.009	0.02	0.1	7

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To: BAYSIDE GEOSCIENCE
124 SHERWOOD DRIVE
THUNDER BAY ON P7B 6L1

Finalized Date: 3-DEC-2021
Account: BGCETTMQ

Project: Jackfish-Kellyn

CERTIFICATE OF ANALYSIS TB21288637

Sample Description	Method Analyte Units LOD	ME-MS61 W ppm 0.1	ME-MS61 Y ppm 0.1	ME-MS61 Zn ppm 2	ME-MS61 Zr ppm 0.5	Ag-OG62 Ag ppm 1	Cu-OG62 Cu % 0.001	Au-ICP21 Au ppm 0.001	Au-GRA21 Au ppm 0.05
D579901		0.7	17.6	30	57.2			0.004	
D579902		0.9	10.3	51	80.2			0.004	
D579903		0.5	4.4	27	32.1			0.002	
D579904		1.1	3.3	6	17.0			0.005	
D579905		3.1	1.6	5	25.1			0.155	
D579906		4.0	6.1	10	43.6			0.002	
D579907		3.9	13.9	169	88.5			0.013	
D579908		1.7	5.2	42	85.6			0.001	
D579909		1.5	2.4	10	38.7			0.005	
D579910		1.1	2.5	14	40.7			0.004	
D579911		6.5	5.0	33	85.6			0.024	
D579912		6.8	5.3	40	89.2			0.372	
D579913		4.0	5.3	41	91.5			0.020	
D579914		1.5	5.6	42	70.1			0.004	
D579915		6.6	4.7	40	86.1			0.708	
D579916		7.0	5.1	37	81.9			0.566	
D579917		3.5	19.9	68	14.2			0.920	
D579918		2.7	6.0	38	66.8			0.005	
D579919		0.6	0.5	3	8.8			<0.001	
D579920		2.3	5.6	35	73.4			0.004	
D579921		0.9	2.1	10	21.5			<0.001	
D579922		0.8	3.1	14	28.3			0.001	
D579923		2.2	8.6	51	82.8			0.009	
D579924		2.9	2.2	15	29.3			0.055	
D579925		7.5	16.2	144	52.5			0.481	
D579926		3.9	7.1	48	76.2			<0.001	
D579927		3.5	1.5	11	24.5			<0.001	
D579928		0.1	2.4	5	3.8			0.001	
D579929		1.9	7.1	17	71.5			0.002	
D579930		1.2	6.4	31	75.2			<0.001	
D579931		2.0	12.2	33	86.9			0.001	
D579932		3.2	4.3	18	72.9			0.011	
D579933		0.4	11.9	50	90.4			0.001	
D579934		0.2	9.3	49	82.1			0.001	
D579935		2.9	3.0	23	49.1			0.253	
D579936		2.3	2.4	19	43.4			0.112	
D579937		0.4	0.6	11	4.9			<0.001	
D579938		1.1	2.1	14	33.1			0.001	
D579939		2.2	6.5	28	66.5			0.005	
D579940		0.7	0.4	8	6.8			0.863	

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124 SHERWOOD DRIVE
THUNDER BAY ON P7B 6L1

Finalized Date: 3-DEC-2021
Account: BGCETTMQ

Project: Jackfish-Kellyn

CERTIFICATE OF ANALYSIS TB21288637

Sample Description	Method / Analyte / Units / LOD	WEI-21 Recvd Wt. kg 0.02	ME-MS61 Ag ppm 0.01	ME-MS61 Al % 0.01	ME-MS61 As ppm 0.2	ME-MS61 Ba ppm 10	ME-MS61 Be ppm 0.05	ME-MS61 Bi ppm 0.01	ME-MS61 Ca % 0.01	ME-MS61 Cd ppm 0.02	ME-MS61 Ce ppm 0.01	ME-MS61 Co ppm 0.1	ME-MS61 Cr ppm 1	ME-MS61 Cs ppm 0.05	ME-MS61 Cu ppm 0.2	ME-MS61 Fe % 0.01
D579941		1.55	0.33	6.52	0.8	420	0.81	0.40	0.22	0.09	35.6	7.3	22	0.77	1.4	1.62
D579942		2.17	0.32	6.81	0.7	670	1.36	0.36	1.44	0.06	53.1	6.4	25	1.70	4.8	1.44
D579943		2.46	0.01	5.19	0.3	680	1.06	0.04	2.10	0.08	31.2	3.6	34	1.94	8.4	1.35
D579944		2.03	0.01	6.32	0.4	720	1.26	0.06	1.60	0.04	41.4	4.0	34	2.01	2.7	1.46
D579945		1.52	0.09	8.14	0.6	640	1.21	0.12	0.58	0.10	62.3	2.4	20	0.33	2.2	1.07
D579946		1.22	0.04	7.02	0.3	820	2.06	0.05	2.46	0.04	45.4	5.3	25	1.00	3.8	1.76
D579947		2.22	0.12	7.36	0.6	590	1.66	0.13	3.56	0.09	50.5	22.5	99	1.63	116.0	4.36
D579948		1.79	0.15	8.14	1.8	1180	2.90	0.30	1.20	0.09	64.0	5.7	15	1.93	15.4	1.38
D579949		1.88	0.05	7.75	0.6	620	2.05	0.06	1.78	0.09	51.7	6.1	29	1.43	4.2	1.72
D579950		0.04	0.02	7.06	2.2	840	1.22	0.02	1.69	0.02	26.6	4.0	25	0.40	25.6	2.50
D579951		2.03	0.50	3.96	1.0	800	0.81	0.23	0.88	0.05	31.6	10.4	25	0.63	2.0	1.93
D579952		1.82	0.04	7.07	0.5	490	1.39	0.16	2.07	0.03	51.7	3.7	23	2.47	2.3	1.41
D579953		1.60	0.01	1.07	0.3	70	0.24	0.02	0.11	<0.02	2.63	1.3	18	0.28	1.0	0.56
D579954		1.26	0.03	6.82	1.3	330	0.84	0.01	5.41	0.11	48.1	47.9	67	2.79	19.3	9.21
D579955		1.71	<0.01	0.08	0.4	10	<0.05	<0.01	0.02	<0.02	0.20	0.2	23	0.12	0.5	0.30
D579956		1.96	0.16	7.41	0.6	1010	1.51	0.05	0.93	0.15	59.0	7.0	34	1.89	4.2	1.76
D579957		2.25	<0.01	1.05	0.3	160	0.25	<0.01	0.82	0.02	5.94	0.8	31	0.25	0.6	0.53
D579958		1.36	0.01	6.27	0.6	760	1.26	0.03	1.49	0.03	37.9	3.8	33	2.37	1.8	1.52
D579959		2.18	0.30	8.75	0.9	540	1.21	0.19	2.64	0.12	46.7	2.4	28	1.26	6.5	1.71
D579960		1.04	0.04	7.52	0.8	750	1.84	0.11	0.82	0.09	48.3	5.1	26	1.94	3.7	1.56
D579961		1.18	0.03	6.70	2.0	720	2.02	0.07	4.27	0.12	127.0	20.2	139	11.15	47.1	4.43
D579962		1.95	0.01	7.51	0.5	810	1.53	0.03	1.59	0.05	50.9	6.2	31	1.45	2.6	1.78
D579963		2.40	18.60	2.36	2.9	2920	0.31	16.70	0.24	0.06	11.45	5.1	22	0.41	535	1.95
D579964		1.77	0.12	7.37	0.7	820	1.26	0.09	1.93	0.10	49.7	6.2	31	3.18	11.8	1.48
D579965		0.87	0.02	5.74	0.7	1040	1.20	0.08	2.71	0.06	62.9	15.0	75	0.42	3.0	3.03
D579966		1.59	0.20	6.91	1.1	860	1.61	0.15	3.57	0.07	58.7	19.7	84	0.68	25.4	4.18
D579967		1.80	0.17	5.39	0.5	640	0.71	0.04	3.69	0.10	30.9	11.1	54	0.34	30.9	2.39
D579968		1.04	0.02	2.33	0.5	170	0.33	0.03	2.23	0.06	19.45	10.4	47	0.39	15.5	2.00
D579969		1.21	0.06	6.50	0.5	760	1.92	0.05	1.70	0.03	68.8	18.0	107	3.52	160.0	3.43
D579970		1.65	0.14	5.38	2.6	3330	2.02	0.24	8.27	0.17	147.0	24.4	140	4.60	42.7	3.63
D579971		1.84	<0.01	6.30	0.4	830	1.53	0.05	2.54	0.07	40.8	2.8	28	2.09	2.7	1.49
D579972		0.90	6.09	2.88	<0.2	340	0.63	4.85	2.51	0.28	16.90	3.2	18	0.74	4.3	1.09
D579973		1.98	0.07	6.17	5.6	990	1.50	0.07	2.69	0.19	39.9	8.6	58	1.57	7.2	2.06
D579974		1.00	0.06	7.36	0.7	670	1.48	0.04	1.19	0.12	47.0	5.9	29	1.56	1.6	1.64
D579975		0.04	0.65	7.32	17.4	1270	0.94	0.17	4.63	0.64	16.85	16.0	30	1.88	777	4.41
D579976		1.09	0.02	6.68	0.7	770	1.33	0.07	1.51	0.05	43.4	5.1	29	2.18	2.4	1.70
D579977		0.88	0.11	7.41	0.5	730	1.56	0.65	0.99	0.03	42.3	9.1	33	3.20	1.4	1.95
D579978		1.39	0.13	1.18	0.5	220	0.24	0.02	1.05	<0.02	14.20	4.6	39	0.15	22.7	1.00
D579979		1.36	0.62	5.69	0.8	1830	0.68	0.06	7.54	0.57	22.7	25.4	95	0.34	9.0	5.68
D579980		1.40	0.39	5.72	0.2	480	0.89	0.05	6.52	0.59	61.8	20.6	173	0.58	21.0	5.12

***** See Appendix Page for comments regarding this certificate *****

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To: **BAYSIDE GEOSCIENCE**
124 SHERWOOD DRIVE
THUNDER BAY ON P7B 6L1

Finalized Date: 3-DEC-2021
Account: BGCETTMQ

Project: Jackfish-Kellyn

CERTIFICATE OF ANALYSIS TB21288637

Sample Description	Method Analyte Units LOD	ME-MS61 Ga ppm 0.05	ME-MS61 Ge ppm 0.05	ME-MS61 Hf ppm 0.1	ME-MS61 In ppm 0.005	ME-MS61 K % 0.01	ME-MS61 La ppm 0.5	ME-MS61 Li ppm 0.2	ME-MS61 Mg % 0.01	ME-MS61 Mn ppm 5	ME-MS61 Mo ppm 0.05	ME-MS61 Na % 0.01	ME-MS61 Nb ppm 0.1	ME-MS61 Ni ppm 0.2	ME-MS61 P ppm 10	ME-MS61 Pb ppm 0.5
D579941		17.50	0.05	1.8	0.010	0.52	16.4	3.5	0.14	254	12.20	5.01	1.9	11.8	380	9.6
D579942		20.4	0.07	2.3	0.023	1.82	25.6	8.0	0.24	284	2.19	3.37	2.4	14.3	450	8.8
D579943		15.90	0.06	1.5	0.020	1.21	14.2	9.2	0.41	316	0.61	2.30	1.9	12.9	310	9.2
D579944		18.90	0.07	2.0	0.020	1.32	18.5	14.1	0.44	223	0.50	3.29	1.8	13.8	430	7.0
D579945		27.0	0.08	2.8	0.014	0.52	27.0	11.6	0.47	302	0.23	7.18	4.3	9.1	480	9.8
D579946		21.0	0.08	2.2	0.022	1.58	20.8	15.4	0.31	250	0.44	3.86	4.1	14.0	480	9.8
D579947		18.90	0.10	3.3	0.039	1.78	22.3	34.4	2.63	657	1.16	3.38	3.2	60.6	1070	7.0
D579948		26.0	0.09	2.4	0.012	0.48	29.2	8.3	0.15	342	2.90	6.45	3.7	11.5	510	13.4
D579949		21.4	0.08	2.5	0.023	1.42	24.8	12.6	0.41	358	0.47	4.64	2.3	16.6	660	12.9
D579950		13.40	0.06	1.8	0.022	1.83	14.9	3.6	0.39	587	4.20	3.24	5.4	13.6	370	2.6
D579951		9.07	0.06	1.1	0.007	0.56	15.6	2.6	0.07	205	0.59	2.72	0.7	9.4	380	5.3
D579952		19.85	0.08	2.3	0.021	2.07	25.0	15.4	0.51	225	0.11	3.42	3.4	13.5	500	7.6
D579953		3.64	<0.05	0.1	<0.005	0.12	1.2	1.6	0.18	58	0.41	0.30	0.2	4.8	20	2.4
D579954		19.15	0.09	3.3	0.080	0.99	23.7	34.0	3.05	1360	0.99	2.08	8.0	35.8	1190	5.4
D579955		0.26	<0.05	<0.1	<0.005	0.03	<0.5	0.3	0.01	35	0.13	0.03	0.1	0.7	10	<0.5
D579956		22.0	0.08	2.6	0.025	1.50	29.1	10.7	0.39	301	0.40	4.39	2.0	18.0	610	11.5
D579957		3.05	<0.05	0.3	<0.005	0.29	2.6	3.4	0.09	121	0.15	0.44	0.5	3.1	80	1.3
D579958		17.65	0.08	1.7	0.017	1.65	18.9	10.4	0.57	238	0.41	2.63	2.7	13.4	370	8.3
D579959		18.65	0.08	2.8	0.017	0.96	22.0	5.9	0.46	432	0.88	6.38	0.5	16.5	660	10.3
D579960		21.3	0.07	2.3	0.024	1.62	23.6	12.6	0.33	352	0.12	4.04	2.7	15.6	510	17.0
D579961		20.0	0.17	3.2	0.045	1.54	60.1	22.5	1.55	706	1.39	3.05	25.4	51.0	3660	13.4
D579962		21.3	0.07	2.3	0.023	1.69	25.0	19.0	0.56	273	1.53	3.71	2.3	17.4	550	13.6
D579963		7.03	<0.05	0.6	0.018	0.27	6.4	1.5	0.04	200	2.97	1.62	0.5	6.0	210	144.0
D579964		20.1	0.10	2.3	0.020	2.85	23.3	15.7	0.27	246	0.43	3.10	3.4	18.3	650	12.9
D579965		14.00	0.11	1.2	0.031	1.80	29.7	5.7	1.66	534	1.05	2.14	2.9	25.5	1170	7.6
D579966		17.60	0.11	1.5	0.033	1.54	27.2	12.7	2.14	702	0.70	2.61	2.7	30.4	1350	10.3
D579967		12.20	0.07	1.1	0.024	1.24	15.6	10.6	1.27	598	0.44	2.72	1.5	18.7	520	8.5
D579968		7.81	0.05	0.4	0.016	0.38	9.3	9.5	0.95	425	0.67	0.90	1.4	16.7	520	2.2
D579969		16.70	0.09	2.6	0.037	1.46	33.7	26.2	1.46	424	0.56	3.60	4.2	49.0	720	11.4
D579970		14.70	0.16	3.3	0.039	1.57	69.6	16.3	2.93	918	0.74	2.80	5.2	111.5	1530	14.4
D579971		19.80	0.07	2.1	0.025	1.37	19.1	12.5	0.36	282	0.44	3.32	2.2	15.3	480	12.7
D579972		8.08	<0.05	1.0	0.008	0.56	8.0	5.9	0.22	230	0.19	1.55	0.7	7.8	290	1095
D579973		16.75	0.08	2.1	0.021	2.19	18.6	7.7	0.81	552	1.11	3.42	11.7	46.3	710	27.6
D579974		20.7	0.07	2.3	0.024	1.58	24.0	12.1	0.37	350	0.93	4.23	2.2	15.4	530	8.2
D579975		16.35	0.06	1.6	0.107	1.54	8.0	18.1	1.60	858	15.05	2.53	2.5	16.0	890	22.5
D579976		16.20	0.07	2.1	0.021	1.51	20.7	18.0	0.61	341	0.15	3.27	2.5	14.6	430	12.0
D579977		20.8	0.07	2.5	0.019	1.94	20.5	18.9	0.56	241	0.47	3.62	3.5	16.7	520	15.3
D579978		2.60	<0.05	0.3	0.009	0.92	6.3	3.3	0.41	191	0.43	0.21	0.6	7.0	210	3.4
D579979		14.10	0.08	0.9	0.036	0.31	9.8	4.3	1.70	1660	6.05	4.23	2.5	63.2	1130	6.5
D579980		16.75	0.09	1.7	0.060	0.96	27.1	9.1	1.75	1540	1.11	3.31	1.2	63.6	1570	7.2

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To: BAYSIDE GEOSCIENCE
124 SHERWOOD DRIVE
THUNDER BAY ON P7B 6L1

Finalized Date: 3-DEC-2021
Account: BGCETTMQ

Project: Jackfish-Kellyn

CERTIFICATE OF ANALYSIS TB21288637

Sample Description / Method / Analyte / Units / LOD	ME-MS61 Rb ppm 0.1	ME-MS61 Re ppm 0.002	ME-MS61 S % 0.01	ME-MS61 Sb ppm 0.05	ME-MS61 Sc ppm 0.1	ME-MS61 Se ppm 1	ME-MS61 Sn ppm 0.2	ME-MS61 Sr ppm 0.2	ME-MS61 Ta ppm 0.05	ME-MS61 Te ppm 0.05	ME-MS61 Th ppm 0.01	ME-MS61 Ti % 0.005	ME-MS61 Tl ppm 0.02	ME-MS61 U ppm 0.1	ME-MS61 V ppm 1
D579941	23.3	<0.002	0.70	0.10	2.3	1	0.3	214	0.12	0.56	2.95	0.067	0.08	0.4	13
D579942	69.2	<0.002	0.25	0.20	3.8	1	0.6	254	0.15	0.40	3.43	0.097	0.26	0.6	31
D579943	34.9	<0.002	0.02	0.10	3.2	1	0.6	457	0.10	<0.05	2.49	0.088	0.15	0.6	31
D579944	39.1	<0.002	0.10	0.07	3.4	<1	0.6	473	0.11	<0.05	3.76	0.100	0.15	0.7	33
D579945	13.0	<0.002	0.25	0.11	2.6	<1	0.4	227	0.17	0.11	52.4	0.091	0.09	2.5	18
D579946	43.7	<0.002	0.01	0.07	3.5	<1	0.6	596	0.23	<0.05	6.81	0.135	0.21	0.8	31
D579947	48.6	<0.002	0.48	0.11	14.9	1	0.7	475	0.22	0.08	3.14	0.378	0.28	1.0	131
D579948	20.8	<0.002	0.69	0.20	2.9	1	0.3	333	0.10	0.15	6.45	0.057	0.13	1.6	22
D579949	46.9	<0.002	0.24	0.10	4.7	1	0.6	658	0.16	0.05	4.27	0.111	0.20	1.0	35
D579950	44.2	<0.002	0.01	0.31	6.5	<1	1.7	197.0	0.39	<0.05	2.87	0.176	0.17	1.2	30
D579951	18.7	<0.002	1.10	0.06	1.6	1	0.2	288	<0.05	0.42	2.30	0.030	0.08	0.3	13
D579952	72.5	<0.002	0.02	0.13	3.9	<1	0.7	220	0.27	<0.05	3.25	0.151	0.32	0.6	37
D579953	4.2	<0.002	0.05	<0.05	1.1	1	<0.2	123.5	<0.05	<0.05	0.24	0.018	0.02	<0.1	16
D579954	79.8	<0.002	0.10	<0.05	38.6	1	0.8	422	0.46	<0.05	2.93	0.861	0.37	0.5	272
D579955	1.0	<0.002	<0.01	<0.05	0.1	1	<0.2	7.1	<0.05	<0.05	0.03	<0.005	<0.02	<0.1	1
D579956	49.2	<0.002	0.24	0.15	4.7	<1	0.6	335	0.15	0.12	4.61	0.103	0.18	0.5	39
D579957	9.2	<0.002	<0.01	<0.05	0.7	1	<0.2	86.4	<0.05	<0.05	0.47	0.021	0.03	0.1	7
D579958	46.9	<0.002	0.01	<0.05	3.6	1	0.6	607	0.20	<0.05	2.89	0.122	0.22	0.5	33
D579959	24.8	<0.002	0.65	0.11	3.5	1	0.3	737	<0.05	0.42	4.04	0.081	0.10	1.5	21
D579960	53.8	<0.002	0.03	0.08	4.1	1	0.6	666	0.19	0.05	4.05	0.135	0.19	0.9	38
D579961	54.9	<0.002	0.11	0.12	9.7	1	1.0	873	1.52	<0.05	5.70	0.528	0.23	2.1	120
D579962	50.6	<0.002	0.01	0.09	4.4	1	0.7	613	0.17	<0.05	3.52	0.129	0.21	0.6	38
D579963	8.2	<0.002	0.46	0.32	0.7	1	0.2	788	<0.05	9.29	1.29	0.028	0.03	0.3	7
D579964	88.3	<0.002	0.12	0.29	4.3	<1	0.7	255	0.25	0.06	3.36	0.149	0.35	0.5	43
D579965	35.3	<0.002	0.01	0.06	10.8	1	0.7	921	0.21	<0.05	3.56	0.245	0.16	1.0	81
D579966	41.3	<0.002	<0.01	0.12	14.4	1	0.6	1130	0.20	<0.05	5.21	0.304	0.18	1.4	122
D579967	30.1	<0.002	0.01	<0.05	7.7	1	0.5	354	0.10	<0.05	2.98	0.123	0.14	0.8	56
D579968	13.0	<0.002	0.01	<0.05	5.7	<1	0.4	176.5	0.06	<0.05	1.04	0.113	0.06	0.2	44
D579969	65.6	<0.002	0.17	0.07	11.1	<1	0.7	777	0.28	<0.05	6.29	0.287	0.31	1.4	87
D579970	60.4	<0.002	0.42	0.21	12.1	1	0.7	1180	0.24	0.05	22.8	0.293	0.34	2.2	95
D579971	34.8	<0.002	0.03	0.09	3.6	1	0.6	670	0.14	<0.05	2.88	0.120	0.16	0.4	34
D579972	17.9	<0.002	0.13	0.06	1.6	2	0.2	179.0	0.05	5.00	1.22	0.041	0.08	0.9	18
D579973	43.8	<0.002	0.03	0.23	4.0	<1	0.6	423	0.49	<0.05	3.37	0.230	0.21	1.4	39
D579974	47.5	<0.002	0.15	0.15	4.2	<1	0.6	346	0.16	0.07	3.66	0.103	0.18	0.8	39
D579975	38.2	0.042	0.58	2.52	14.7	2	1.5	454	0.18	0.16	2.13	0.293	0.30	1.2	143
D579976	46.0	<0.002	0.03	0.08	4.0	<1	0.5	620	0.18	<0.05	4.04	0.124	0.20	0.6	35
D579977	66.9	<0.002	0.20	0.06	3.8	<1	0.6	617	0.27	0.43	4.08	0.155	0.24	0.9	35
D579978	29.6	<0.002	0.01	<0.05	3.0	1	0.3	70.1	<0.05	<0.05	0.76	0.063	0.13	0.2	25
D579979	10.3	<0.002	0.88	0.18	17.9	1	0.4	672	0.13	1.16	0.64	0.303	0.05	0.3	88
D579980	31.2	<0.002	0.50	0.13	19.4	1	0.6	454	0.07	0.38	3.45	0.167	0.12	0.7	119

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THUNDER BAY ON P7B 6L1

Finalized Date: 3-DEC-2021
Account: BGCETTMQ

Project: Jackfish-Kellyn

CERTIFICATE OF ANALYSIS TB21288637

Sample Description	Method Analyte Units LOD	ME-MS61 W ppm 0.1	ME-MS61 Y ppm 0.1	ME-MS61 Zn ppm 2	ME-MS61 Zr ppm 0.5	Ag-OG62 Ag ppm 1	Cu-OG62 Cu % 0.001	Au-ICP21 Au ppm 0.001	Au-GRA21 Au ppm 0.05
D579941		3.5	3.0	19	69.3			0.106	
D579942		6.0	6.3	27	85.1			0.149	
D579943		3.0	5.6	36	57.5			0.003	
D579944		3.9	5.0	40	74.8			0.001	
D579945		12.7	8.2	25	81.1			0.061	
D579946		3.0	10.9	42	78.3			0.008	
D579947		2.1	15.2	85	124.5			0.017	
D579948		9.1	9.2	20	80.8			0.014	
D579949		6.0	6.8	47	93.0			0.014	
D579950		0.6	16.5	27	55.3			<0.001	
D579951		2.6	3.3	13	39.7			0.149	
D579952		5.9	9.7	32	84.9			0.003	
D579953		0.8	0.6	13	3.9			<0.001	
D579954		0.9	28.1	120	126.5			<0.001	
D579955		0.1	0.1	<2	0.6			0.004	
D579956		7.8	6.7	39	98.8			0.052	
D579957		0.3	1.4	8	9.5			0.004	
D579958		1.0	7.1	42	60.8			<0.001	
D579959		9.2	6.0	24	102.5			0.054	
D579960		2.5	7.4	51	85.2			0.004	
D579961		2.7	20.3	71	158.0			0.004	
D579962		1.2	7.5	53	82.9			0.001	
D579963		3.1	1.1	11	22.8			3.33	
D579964		4.7	6.0	35	85.5			0.013	
D579965		0.4	11.0	49	40.9			<0.001	
D579966		0.4	12.4	71	38.5			0.004	
D579967		1.8	6.7	44	32.5			0.196	
D579968		2.6	3.9	46	12.8			<0.001	
D579969		0.7	12.1	62	104.5			0.006	
D579970		7.1	23.5	76	143.0			0.008	
D579971		4.7	7.6	37	79.7			<0.001	
D579972		2.3	5.4	25	44.7			0.221	
D579973		7.6	8.1	91	83.1			<0.001	
D579974		6.0	5.7	38	85.7			0.025	
D579975		7.2	14.8	141	50.1			0.493	
D579976		2.2	9.0	42	75.3			<0.001	
D579977		5.0	6.8	52	91.7			0.001	
D579978		0.4	2.1	13	8.7			<0.001	
D579979		11.1	9.0	75	28.1			0.221	
D579980		7.1	11.7	105	46.7			0.258	

***** See Appendix Page for comments regarding this certificate *****

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To: BAYSIDE GEOSCIENCE
124 SHERWOOD DRIVE
THUNDER BAY ON P7B 6L1

Finalized Date: 3-DEC-2021
Account: BGCETTMQ

Project: Jackfish-Kellyn

CERTIFICATE OF ANALYSIS TB21288637

Sample Description	WEI-21 Recvd Wt. kg 0.02	ME-MS61 Ag ppm 0.01	ME-MS61 Al % 0.01	ME-MS61 As ppm 0.2	ME-MS61 Ba ppm 10	ME-MS61 Be ppm 0.05	ME-MS61 Bi ppm 0.01	ME-MS61 Ca % 0.01	ME-MS61 Cd ppm 0.02	ME-MS61 Ce ppm 0.01	ME-MS61 Co ppm 0.1	ME-MS61 Cr ppm 1	ME-MS61 Cs ppm 0.05	ME-MS61 Cu ppm 0.2	ME-MS61 Fe % 0.01
D579981	1.11	0.26	8.55	7.4	250	0.81	0.12	6.29	0.05	34.0	54.0	135	0.37	464	9.25
D579982	0.98	0.04	0.12	0.4	690	0.07	0.01	0.05	0.02	0.82	1.0	21	0.40	5.1	0.39
D579983	2.20	0.47	3.24	0.2	1500	1.25	0.41	2.79	0.23	62.3	16.5	111	5.24	182.5	2.19
D579984	0.77	0.32	7.82	0.3	370	3.18	0.32	3.96	0.31	31.9	33.3	38	17.10	111.5	6.50
D579985	1.98	0.05	4.24	<0.2	770	2.69	0.08	8.30	0.62	36.1	25.5	94	6.39	6.1	5.67
D579986	0.41	0.86	2.41	0.3	480	0.73	3.60	0.19	0.02	12.15	1.7	13	0.32	3.3	0.95
D579987	1.01	4.53	2.45	<0.2	1080	0.43	7.95	0.83	0.04	8.66	3.9	29	0.51	2.6	0.81
D579988	0.96	0.22	6.99	1.1	830	1.26	0.21	1.00	0.07	50.5	9.1	26	1.51	1.2	1.75
D579989	1.80	0.04	6.96	<0.2	280	1.69	0.04	4.03	0.14	40.0	37.9	68	4.80	77.2	6.92
D579990	1.00	0.04	7.42	0.4	780	2.68	0.15	3.11	0.06	102.0	22.7	76	3.87	46.7	4.92
D579991	1.96	0.01	0.27	0.3	20	0.08	0.03	0.11	<0.02	6.95	0.4	25	0.17	2.0	0.25
D579992	0.98	0.16	6.89	0.5	730	1.39	0.31	1.29	0.04	38.8	4.5	26	0.74	6.8	1.80
D579993	1.08	0.01	4.24	<0.2	510	0.88	0.02	0.68	0.03	26.8	2.6	21	0.42	2.4	0.94
D579994	1.30	0.24	4.79	0.4	300	1.87	0.14	0.56	0.03	30.8	2.0	26	0.72	14.8	0.77
D579995	1.61	0.05	4.57	0.6	160	0.72	0.12	1.03	0.06	6.44	4.0	42	1.53	2.7	0.87
D579996	2.48	0.06	7.45	1.8	600	2.12	0.02	5.68	0.13	56.5	27.7	232	8.15	40.5	4.67
D579997	2.54	0.29	2.80	0.7	950	0.58	0.05	0.33	0.05	19.00	3.3	25	0.56	2.3	0.82
D579998	2.47	1.59	3.62	1.0	280	0.45	0.14	7.63	0.49	11.70	35.9	59	0.19	8.0	6.17
D579999	1.80	0.08	7.31	1.1	630	1.25	0.10	2.21	0.04	51.6	25.0	189	3.17	79.8	3.94
D580000	0.04	0.02	6.80	1.8	830	1.01	0.03	1.60	0.02	23.9	3.7	24	0.36	23.8	2.43
D904001	1.75	0.02	7.29	<0.2	640	2.07	0.04	2.42	0.10	78.4	18.5	92	5.27	11.2	3.94
D904002	1.48	0.26	1.49	<0.2	90	0.31	0.96	0.08	<0.02	2.47	1.9	26	0.29	9.2	0.78
D904003	1.33	0.65	5.08	<0.2	250	0.98	0.88	0.43	0.03	21.4	5.4	25	0.78	10.7	1.63
D904004	1.52	0.65	2.20	0.6	100	0.33	54.9	0.26	0.02	7.66	3.6	25	0.27	2.9	1.15
D904005	2.50	13.90	1.00	0.8	270	0.13	31.6	0.58	96.1	8.43	6.3	45	0.10	199.5	0.76
D904006	3.09	0.07	7.39	0.8	120	0.62	0.20	7.13	0.18	31.1	39.5	119	0.17	102.0	8.22
D904007	3.65	6.34	0.96	0.3	140	0.20	1.37	0.78	0.19	9.45	23.7	54	0.13	>10000	2.33
D904008	1.23	0.05	3.52	0.6	310	0.58	0.55	0.42	0.03	13.15	1.8	32	0.50	26.2	0.92
D904009	1.56	0.04	6.12	0.2	210	1.62	0.06	0.64	0.05	43.7	2.0	19	0.51	19.0	0.76
D904010	1.47	0.03	6.19	0.2	190	1.63	0.05	0.65	0.06	33.3	3.0	19	0.33	12.0	0.95
D904011	2.26	0.05	6.54	1.9	730	2.24	0.14	5.15	0.26	137.0	23.9	185	2.64	40.7	3.91
D904012	1.27	9.52	0.83	0.7	5780	0.15	24.4	0.81	0.49	14.65	3.2	25	0.32	108.5	0.77
D904013	1.16	0.32	0.21	<0.2	640	0.21	1.24	0.38	0.03	23.2	1.1	29	0.22	17.4	0.35
D904014	0.61	0.12	0.07	<0.2	30	1.93	0.24	0.36	0.02	56.9	1.0	24	0.10	14.4	0.51
D904015	0.93	3.29	7.26	0.9	390	10.30	6.51	3.45	0.06	134.5	13.4	53	0.80	99.6	3.46
D904016	1.39	0.17	7.24	0.6	1040	3.42	0.10	0.81	0.06	102.0	11.1	38	1.78	61.3	2.70
D904017	2.34	0.12	8.61	0.8	140	0.65	0.02	4.39	0.10	33.6	86.3	168	1.95	148.5	8.51
D904018	1.13	0.13	8.79	3.4	310	0.60	0.08	6.58	0.08	34.9	32.5	167	0.67	28.4	7.15
D904019	1.72	0.14	7.21	3.5	230	0.53	0.09	5.58	0.12	36.0	36.0	140	0.70	82.4	6.98
D904020	1.63	0.01	7.80	0.3	40	0.73	0.02	0.37	0.08	11.45	10.2	26	0.23	0.7	2.63

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To: BAYSIDE GEOSCIENCE
124 SHERWOOD DRIVE
THUNDER BAY ON P7B 6L1

Finalized Date: 3-DEC-2021
Account: BGCETTMQ

Project: Jackfish-Kellyn

CERTIFICATE OF ANALYSIS TB21288637

Sample Description	Method	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P	Pb
	Units	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm
	LOD	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10	0.5
D579981		23.2	0.09	1.1	0.086	0.69	12.9	15.4	1.84	1830	6.99	1.49	10.6	161.0	1990	2.3
D579982		0.45	0.08	<0.1	<0.005	0.04	<0.5	0.4	0.01	62	0.92	0.02	0.1	5.3	30	3.9
D579983		8.97	0.20	1.9	0.042	0.79	30.5	11.7	1.23	567	0.43	1.48	2.1	70.7	470	17.6
D579984		20.1	0.20	2.3	0.056	1.75	14.1	31.7	2.29	781	0.10	4.34	3.0	16.2	1300	13.9
D579985		18.75	0.18	1.8	0.057	0.95	17.1	47.1	3.46	1980	0.19	0.54	2.1	37.5	490	9.1
D579986		5.96	0.12	0.7	<0.005	0.49	5.2	1.6	0.15	92	0.40	1.46	1.2	4.3	130	13.3
D579987		8.02	0.15	0.6	0.012	0.49	4.1	3.8	0.17	146	19.00	1.35	0.6	7.6	150	327
D579988		17.20	0.23	2.3	0.015	0.80	24.9	6.3	0.17	364	4.50	4.85	2.3	18.1	600	13.5
D579989		16.85	0.23	3.5	0.066	1.34	17.9	47.3	2.98	1240	0.21	2.14	2.9	19.3	1120	8.0
D579990		19.65	0.29	2.4	0.042	1.87	49.4	26.7	1.74	1020	0.56	3.96	12.7	56.9	1190	8.2
D579991		0.81	0.12	0.1	<0.005	0.09	3.3	0.9	0.03	32	0.32	0.11	0.3	1.5	260	0.7
D579992		19.00	0.23	2.2	0.020	1.73	17.8	8.4	0.45	205	0.37	3.46	3.6	11.8	460	16.4
D579993		10.60	0.19	1.0	0.016	1.28	12.6	6.4	0.32	146	0.42	1.97	2.9	8.2	240	5.2
D579994		14.90	0.19	4.3	0.006	2.09	18.7	5.8	0.16	95	0.18	2.29	3.9	6.8	130	17.0
D579995		9.72	0.18	1.1	0.010	0.97	2.7	3.8	0.18	183	0.59	2.50	1.8	13.0	460	3.6
D579996		18.55	0.25	2.8	0.045	2.52	25.8	37.5	2.09	704	0.13	1.07	3.9	126.0	1030	10.2
D579997		7.95	0.19	0.9	0.007	0.59	8.0	4.3	0.13	117	7.85	1.49	1.2	9.1	190	16.8
D579998		7.94	0.18	0.5	0.030	0.24	4.3	3.6	1.86	1700	13.45	2.61	2.4	70.0	860	5.0
D579999		18.60	0.21	3.0	0.035	1.69	24.4	23.7	1.91	666	1.23	2.57	6.0	84.3	730	6.9
D580000		12.30	0.20	1.8	0.020	1.80	12.1	3.3	0.38	559	3.83	3.14	5.5	13.6	360	2.5
D904001		18.80	0.28	2.8	0.034	1.82	37.8	33.9	2.12	608	0.31	3.98	4.1	43.4	1300	12.4
D904002		4.27	0.14	0.4	<0.005	0.23	1.3	3.6	0.10	47	0.53	0.83	0.8	4.6	90	1.9
D904003		14.40	0.18	1.4	0.015	0.75	9.4	13.1	0.36	147	0.20	3.00	2.2	14.7	310	5.1
D904004		5.56	0.14	0.6	0.006	0.26	3.6	3.0	0.08	43	0.73	1.42	0.7	7.2	150	3.8
D904005		3.05	0.12	0.2	0.050	0.07	3.8	1.1	0.07	106	65.4	0.69	0.3	16.4	70	4390
D904006		20.5	0.22	1.6	0.144	0.26	10.3	4.5	1.93	2180	0.91	2.12	8.5	82.9	1440	5.7
D904007		2.93	0.12	0.3	0.195	0.20	4.3	2.8	0.36	164	0.41	0.36	0.4	11.0	280	12.4
D904008		8.89	0.14	1.2	0.010	1.27	5.4	2.0	0.21	111	0.57	1.65	1.4	5.7	170	13.7
D904009		15.60	0.20	1.8	0.005	0.33	26.7	4.2	0.21	182	0.95	4.92	3.9	5.4	140	9.1
D904010		15.65	0.18	2.7	0.011	0.43	16.5	4.0	0.22	251	0.23	5.00	3.4	9.6	260	13.0
D904011		17.80	0.34	3.9	0.038	1.39	64.0	19.5	2.80	827	0.58	3.95	7.5	148.5	1890	9.7
D904012		1.96	0.15	0.1	0.008	0.09	5.8	2.3	0.20	252	1.07	0.53	0.5	6.4	150	1585
D904013		1.02	0.20	0.3	<0.005	0.09	10.2	0.9	0.11	104	0.77	0.09	0.7	5.9	40	18.0
D904014		0.77	0.20	0.1	0.013	0.01	25.6	0.9	0.11	84	0.18	0.02	1.8	2.9	110	14.4
D904015		19.55	0.32	3.2	0.033	1.78	55.4	12.2	1.49	638	73.2	4.74	34.0	42.7	970	218
D904016		18.75	0.27	2.5	0.028	2.25	47.9	15.3	1.25	390	1.44	4.21	5.1	33.9	1040	10.3
D904017		21.1	0.27	3.2	0.069	0.59	12.5	14.6	2.13	1500	2.32	2.47	7.3	232	1390	2.5
D904018		22.4	0.14	1.9	0.079	0.82	11.6	10.7	1.48	1200	0.93	2.32	6.9	96.4	1530	7.8
D904019		17.70	0.13	2.2	0.074	0.61	12.2	9.3	1.02	1280	1.70	1.22	8.1	86.5	1330	4.7
D904020		20.1	0.09	2.9	0.024	0.09	4.6	24.2	2.84	431	0.20	6.57	4.4	22.2	1000	1.8

***** See Appendix Page for comments regarding this certificate *****

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To: BAYSIDE GEOSCIENCE
124 SHERWOOD DRIVE
THUNDER BAY ON P7B 6L1

Finalized Date: 3-DEC-2021
Account: BGCETTMQ

Project: Jackfish-Kellyn

CERTIFICATE OF ANALYSIS TB21288637

Sample Description	Method / Analyte / Units / LOD	ME-MS61 Rb ppm 0.1	ME-MS61 Re ppm 0.002	ME-MS61 S % 0.01	ME-MS61 Sb ppm 0.05	ME-MS61 Sc ppm 0.1	ME-MS61 Se ppm 1	ME-MS61 Sn ppm 0.2	ME-MS61 Sr ppm 0.2	ME-MS61 Ta ppm 0.05	ME-MS61 Te ppm 0.05	ME-MS61 Th ppm 0.01	ME-MS61 Ti % 0.005	ME-MS61 Tl ppm 0.02	ME-MS61 U ppm 0.1	ME-MS61 V ppm 1
D579981		35.9	0.006	2.65	0.13	33.0	3	1.5	297	0.57	0.53	0.27	1.400	0.20	0.1	298
D579982		2.3	<0.002	0.06	0.52	0.4	1	<0.2	22.7	<0.05	<0.05	0.06	0.008	<0.02	<0.1	3
D579983		48.0	<0.002	0.30	0.20	8.0	1	0.5	471	0.11	0.86	3.73	0.166	0.22	1.2	46
D579984		75.7	<0.002	2.26	0.15	19.6	1	1.0	533	0.20	0.38	1.50	0.403	0.51	0.4	176
D579985		44.5	<0.002	0.16	0.12	19.4	1	1.1	729	0.13	0.08	2.38	0.258	0.21	0.4	163
D579986		11.6	<0.002	0.12	0.09	0.8	1	0.2	225	0.07	0.68	1.14	0.040	0.05	0.2	10
D579987		16.6	<0.002	0.24	0.13	1.9	1	0.3	108.5	<0.05	2.35	1.00	0.031	0.07	0.3	22
D579988		39.1	<0.002	0.80	0.15	3.0	1	0.4	308	0.15	0.22	7.06	0.087	0.13	1.0	24
D579989		64.9	<0.002	0.02	0.32	26.1	1	1.0	418	0.24	<0.05	2.04	0.305	0.27	0.7	190
D579990		65.2	<0.002	0.09	0.15	17.4	1	0.9	619	0.27	<0.05	5.87	0.515	0.26	2.3	179
D579991		3.1	<0.002	<0.01	0.07	0.2	1	<0.2	19.2	<0.05	<0.05	0.38	0.023	<0.02	0.1	2
D579992		39.2	<0.002	0.10	0.09	2.9	1	0.6	688	0.25	0.24	3.23	0.137	0.15	0.6	30
D579993		27.8	<0.002	<0.01	0.09	1.7	1	0.5	395	0.16	<0.05	1.77	0.082	0.09	0.4	17
D579994		55.9	<0.002	0.04	0.10	1.1	1	0.3	237	0.65	0.16	11.85	0.052	0.19	4.0	12
D579995		32.8	<0.002	0.09	0.10	2.3	1	0.3	106.5	0.12	0.20	1.77	0.074	0.12	0.4	24
D579996		90.4	<0.002	0.09	0.12	18.5	1	0.8	263	0.24	0.09	3.19	0.349	0.32	1.0	141
D579997		18.6	<0.002	0.16	0.12	1.5	1	0.3	160.5	0.09	0.31	1.35	0.054	0.06	0.2	22
D579998		7.4	<0.002	3.04	0.19	14.8	1	0.3	455	0.11	2.08	0.31	0.254	0.05	0.4	61
D579999		62.3	<0.002	0.46	0.11	13.7	1	0.8	459	0.45	0.14	5.09	0.319	0.53	1.5	97
D580000		41.3	<0.002	0.01	0.30	5.3	1	1.6	188.0	0.39	<0.05	2.55	0.170	0.16	1.1	29
D904001		72.5	<0.002	0.08	0.07	12.3	1	0.9	658	0.25	<0.05	6.71	0.289	0.30	1.5	108
D904002		9.1	<0.002	0.13	0.08	0.9	1	0.2	39.0	0.05	0.76	0.56	0.028	0.04	0.1	11
D904003		31.2	<0.002	0.32	0.09	2.5	1	0.5	129.0	0.14	1.09	2.37	0.086	0.12	0.3	41
D904004		8.8	<0.002	0.45	0.09	0.8	1	0.2	67.2	0.05	34.1	0.73	0.032	0.03	0.1	11
D904005		2.3	<0.002	0.63	0.17	0.7	2	<0.2	52.7	<0.05	11.30	0.50	0.014	0.03	0.2	3
D904006		7.2	0.002	0.80	0.26	31.0	2	1.4	224	0.47	0.36	0.45	1.130	0.09	0.1	255
D904007		5.8	<0.002	1.42	0.05	2.1	1	0.2	86.9	<0.05	1.53	0.48	0.050	0.03	0.1	21
D904008		32.8	<0.002	0.04	0.07	1.2	1	0.3	244	0.09	0.32	2.69	0.054	0.13	0.5	13
D904009		10.1	<0.002	0.05	0.09	1.2	1	0.2	456	0.29	<0.05	11.80	0.056	0.05	1.7	16
D904010		10.7	<0.002	0.02	0.11	1.7	1	0.4	375	0.27	<0.05	14.35	0.069	0.05	1.8	22
D904011		55.4	<0.002	0.23	0.16	11.2	1	1.0	877	0.32	<0.05	8.81	0.385	0.32	1.8	93
D904012		4.3	<0.002	0.28	0.08	2.2	3	<0.2	282	<0.05	4.58	0.64	0.034	0.04	0.1	8
D904013		3.8	<0.002	0.02	0.06	0.8	1	<0.2	105.0	<0.05	0.07	6.15	0.014	0.03	0.5	6
D904014		0.4	<0.002	0.01	0.05	0.9	1	<0.2	23.0	<0.05	<0.05	17.10	0.010	<0.02	0.5	8
D904015		43.7	0.006	0.03	0.08	12.0	2	1.0	470	0.35	0.25	24.4	0.392	0.26	1.7	101
D904016		65.9	<0.002	0.07	0.09	6.4	1	0.6	589	0.22	<0.05	31.8	0.216	0.34	2.1	69
D904017		25.4	0.004	1.18	0.05	33.4	1	0.5	295	0.41	0.20	0.84	1.030	0.22	0.5	274
D904018		17.9	0.002	0.73	0.11	34.4	1	1.0	535	0.36	0.05	0.90	1.095	0.17	0.5	305
D904019		20.2	0.002	2.05	0.25	26.9	1	1.0	299	0.44	0.10	0.75	1.045	0.34	0.3	220
D904020		0.9	0.002	0.01	<0.05	5.5	<1	0.8	115.0	0.30	<0.05	2.50	0.176	0.02	0.8	35

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.

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To: BAYSIDE GEOSCIENCE
124 SHERWOOD DRIVE
THUNDER BAY ON P7B 6L1

Finalized Date: 3-DEC-2021
Account: BGCETTMQ

Project: Jackfish-Kellyn

CERTIFICATE OF ANALYSIS TB21288637

Sample Description	Method	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Ag-OG62	Cu-OG62	Au-ICP21	Au-GRA21
	Analyte	W	Y	Zn	Zr	Ag	Cu	Au	Au
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOD	0.1	0.1	2	0.5	1	0.001	0.001	0.05
D579981		2.3	32.8	71	37.7			0.004	
D579982		0.7	0.3	7	1.5			<0.001	
D579983		14.2	7.6	60	81.8			0.012	
D579984		17.1	12.8	110	90.1			0.066	
D579985		8.0	14.2	131	66.0			<0.001	
D579986		2.6	1.8	12	25.6			<0.001	
D579987		2.0	2.0	10	21.4			0.438	
D579988		4.4	6.9	23	89.6			0.109	
D579989		0.8	17.1	131	133.0			0.002	
D579990		3.6	25.6	90	101.0			0.005	
D579991		0.2	0.7	3	3.3			<0.001	
D579992		0.9	7.3	32	79.8			0.001	
D579993		0.3	4.2	20	40.8			<0.001	
D579994		1.1	3.4	15	59.7			0.043	
D579995		2.1	3.6	17	46.0			0.026	
D579996		4.7	14.6	67	115.0			0.011	
D579997		3.4	2.1	22	34.5			0.240	
D579998		8.7	5.2	62	16.9			0.682	
D579999		0.8	12.2	92	111.5			0.001	
D580000		0.6	14.7	27	58.1			<0.001	
D904001		2.0	12.0	72	105.5			0.002	
D904002		0.8	1.2	7	15.4			0.076	
D904003		2.4	3.9	22	52.0			0.164	
D904004		1.5	1.7	6	24.7			0.128	
D904005		2.0	1.0	3750	8.7			7.78	
D904006		1.1	30.2	92	54.3			<0.001	
D904007		0.9	1.8	25	9.2		1.010	0.053	
D904008		1.5	2.5	15	34.7			0.007	
D904009		1.3	5.4	11	49.9			<0.001	
D904010		2.3	6.2	13	78.1			<0.001	
D904011		4.7	20.2	86	168.5			0.002	
D904012		2.2	2.1	10	4.5			0.127	
D904013		0.4	2.2	6	15.8			0.002	
D904014		0.2	11.2	5	11.6			0.001	
D904015		5.4	54.7	54	157.0			0.004	
D904016		1.7	17.1	53	95.4			0.013	
D904017		0.3	24.7	187	138.5			<0.001	
D904018		0.6	25.3	105	58.8			0.001	
D904019		0.6	23.3	106	73.6			0.001	
D904020		0.6	12.2	65	111.0			<0.001	

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To: BAYSIDE GEOSCIENCE
124 SHERWOOD DRIVE
THUNDER BAY ON P7B 6L1

Finalized Date: 3-DEC-2021
Account: BGCETTMQ

Project: Jackfish-Kellyn

CERTIFICATE OF ANALYSIS TB21288637

Sample Description / Method / Analyte / Units / LOD	WEI-21 Recvd Wt. kg 0.02	ME-MS61 Ag ppm 0.01	ME-MS61 Al % 0.01	ME-MS61 As ppm 0.2	ME-MS61 Ba ppm 10	ME-MS61 Be ppm 0.05	ME-MS61 Bi ppm 0.01	ME-MS61 Ca % 0.01	ME-MS61 Cd ppm 0.02	ME-MS61 Ce ppm 0.01	ME-MS61 Co ppm 0.1	ME-MS61 Cr ppm 1	ME-MS61 Cs ppm 0.05	ME-MS61 Cu ppm 0.2	ME-MS61 Fe % 0.01
D904021	2.09	0.01	0.69	0.3	180	0.14	0.02	0.63	0.03	4.74	0.8	34	0.32	1.2	0.47
D904022	2.28	0.12	8.18	1.2	570	1.08	0.78	2.19	0.12	50.8	16.1	31	2.08	2.7	2.26
D904023	1.92	0.26	5.62	1.4	340	1.19	0.97	4.91	0.10	9.13	10.2	38	1.71	4.5	1.66
D904024	1.50	0.09	1.94	0.5	260	0.35	0.79	0.33	0.04	11.10	9.1	22	0.57	1.9	1.60
D904025	0.85	>100	3.17	2.5	110	0.48	122.5	1.03	4.22	20.9	55.3	20	0.44	4210	9.05
D904026	1.30	0.51	6.66	1.1	1040	1.28	0.65	4.18	0.07	73.1	23.7	87	0.51	26.9	4.90
D904027	1.70	0.37	7.21	1.1	370	1.08	0.51	3.63	0.12	29.0	26.5	67	9.09	63.8	5.37
D904028	2.47	0.63	6.04	1.6	1260	2.09	3.99	7.02	0.39	105.0	15.7	89	1.04	13.4	3.53
D904029	2.42	0.40	4.71	0.3	230	2.01	2.94	0.31	0.03	26.8	7.9	38	0.46	6.9	2.21
D904030	2.04	0.05	4.99	1.4	120	0.24	0.05	4.75	0.05	16.60	24.9	118	0.13	39.5	3.45
D904031	0.04	0.50	7.59	17.9	1300	0.79	0.20	4.80	0.68	15.10	15.1	30	1.79	775	4.61
D904032	1.87	0.14	8.76	0.9	220	0.58	0.13	5.51	0.10	39.1	53.8	178	1.12	134.0	7.54
D904033	1.42	0.05	7.39	1.1	850	1.24	0.06	1.85	0.03	47.0	6.0	28	1.17	2.5	1.73
D904034	1.80	1.19	7.14	0.8	1030	2.14	0.30	3.19	0.17	91.0	25.5	109	6.41	1480	4.88
D904035	1.47	0.12	6.84	1.7	1040	1.98	0.05	6.02	0.16	191.5	46.0	24	2.52	233	11.50
D904036	1.71	0.05	7.53	0.9	850	1.65	0.15	1.41	0.05	49.8	5.2	28	3.73	3.9	1.62

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To: BAYSIDE GEOSCIENCE
124 SHERWOOD DRIVE
THUNDER BAY ON P7B 6L1

Finalized Date: 3-DEC-2021
Account: BGCETTMQ

Project: Jackfish-Kellyn

CERTIFICATE OF ANALYSIS TB21288637

Sample Description	Method Analyte Units LOD	ME-MS61 Ga ppm 0.05	ME-MS61 Ge ppm 0.05	ME-MS61 Hf ppm 0.1	ME-MS61 In ppm 0.005	ME-MS61 K % 0.01	ME-MS61 La ppm 0.5	ME-MS61 Li ppm 0.2	ME-MS61 Mg % 0.01	ME-MS61 Mn ppm 5	ME-MS61 Mo ppm 0.05	ME-MS61 Na % 0.01	ME-MS61 Nb ppm 0.1	ME-MS61 Ni ppm 0.2	ME-MS61 P ppm 10	ME-MS61 Pb ppm 0.5
D904021		2.31	0.07	0.2	<0.005	0.23	2.1	2.1	0.08	142	0.64	0.18	0.3	3.8	50	1.6
D904022		20.6	0.16	2.6	0.018	1.40	22.7	12.4	0.30	264	2.30	5.25	4.8	21.4	580	6.9
D904023		14.90	0.12	1.7	0.020	1.61	3.7	4.5	0.67	551	1.42	3.97	3.3	25.5	730	10.5
D904024		5.56	0.10	0.6	0.011	0.55	5.3	2.9	0.13	107	0.55	0.76	0.8	8.6	130	7.4
D904025		8.85	0.10	1.1	0.682	0.68	8.7	6.0	0.20	153	4.91	1.71	1.0	131.5	230	3650
D904026		17.65	0.16	1.9	0.052	1.19	32.8	7.2	2.34	818	0.66	3.22	3.8	45.5	1580	24.2
D904027		17.55	0.12	2.4	0.055	1.74	11.9	20.0	2.13	924	0.82	3.75	5.9	65.8	940	17.3
D904028		15.90	0.21	2.7	0.036	1.30	48.7	4.4	2.41	1000	10.20	4.22	4.6	47.0	1270	44.5
D904029		12.40	0.09	1.6	0.013	0.88	6.9	6.4	0.75	188	0.96	3.02	2.5	20.6	580	9.1
D904030		11.00	0.07	1.3	0.037	0.30	6.1	3.1	0.57	827	1.52	1.56	2.9	76.0	760	3.2
D904031		16.10	0.09	1.6	0.105	1.61	6.8	15.9	1.69	889	14.90	2.68	2.8	16.7	910	24.6
D904032		22.0	0.12	2.8	0.090	0.51	12.8	6.7	1.55	1620	0.75	3.17	7.7	160.0	1590	3.4
D904033		20.7	0.15	2.5	0.022	2.25	20.7	13.9	0.64	329	0.42	3.72	4.0	17.4	510	12.2
D904034		19.15	0.19	2.6	0.066	2.23	43.4	33.7	2.53	707	3.78	3.69	4.3	74.3	1650	16.5
D904035		20.4	0.28	5.8	0.090	1.57	92.5	12.4	2.39	1860	2.50	2.33	84.3	33.9	4390	8.0
D904036		20.5	0.13	2.5	0.025	1.83	23.6	12.5	0.42	305	0.21	3.96	3.8	16.4	490	14.0

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To: BAYSIDE GEOSCIENCE
124 SHERWOOD DRIVE
THUNDER BAY ON P7B 6L1

Finalized Date: 3-DEC-2021
Account: BGCETTMQ

Project: Jackfish-Kellyn

CERTIFICATE OF ANALYSIS TB21288637

Sample Description	Method Analyte Units LOD	ME-MS61 Rb ppm 0.1	ME-MS61 Re ppm 0.002	ME-MS61 S % 0.01	ME-MS61 Sb ppm 0.05	ME-MS61 Sc ppm 0.1	ME-MS61 Se ppm 1	ME-MS61 Sn ppm 0.2	ME-MS61 Sr ppm 0.2	ME-MS61 Ta ppm 0.05	ME-MS61 Te ppm 0.05	ME-MS61 Th ppm 0.01	ME-MS61 Ti % 0.005	ME-MS61 Tl ppm 0.02	ME-MS61 U ppm 0.1	ME-MS61 V ppm 1
D904021		6.0	<0.002	0.02	<0.05	0.8	<1	0.2	80.5	<0.05	<0.05	0.32	0.018	0.03	0.1	8
D904022		44.4	0.002	1.31	0.13	4.2	1	0.7	529	0.22	0.60	3.59	0.147	0.21	0.6	42
D904023		36.5	<0.002	0.31	0.10	4.2	1	0.5	198.5	0.15	1.30	1.45	0.123	0.21	1.2	41
D904024		15.4	0.003	0.88	0.06	1.2	1	0.3	107.0	<0.05	0.57	0.93	0.034	0.07	0.2	13
D904025		18.7	<0.002	8.97	0.14	2.0	3	0.5	9190	0.06	41.8	1.67	0.045	0.11	0.6	18
D904026		28.4	<0.002	0.03	0.07	17.4	1	1.0	1190	0.21	0.25	3.98	0.370	0.11	1.2	137
D904027		66.9	<0.002	0.24	0.06	18.1	1	0.9	355	0.40	0.17	2.65	0.649	0.35	0.9	151
D904028		34.5	0.004	1.34	0.10	11.4	1	0.6	455	0.15	0.23	20.7	0.221	0.22	4.8	79
D904029		21.8	0.002	0.59	0.05	3.4	1	0.4	134.0	0.12	0.37	4.09	0.116	0.10	0.8	36
D904030		8.3	0.002	0.58	0.08	14.1	1	0.5	162.5	0.13	0.05	0.40	0.539	0.09	0.2	143
D904031		33.6	0.036	0.60	2.54	13.2	1	1.6	470	0.17	0.19	2.04	0.310	0.29	1.2	147
D904032		14.4	<0.002	1.23	<0.05	35.8	1	0.9	317	0.38	0.10	0.81	1.110	0.14	0.4	286
D904033		60.8	0.002	0.01	0.11	3.8	1	0.7	769	0.28	<0.05	3.43	0.161	0.28	0.6	34
D904034		73.8	<0.002	0.16	0.11	14.6	1	1.0	1130	0.19	0.10	5.29	0.363	0.43	1.0	137
D904035		59.9	0.002	0.02	0.08	27.6	1	1.9	641	3.46	<0.05	10.20	1.050	0.25	2.8	320
D904036		64.3	0.002	0.08	0.15	3.7	1	0.7	534	0.26	0.08	4.77	0.149	0.36	0.9	36

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124 SHERWOOD DRIVE
THUNDER BAY ON P7B 6L1

Finalized Date: 3-DEC-2021
Account: BGCETTMQ

Project: Jackfish-Kellyn

CERTIFICATE OF ANALYSIS TB21288637

Sample Description	Method Analyte Units LOD	ME-MS61 W ppm 0.1	ME-MS61 Y ppm 0.1	ME-MS61 Zn ppm 2	ME-MS61 Zr ppm 0.5	Ag-OG62 Ag ppm 1	Cu-OG62 Cu % 0.001	Au-ICP21 Au ppm 0.001	Au-GRA21 Au ppm 0.05
D904021		0.6	1.2	6	7.9			<0.001	
D904022		3.6	5.6	36	94.9			0.027	
D904023		3.0	8.6	31	70.0			0.192	
D904024		1.5	2.1	9	20.2			0.009	
D904025		2.6	3.5	271	40.9	114		>10.0	23.3
D904026		0.2	14.5	71	59.1			0.057	
D904027		5.1	17.9	93	94.5			0.034	
D904028		8.7	31.3	85	106.5			0.003	
D904029		2.2	12.2	24	56.9			0.006	
D904030		0.6	11.2	57	48.4			<0.001	
D904031		7.7	13.0	148	49.8			0.464	
D904032		0.6	27.5	117	97.8			0.001	
D904033		0.1	9.3	50	85.6			<0.001	
D904034		1.5	13.9	79	96.7			0.562	
D904035		0.9	41.6	157	256			0.008	
D904036		3.9	7.6	44	80.4			0.004	

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Finalized Date: 3-DEC-2021
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Project: Jackfish-Kellyn

CERTIFICATE OF ANALYSIS TB21288637

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

REEs may not be totally soluble in this method.

Applies to Method: ME-MS61

LABORATORY ADDRESSES

Processed at ALS Thunder Bay located at 645 Norah Crescent, Thunder Bay, ON, Canada

Applies to Method:				
	CRU-31	CRU-QC	LOG-21	LOG-23
	PUL-31	PUL-QC	SPL-21	WEI-21

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Applies to Method:				
	Ag-OG62	Au-GRA21	Au-ICP21	Cu-OG62
	ME-MS61	ME-OG62		