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ASSESSMENT REPORT

on the

2021 EXPLORATION PROGRAM
SATELLITE IMAGING

KCR PROPERTY
CLAIM 650103

FORT HOPE AREA, NW ONTARIO
Thunder Bay Mining District

NTS: 5210H
390810 E, 5733818 N
UTM NAD 83, Zone 16

for

SLAM EXPLORATION LTD.
295 Hutchinson Drive
Miramichi, NB Canada E1V 6C7

PREPARED BY:

Rod Moore, Project Manager
&
Michael Taylor, P.Geo
Miramichi, New Brunswick
December 21, 2021

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SUMMARY

This report documents a satellite image analysis and data compilation program conducted by SLAM Exploration Ltd. ("SLAM") on its KCR gold project during Fall, 2021. The program consisted of the examination of remote sensing images, and the application of various techniques and filters to derive applicable images and information, as well as the analysis of this derived data and images. The program also consisted of a compilation of historical exploration work conducted on and near claim 650103. This report details exploration work conducted on claim 650103 which resulted in expenditures of $8,000.

The 2021 exploration program involved the application and analysis of remote sensing imagery/data obtained from Sentinel-2 and Aster satellite images over the Keezhik Lake-Miminiska Lake area of northwestern Ontario with a focus predominantly on SLAM's Nesting Lake area claim 650103 where past activity has generated previous significant drill results including 1m of 64.10 g/t gold and 2 m of 5.97 g/t gold, as well as trench samples to 3.8 m of 18.1 g/t gold. Analysis of satellite imagery revealed potential occurrences of end members of quartz and carbonate as well as arsenopyrite, galena and sphalerite.

As part of the 2021 exploration program, SLAM Exploration Ltd. also conducted a review and compilation of all previously filed exploration data from work occurring within the claim boundaries as well as the immediate surrounding vicinity of claim 650103. This compilation of data upturned additional historical drilling information (assays and drill logs) that occurred along the Ymir (Szetu-Bayne) Zone and the KCR Zone including a historical drill intersection of 2m of 4.32 g/t gold (incl. 0.3 m of 18.19 g/t gold) as well as historical drill logs indicating 15 m core intervals of quartz veining.

Based on results of the 2021 program, the Company proposes additional exploration work be conducted on claim 650103. Additional prospecting/sampling should be undertaken in the targeted areas revealed by the satellite imagery analysis. Geochemical sampling over select regions of these targets could validate/support satellite derived data, particularly in areas lacking outcrop. Detailed review of geophysical surveys in conjunction with satellite image derived targets would also lead to and confirm additional priority exploration targets. An expansion of the soil geochemical survey to cover the entire claim is recommended.

Future drilling is recommended to test the KCR zone where hole MM1001 reported visible gold and produced significant assay results. The KCR gold occurrence is open along strike and at depth; and there is a strong indication from past humus geochemistry surveys that another mineralized zone occurs within 150 m to the north. Two holes stepping to either side of the MM1001 hole would have significant potential for gold mineralization.

INTRODUCTION

Between June 30 and December 20, SLAM Exploration Ltd. ("SLAM") of 295 Hutchinson Dr., Miramichi, NB completed a program of satellite imagery analysis and data compilation on its KCR Project (Claim 650103; 405 ha) located approximately 115 km east - northeast of Pickle Lake and 45 km west of Fort Hope in northwestern Ontario. The property can be accessed by air (float/ski plane or helicopter) from Pickle Lake or Fort Hope, as well possibly via snowmobile trails from Fort Hope

SLAM Exploration Ltd. originally staked claim 650103 (450 ha) based on a historic gold occurrence known as the "YMIR" showing where 3.8 m of 18.1 g/t gold and 4.1 m of 15.8 g/t gold were reported from a trench as well as a 2 m interval of 4.32 g/t gold (incl. 0.3 m of 18.19 g/t gold reported from a past drill hole. SLAM drilled 2 holes in 2010. Hole MM10-01 intersected the Ymir occurrence with an interval of 2 m of 5.97 g/t gold at 17.4 m depth. A 1.0 m core interval (with visible gold) grading 64.1 g/t gold at a depth of 147.2 m represented a new discovery referenced as the KCR occurrence.

The Ontario Geological Survey describes the recorded mineral occurrence (YMIR) as: "…Gold was reported to occur in sheared and silicified metasedimentary rocks containing quartz and carbonate stringers. Mineralization included disseminated pyrite, pyrrhotite, arsenopyrite and visible gold. The mineralized zone occurs in an approximately 3 m wide shear zone that is oriented approximately 050…"

A second recorded nearby gold occurrence approximately 350 m west of SLAM's KCR claim is the 80-MW-13 occurrence, and is partially described by the Ontario Geological Survey, "…as a 1.3 foot wide zone of quartz-carbonate veining (assay value of 0.047 ounce per ton gold). This vein material was mineralized with up to 3% pyrrhotite and pyrite, with trace chalcopyrite and arsenopyrite. The mineralization was encountered near the contact with a quartz-feldspar porphyry intrusion…"

The objective of the fall/2021 satellite imagery analysis and data compilation program were to conduct follow up work, particularly through the analysis/interpretation and application of remote sensing imagery/data obtained from Sentinel-2 and Aster satellite images over the entire KCR claim and immediate area in attempt to discover further zones of mineralization or areas of interest, and generate additional exploration targets through the detection of potential end members often associated with gold mineralization.

SLAM Exploration Ltd. contracted Neil Pendock of DIRT Exploration to perform the satellite imagery services. SLAM employees completed data compilation activities and were responsible for the planning, supervision and project management services.

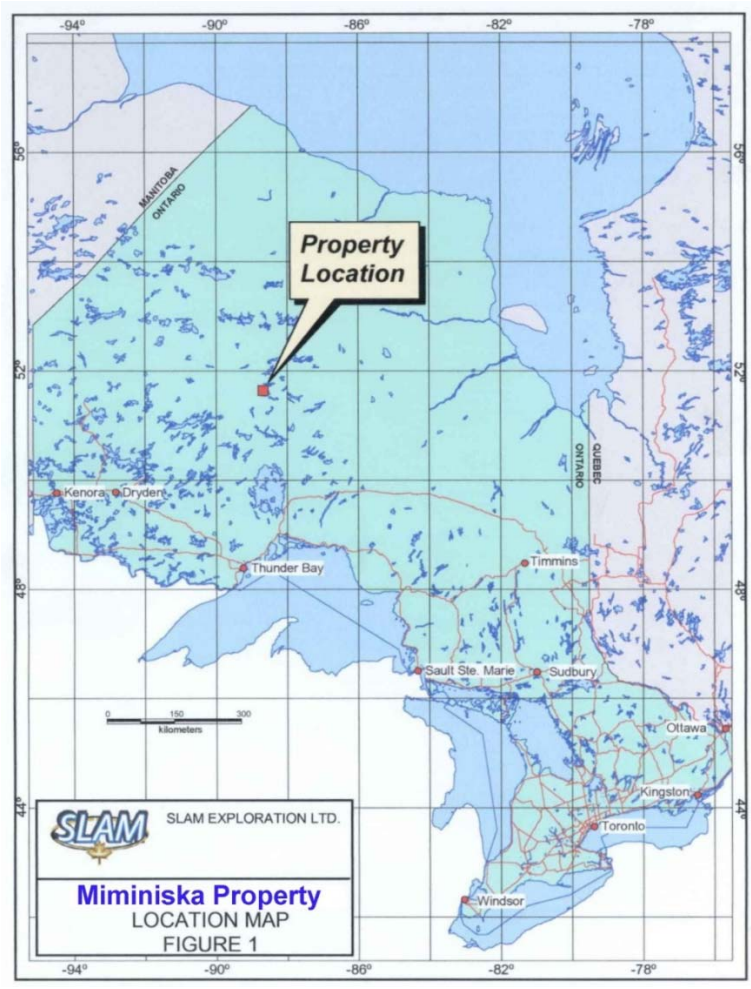
3.0 DISCLAIMER

Mr. Michael R. Taylor, P.Geo, President of SLAM was responsible for the design and implementation of the 2021 exploration program. With the exception of regional scale geological information extracted from public sources, the technical data contained within this report is the result of work compiled by the exploration staff of SLAM Exploration and by contractor Neil Pendock of DIRT Exploration.

4.0 PROPERTY LOCATION AND DESCRIPTION

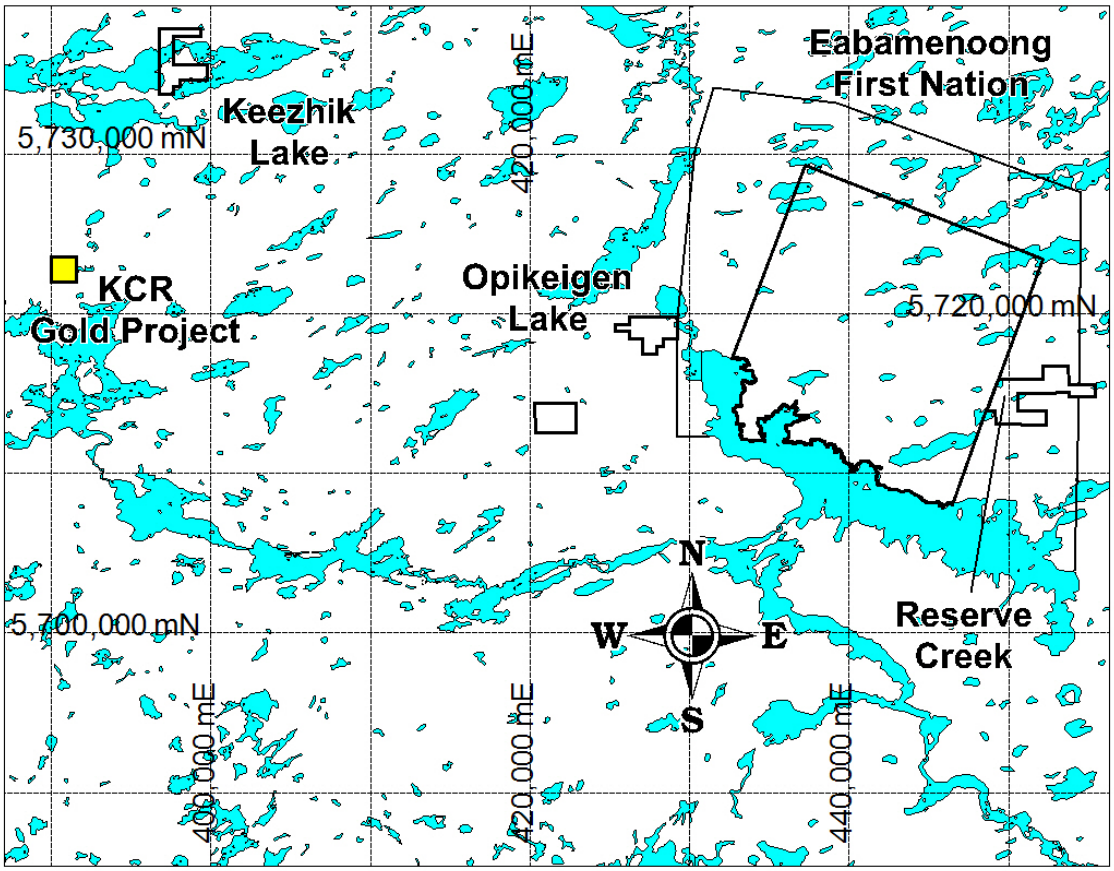
T
he KCR property is located in northwest portion of the Province of Ontario, approximately 100 km east of Pickle Lake, and approximately 50 km west of the settlement of Fort Hope, Ontario. Refer to Figures 1 and 2. Access is via air from Pickle Lake and Fort Hope. A resort lodge (Miminiska Lodge) with a grass airstrip is located on the north shore of Miminiska Lake. The KCR property is 100% owned and operated by SLAM Exploration.

Figure 1: Property Location



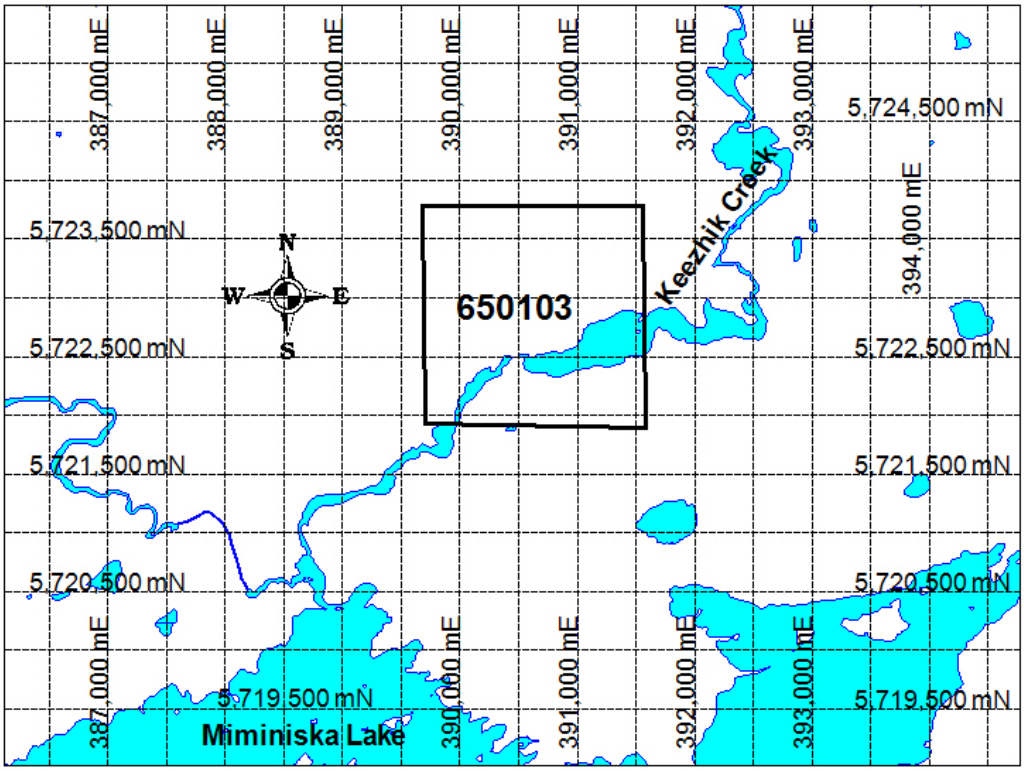
The KCR Property lies within the Traditional Territories of the Eabametoong First Nation ("EFN"). In May 2010, SLAM and EFN signed an agreement to guide exploration projects in this area. Although that agreement has expired, SLAM intends to consult with EFN and negotiate an updated agreement for SLAM activities.

Figure 2: Regional Location Map



The KCR Property is comprised of one (1) unpatented mining claim registered to SLAM Exploration Ltd., totaling 20 claim units located in the Thunder Bay Mining District, Ontario in NTS area 52P. The rectangular property includes two (2) known Au occurrences and covers 350 hectares of favourable geology. The claims are not surveyed and are shown on the claim map (see Figure 3).

Figure 3: Claim Map



5.0 ACCESS, PHYSIOGRAPHY & LOCAL RESOURCES

The property can be accessed via helicopter, float or ski-equipped plane from Fort Hope or the towns of Pickle Lake or Nakina, Ontario. Alternatively, the property can be accessed from Fort Hope by snow machine in winter. Fort Hope has an all season airstrip and is serviced daily by commercial flights originating from the city of Thunder Bay, Ontario located approximately 350 kilometers to the south. Fuel, equipment and bulk supplies can be delivered to Fort Hope via winter road from Pickle Lake given enough advance planning.

The KCR Zone location is about 1.6 km north of Curry Bay of Lake Miminiska. A widening of Keezhik Creek enables a floatplane to land within easy walking distance of the zone.

Accommodations are available in Fort Hope at the Construction Lodge owned by Eabamatoong First Nation. A limited amount of construction equipment is available in Fort Hope. A variety of exploration services, including diamond drilling, assaying, outfitters and construction contractors are available in Thunder Bay. Depending on the

time of year, accommodations may also be available relatively close to the property at the Miminiska Sport Fishing Lodge.

Much of the topography in the vicinity of Fort Hope consists of wet bogs or thick muskeg, typical of the Canadian Shield. Topographic relief is generally low to flat-lying. The few hills present appear to be comprised primarily of glacial sand, gravel and rounded granitic boulders. Almost the entire property is covered by muskeg or esker like glacial features comprised of sand and boulders with few rock outcroppings, often occurring in relatively dense clusters.

6.0 EXPLORATION HISTORY

The area was first mapped in 1937 by V.K. Prest (Prest, 1939). Further government work included airborne magnetic surveys which were carried out by the Ontario Department of Mines in 1959. The area was mapped in 1969 as part of Operation Fort Hope (Thurston and Carter, 1970); and then in 1981 was re-mapped by Henry Wallace as part of Ontario Geological Survey, report 214.

A number of exploration programs have been conducted on SLAM Exploration Ltd.'s KCR claim and immediate surrounding area.

From **Mann, J. Leslie**; Nov. 1984; Geological, Geochemical and Geophysical Report; Keezhik Creek Project, he stated:

"The first mention of work in the Keezhik Creek property area is contained in O.D.M report 48 (1939), part 6, p 2 where it reported that some 30 claims were staked on a gold-quartz vein with the "break" striking N50E. A drill program of unknown extent was apparently carried out at this time."

In 1959-1960, the northeastern part of the property was included in a ground magnetic, electromagnetic and geological surveys done by M.J Boylen Engineering offices subsequent to airborne geophysical surveys conducted in the region in 1959 during a search for base metal sulphides. No significant anomalies were located.

In 1961, Mr. J.C Baker located an old trench and two drill holes 83 m north of the shore of Keezhik Creek near the west boundary of Claim TB518918. No work was done on the showing at this time other than to establish the presence of gold. In 1962, a trenching and sampling program was conducted in the trench area. During the period 1973-1974, detailed prospecting was carried out by A.S Bayne and Company. In the winter of 1976, a magnetometer survey was performed over the three main claims of the property by J. Koski. In 1981, a VLF-EM survey was conducted by M. Ogden over the same claims."

In 1980, New Jersey Zinc Exploration Co. Limited drilled 5 holes (total 426.31 m) near the borders of SLAM's current KCR claims. The Ontario Drill Hole Data Base states

that sampling was indicated, but no results were given. Drill logs for these holes, however have been located.

3 of the holes (80-MW-13, 80-MW-14 and 80-MW-15) were drilled within a 350 m distance west of SLAM's KCR claim's southwestern corner. Of note is DDH 80-MW-13 (389357 E, 5721871 N) of which the OGS Mineral Occurrence description describes a 1.3 ft wide zone of quartz – carbonate veining with up to 3% pyrrhotite/pyrite and trace chalcopyrite and arsenopyrite that assayed 0.047 g/t gold. Zones (up to 2 m thick) of quartz -carbonate veining (concentrations ranging from 5-10% and up to 70%) were reported throughout the hole which was predominantly "feldspathic arenite" with minor wacke layering as well as a lower unit of quartz-feldspar porphyry.

2 other holes (SC-80-1, SC-80-2) were drilled approximately 50-100 m east of the KCR claim's southeast border. SC-80-01 (391970 E, 5722026 N) reported a 5 m zone of "moderate" quartz-carbonate veining hosting localized arsenopyrite as well as 1-2% disseminated pyrite/pyrrhotite at 93 m – 98 m. SC-80-02 (39193 E, 5722361 N) intersected a 5 m wide strongly sheared zone at the hole bottom (87 m) hosting 10 – 15% quartz – carbonate veinlets and veins (to 20 cm) with disseminated chalcopyrite and pyrite.

In 1984, Anaconda Canada conducted exploration on their Keezhik Creek property. 16 of the 56 claims were optioned from S.S Szetu and A.S Baynes (Szetu-Baynes). They conducted line cutting (25 km), mapping and sampling (74 grab samples). Total field, magnetic gradient and VLF-EM surveys were conducted.

Samples from a trench on a shear returned 3.8 m of 18.1 g/t gold, with the "pyritized host rock" returning less than 250 ppb gold (Mann, 1984). Mann also stated that the shear zone didn't have a geophysical response, and that EM anomalies are related to sulphide rich argillite horizons.

According to Mann, the trench zone consists of rusty, weathered, pyritized argillites and wackes hosting quartz veins and stringers striking 055 and dipping steeply to the southwest. It has a width of approximately 3.5 m and "lenses" over a distance of approximately 3 m towards the northeast. The weighted average across the end of the trench returned 3.8 m of 18.1 g/t gold. Previous sampling by Baynes returned 4.1 m of 15.8 g/t gold.

Anaconda Canada Exploration Ltd. drilled a total of 6 holes into the Szetu-Baynes showing in March-April, 1985. The holes were drilled in pairs 10 m apart along the projected strike of the shear/veining. KC-01 and KC-02 were drilled directly below the trench (45/60 degrees respectively). Logs reported predominantly "sandstones" with varying degrees of quartz stringers and veins with associated sulphides (generally 1-2%) in localized sections.

Depths of intersections have been estimated using drill section scales. KC-01 intersected an interval of 1.1 m grading 4.86 g/t gold (incl. 0.2 m of 15.3 g/t gold) at approx. 23 m,

with KC-02 returning 2 m of 4.32 g/t gold (incl. 0.3 m of 18.19 g/t gold) at about 27 m depth. An interval of 0.8 m of 2.97 g/t gold (12 m depth) was reported in KC-03. KC-04 returned 0.5 m of 4.48 g/t gold at approx. 32 m depth. KC-05 and KC-06 were drilled on the same section, but from opposite sides of the interpreted zone towards each other. No gold values from either hole were noted on the historic sections. It is worthwhile to note that a unit of quartz porphyry was recorded in holes KC-02 to KC-06 with the unit 1.5 m – 3 m thick in holes 2-4, and then 15 m – 25 m thick in holes 5 and 6 at 20 m west of the original showing.

In 1985, Darius Gold Mines Inc. contracted an airborne VLF / magnetometer survey over their Keezhik Creek property in which 74 miles were flown. They noted magnetic trends generally east-west across the property. A number of conductors were also interpreted as a combination of shear zones, stratifom sulphides and graphitic argillite (Troup, W.R; 1986).

In 1986, Goldfields Canadian Mining Ltd (on behalf of Darius Gold Mines Inc.) drilled 9 holes on their Szetu/Baynes property. 3 of the holes were on SLAM's current KCR claim. M86-7 was drilled at 390925 E / 5722382 N. M86-8 was drilled at 390864 E / 5722490 N, while DDH M86-9 was drilled at 390448 E / 5722368 N.

Though no assays could be located, M86-7 intersected a 31 ft zone (820.0 – 851.5 ft) with "common" quartz-carbonate and quartz tourmaline stringers in greywacke including a 3.5 ft concentrated zone of quartz – tourmaline veining (Diamond Drilling Report 16). M86-9 intersected a "massive white quartz vein" with 1% sulphides overall (pyrite, arsenopyrite) from 70.2 ft – 112.0 ft.

In 2008, SLAM drilled hole MK0819 (382045 E, 5719602 N) into the YMIR (Szetu-Baynes) Zone and intersected 2 m of 5.97 g/t gold (from 22.44 m – 24.44 m). It was drilled below the historic trench, intersecting silicified greywacke in the footwall of the Miminiska iron formation (Clark, 2008).

In 2010, two follow up holes (MM10-01 and MMI0-02) were drilled by SLAM Exploration Ltd. to test the depth and extent of mineralization and to further delineate the YMIR zone and discover the KCR Zone (Publicover/Taylor, 2010). Both holes were drilled from the same location of 390925 E, 5722650 N with MM10-01 being at a dip of 45 degrees, and MM10-02 at 60 degrees with both at an azimuth of 345 degrees. DDH MM10-01 particularly returned numerous intervals of gold mineralization. See table below.

Table I: 2010 KCR Drill Results

DDH No	From (m)	To (m)	Width (m)	Gold (g/t)
MM10-01	17.4	17.9	0.5	2.22
MM10-01	17.9	19.4	1.5	19.70
MM10-01	20.3	21.2	0.9	6.52
MM10-01	139.6	140.6	1.0	3.61
MM10-01	147.0	148.0	1.0	64.10

MM10-01	158.8	160.0	1.2	1.72
MM10-02	47.5	49.0	1.5	1.19
MM10-02	49.0	50.5	1.5	1.61

Of note, in MM10-01, visible gold was observed at 140 m within a quartz stringer in wall rock near a near a 6.4 m interval of quartz porphyry. Visible gold was also noted in the 1.0 m sample grading 64.10 g/t gold, which notably occurred below a gold in soil anomaly (Publicover/Taylor, 2010).

7.0 GEOLOGICAL SETTING

7.1 Regional Geology

The KCR Property is situated within the Uchi Subprovince of the Superior Province, a subdivision of the Canadian Shield. The Uchi Subprovince is a 600-kilometre long greenstone belt that extends from Lake Winnipeg to the Hudson Bay Lowlands, hosting the Pickle Lake, Rice Lake, and world-famous Red Lake gold mining camps In the Miminiska-Keezhik area the 40 kilometre wide greenstone belt is bounded on the north and south by granitic stocks. Uchi Sub-province rocks in the Miminiska-Keezhik project area comprise an easterly-trending bi-modal sequence of meta-volcanics intercalated with meta-sedimentary rocks. The Miminiska supracrustal rocks are believed to be metamorphosed to upper amphibolite grade while the Keezhik supracrustal rocks appear to have only reached the lower amphibolite grade of metamorphism. All the above units are intruded by younger diabase dykes trending both north-south and east-west (probably middle Precambrian in age).

Mineral deposits in the region are predominantly classified into four main groups:

- gold bearing quartz-carbonate veins and shear zones in clastic metasediments and metamorphosed iron formation;
- magnetite-quartz and carbonate-quartz iron formation associated with wacke-mudstone sequence;
- lithium bearing pegmatite dykes;
- base metal sulphide deposits associated with sulphide iron formation and felsic to intermediate metavolcanics.

7.2 KCR Property Geology

The KCR property lies on the north flank of a regional scale synclinal structure consisting of a belt of predominantly mafic flows and tuffs that are bound by clastic sediments to the south and the Troutfly Lake Granodiorite Batholith to the north. The volcanic unit averages 2,000 metres thick in the centre and thickens in to the east and west. Laterally, there is a significant amount of interflow sediments interlayered with the mafic volcanics.

These sedimentary layers are mudstone and sulphide/graphite argillite beds with intercalated chemical sediments such as chert and oxide iron formation. These interflow zones are typically marked by airborne and ground EM/magnetic anomalies. Locally there is porphyry intruding both the mafic and sedimentary units. The rock units strike east to northeast and are sub-vertical. Stratigraphic tops are generally to the north/northwest. The tuffaceous parts of the mafic volcanic beds are more susceptible to foliation and shearing. Many of these areas manifest themselves as discreet shear zones. The property is host to widespread areas of alteration and mineralization within the mafic flow/interflow sediment horizons. The alteration is typically carbonatization, silicification, sericitization, and sulphidization. Gold is present in quartz and quartz-carbonate veining, and altered shear zones in the volcanics and interflow sediments. The sulphide minerals are predominantly pyrite, pyrrhotite and arsenopyrite.

While outcrops are generally scarce, airborne and ground-based geophysical surveys give evidence of structural events such as folding and faulting.

7.3 The KCR Zone

The KCR Zone, also known as the YMIR zone and the Szetu-Baynes gold occurrence, as mentioned previously is believed to have been discovered and initially worked in the 1930's. Signs of the historic work include a trench 1.5 m to 2.5 m wide, 1 m to 2 m deep and 16 m long. Surface sampling as well as drill holes have returned significant grades over time. In 1974, comprehensive sampling yielded 3.35 m of 14.9 g/t gold (cut). New Jersey Zinc evaluated the occurrence in 1980 and reported 4.1 m of 11.6 g/t gold (cut); and in 1984, Anaconda Canada's sampling of the trench returned 3.8 m of 18.1 g/t gold (cut).

Gold mineralization is hosted in an intensely silicified shear zone cutting greywacke. The sulphide minerals observed are reported to be predominantly pyrite and pyrrhotite, with localized arsenopyrite. Through 70 samples collected by Anaconda Canada, Mann (1984) noted a correlation between elevated arsenic levels and gold values in the samples. According to Baynes (1984), a strong E-W trending humus gold anomaly with gold values as high as 150 ppb occurs approximately 100 to 130 m north of the trench.

In 2008, SLAM's hole MK0819 tested directly below the showing, and intersected 2 m of 5.97 g/t gold approximately 15 m below the mineralized trench in a silicified greywacke in the footwall of the Miminiska iron formation. SLAM's 2010 follow up holes, MM1001 and MM1002, were designed to further test the KCR (YMIR) Zone as well as a strong humus geochemistry anomaly approximately 150 m north where anomalous soils up to 150 ppb gold were detected in a previous geochemical survey. This survey is discussed below and shown there as Figure 22.

SLAM's 2010 hole MM1001tested the soil geochemical anomaly to the north as well as mineralization at depth that was encountered in MK0819. Visible gold was reported at 140 m within a quartz stringer in the wall rock near a 6.4 m interval of mineralized quartz porphyry. Notable results include a 7.2 m interval that averaged 9.47 g/t gold (incl. 1.0 m of 64.1 g/t gold) starting at a depth of 147 m. Visible gold in this interval occurs directly below the gold soil anomaly.

MM1002 was drilled from the same location and azimuth as MM1001 but at a steeper dip to test the zone at a deeper level. Notable results include a 3 m interval grading 1.76 g/t gold at 48 m.

Table II: Weighted Assay Averages, Drill Holes MM1001 and MM1002

DDH No	From (m)	To (m)	Width (m)	Au (g/t)	Au (oz/t)
MM1001	17.4	21.2	3.8	9.794	0.286
MM1001	17.9	19.4	1.5	19.700	0.575
MM1001	20.3	21.2	0.9	6.520	0.000
MM1001	139.6	140.6	1.0	3.610	0.105
MM1001	147.0	160.0	13.0	9.474	0.276
MM1001	147.0	148.0	1.0	64.100	1.870
MM1002	47.5	50.5	3.0	1.755	0.051

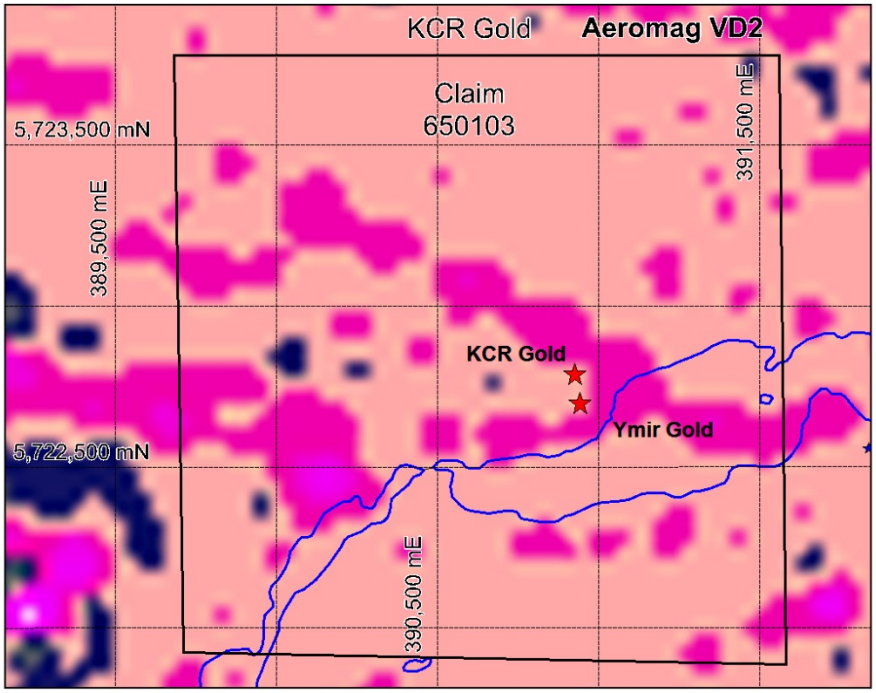
8.0 2021 EXPLORATION PROGRAM

SLAM Exploration Ltd. contracted Neil Pendock of DIRT Exploration to perform the satellite imagery services. SLAM employees completed data compilation activities and were responsible for the planning, supervision and project management services. Pendock provided images in the form of registered TIFF files. The tiff format images were opened in MapInfo Discover and saved as tab files.

The objective of the satellite imagery analysis and data compilation program is to generate exploration targets through the analysis and interpretation of remote sensing images obtained from Sentinel-2 and Aster satellite images over the KCR claim. This could provide a technique for the discovery of potential extensions and further zones of mineralization. In the bigger picture of the Fort Hope mineral belt, it could generate new areas of interest and additional exploration targets through the detection of potential end members associated with gold mineralization.

The aeromagnetic data shown in figure 4 can be compared with the sentinel images below.

Figure 4: Aeromagnetics_CVD2



8.1 SENTINEL-2 IMAGES

Images were provided for 16 end members and the coverage within the KCR claim is shown on Figures 5 to 21 respectively. A general interpretation of these images is discussed in Appendix II.

Figure 5: S 1 Pyrite

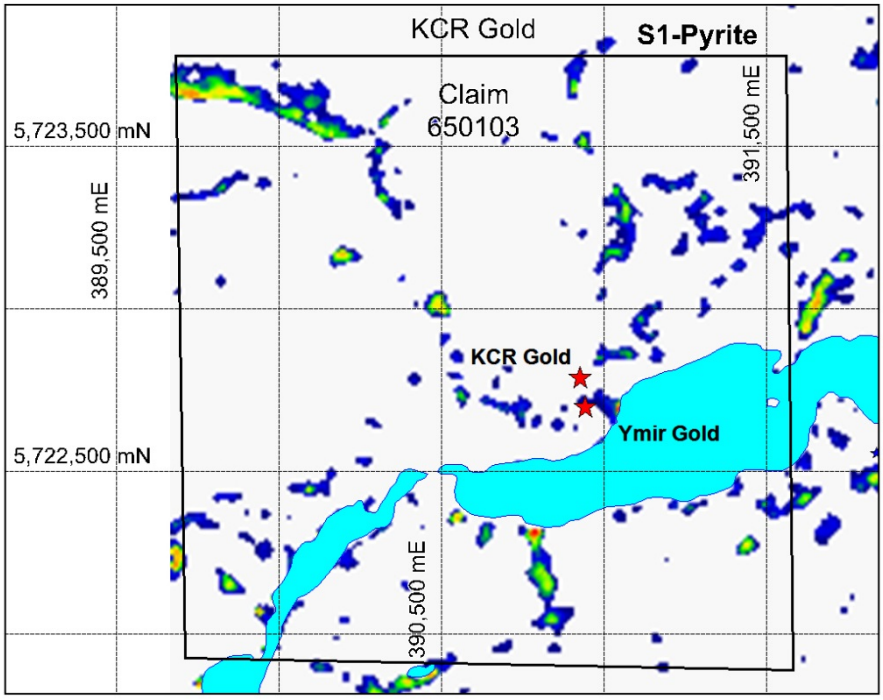


Figure 6: S 2 Almandine

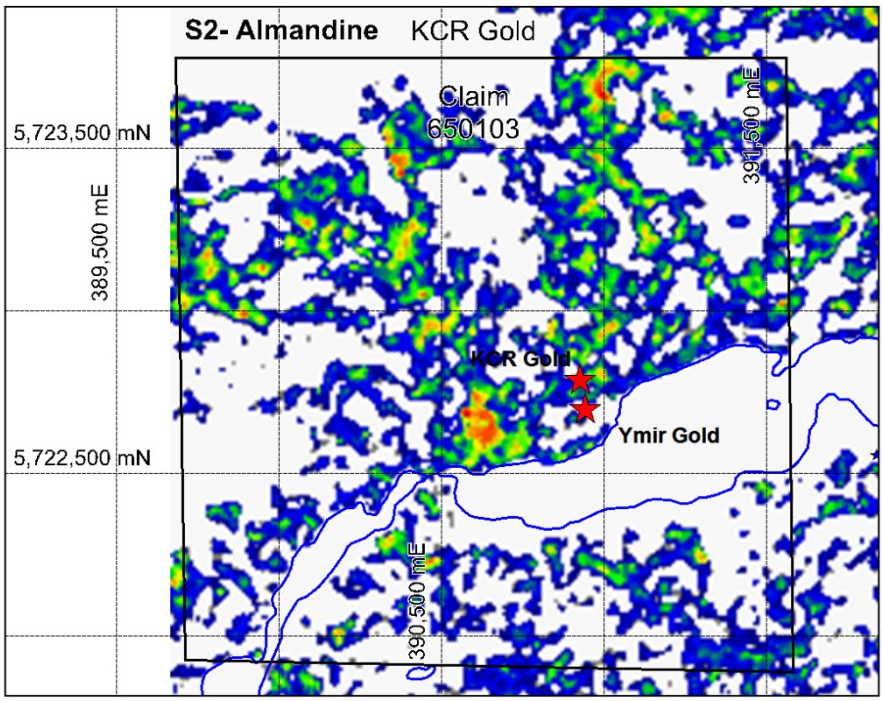


Figure 7: S 3 Vegetation

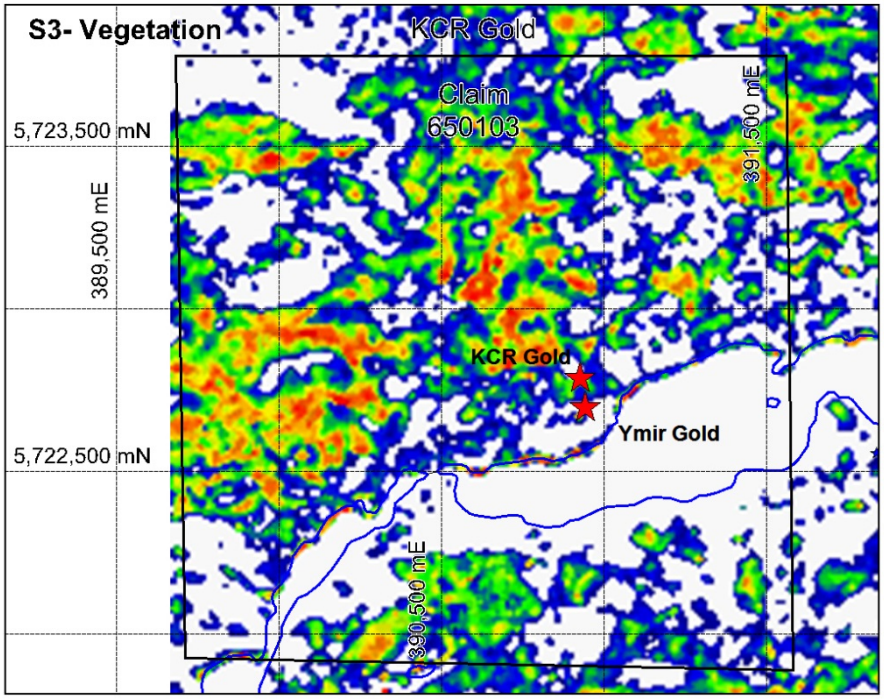


Figure 8: S 4 Microcline

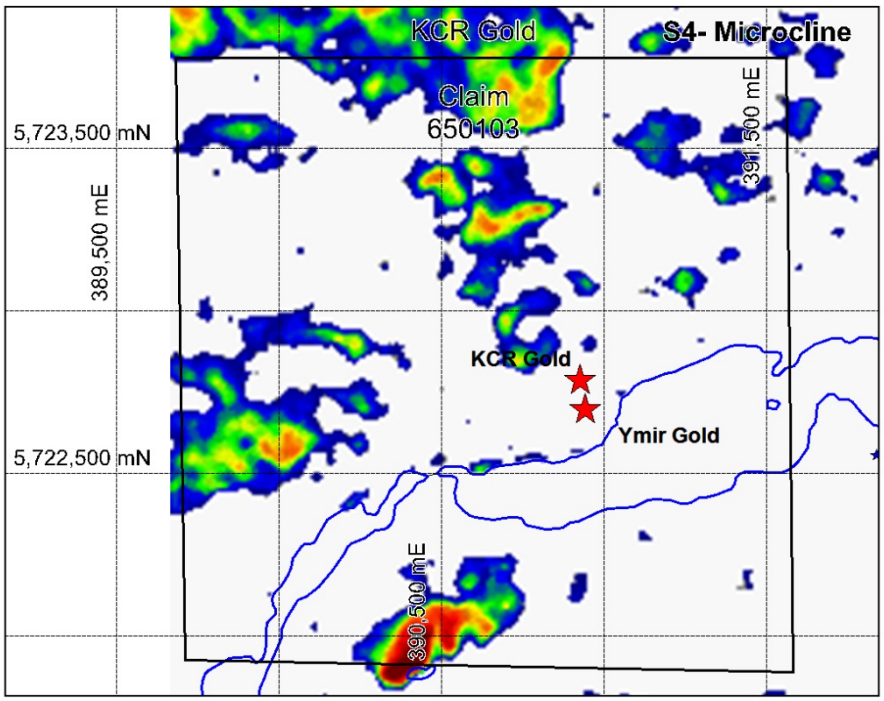


Figure 9: S 5 Vegetation

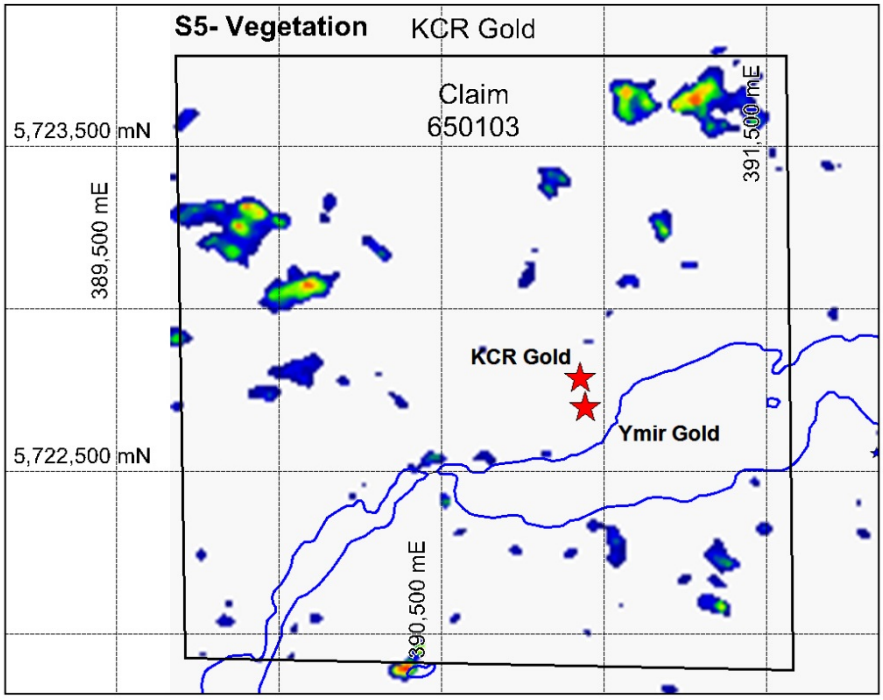


Figure 10: S 6 Serpentine

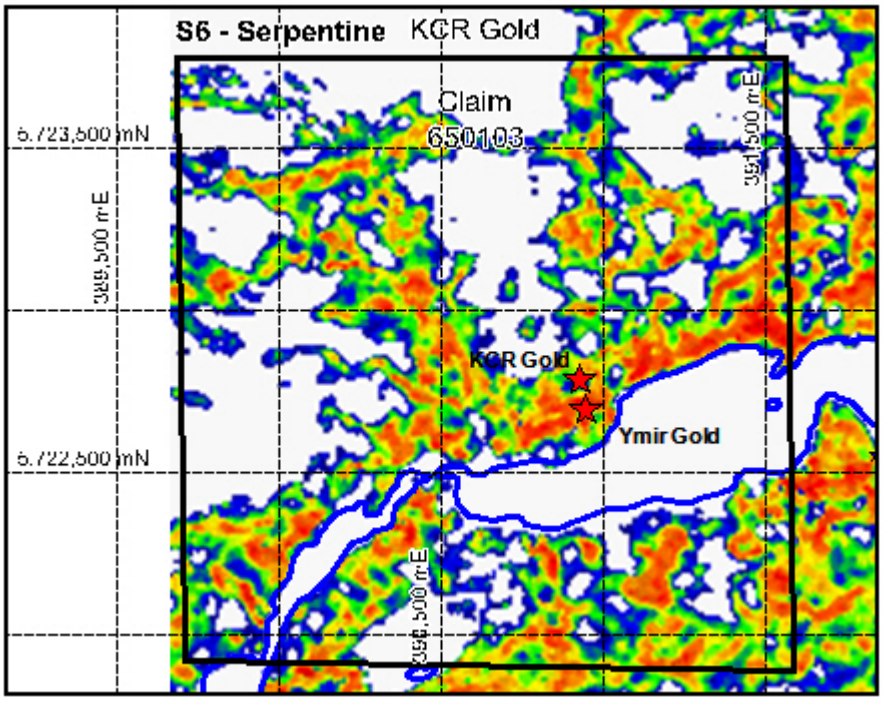


Figure 11: S 7 Arsenopyrite

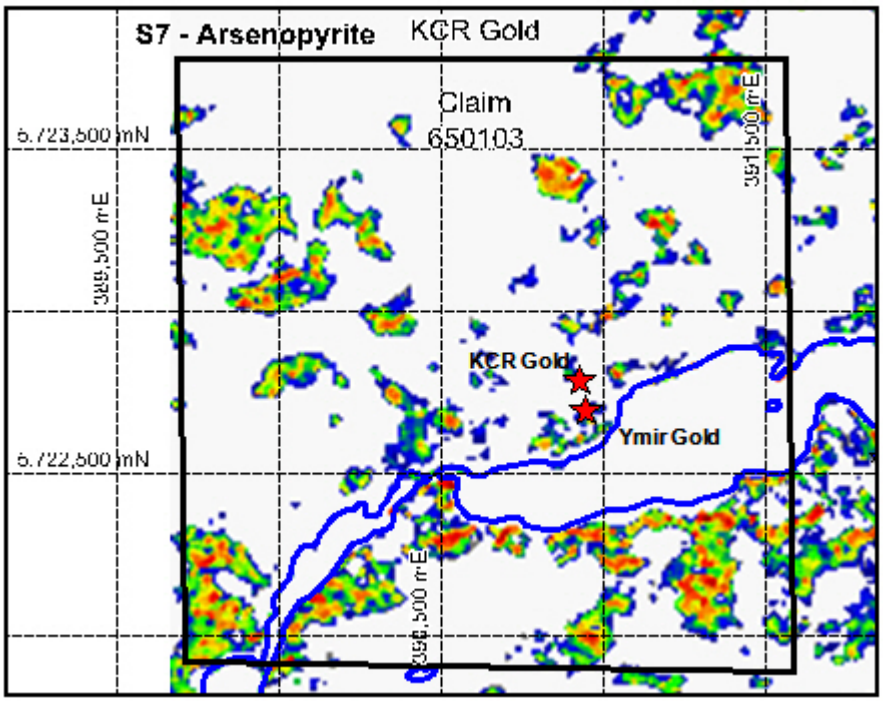


Figure 12: S 8 Hematite

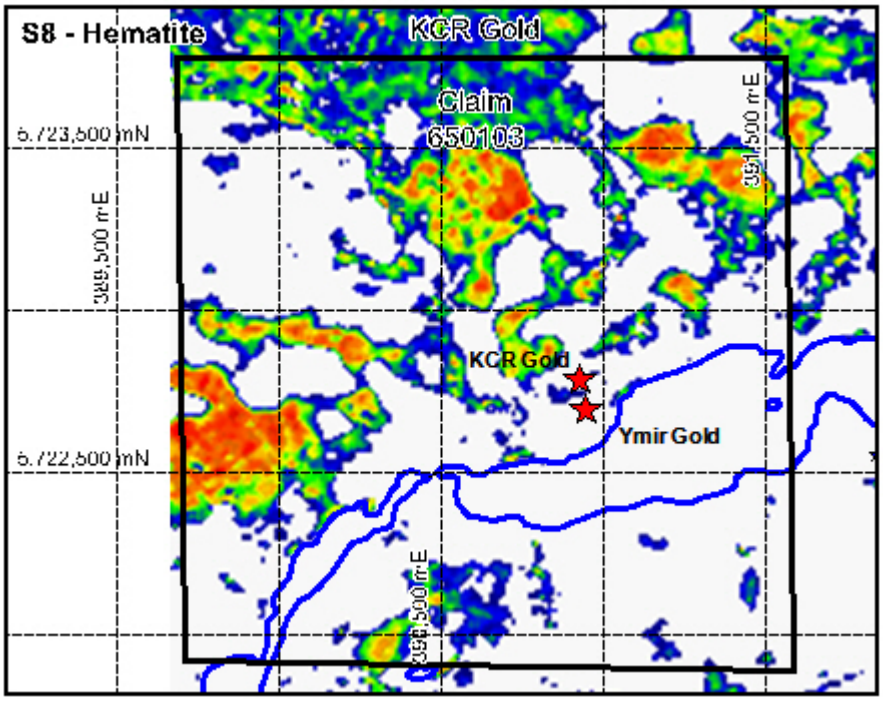


Figure 13: S 9 Hornblende

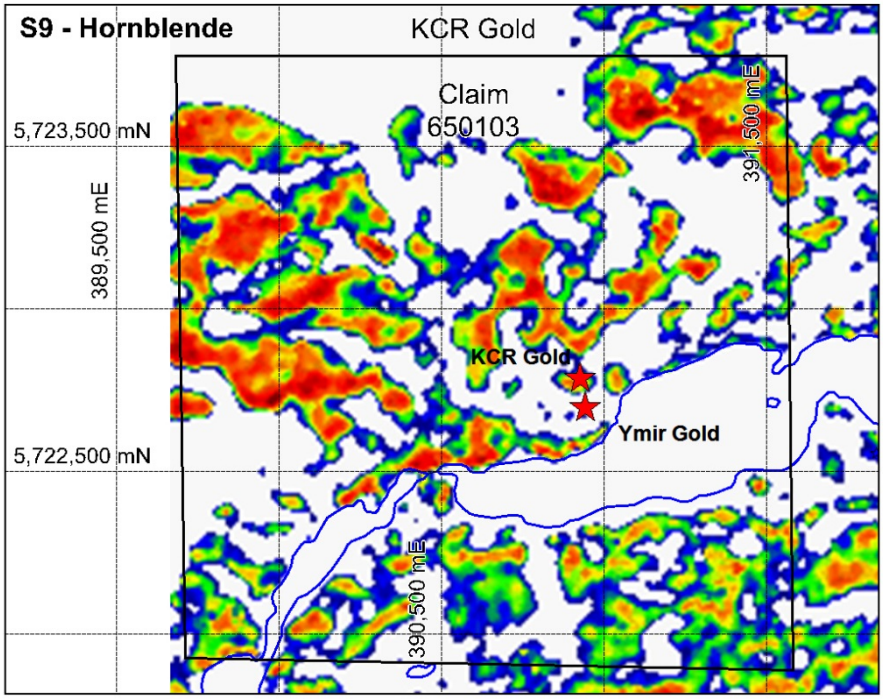


Figure 14: S 10 Vegetation

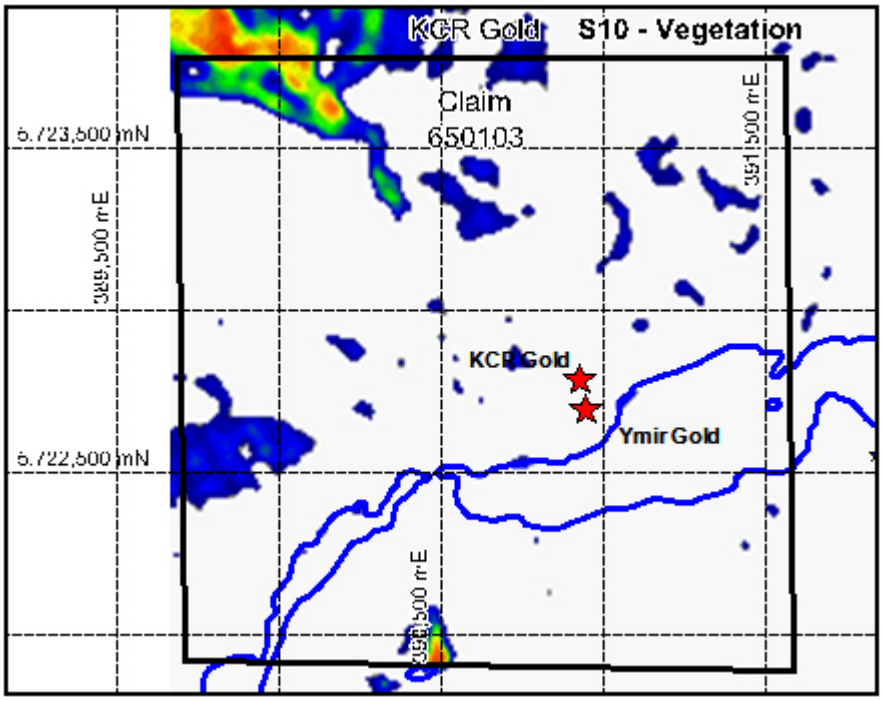


Figure 15: S 11 Quartz

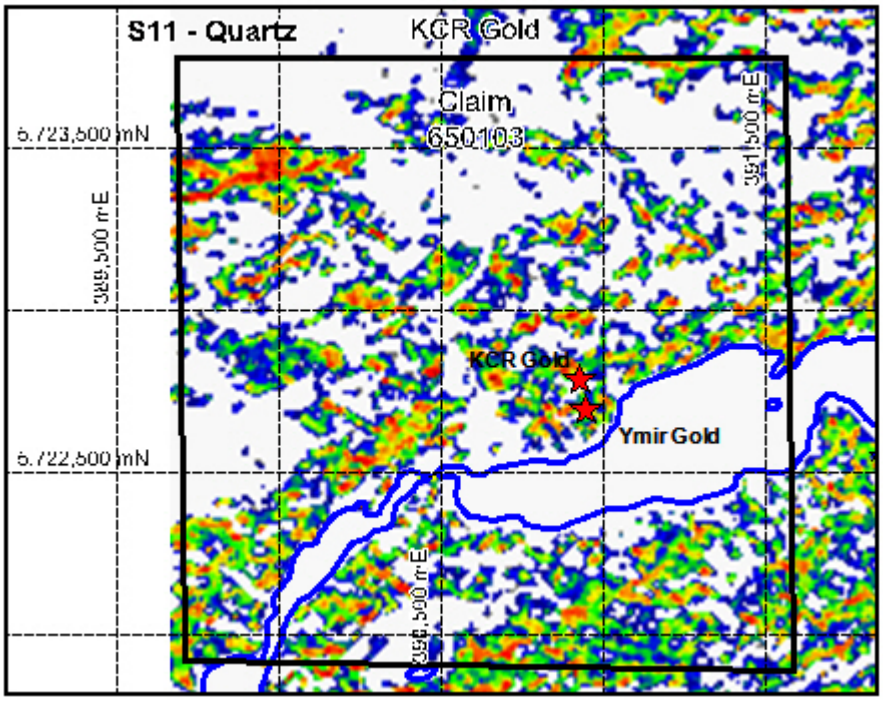


Figure 16: S 12 Galena

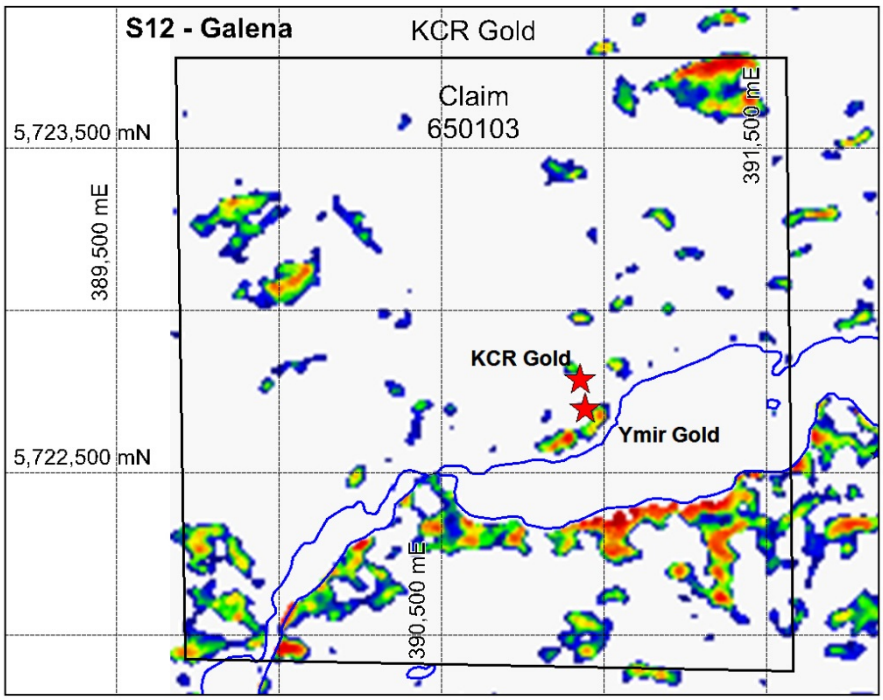


Figure 17: S 13 Vegetation

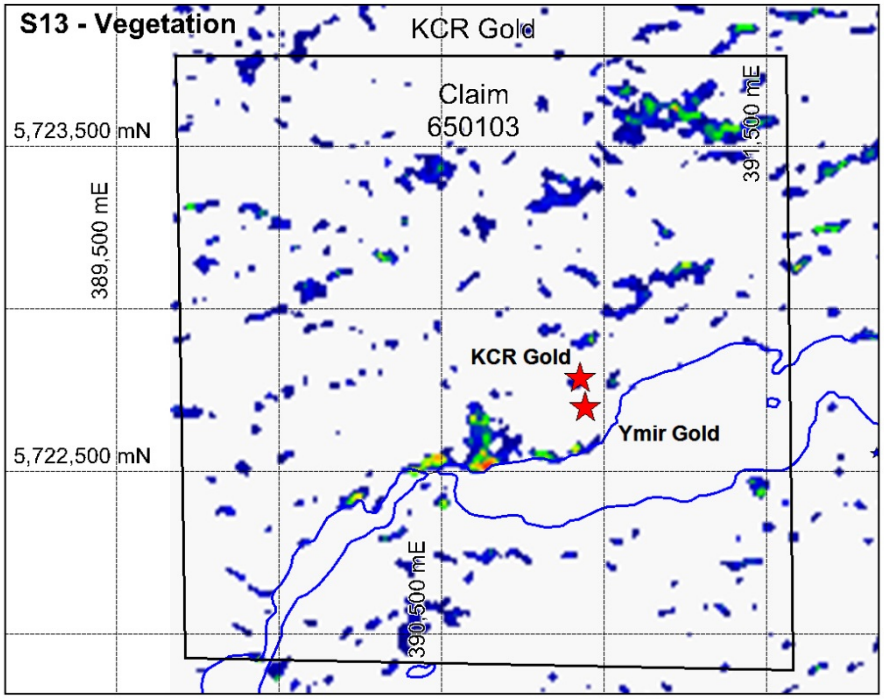


Figure 18: S 14 Magnetite

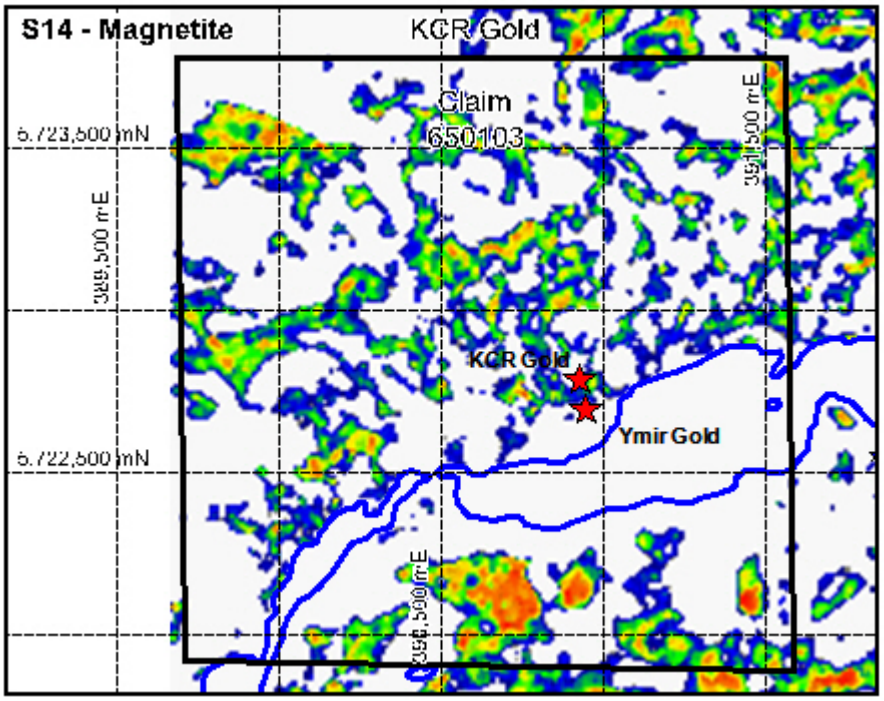


Figure 19: S 15 Chlorite

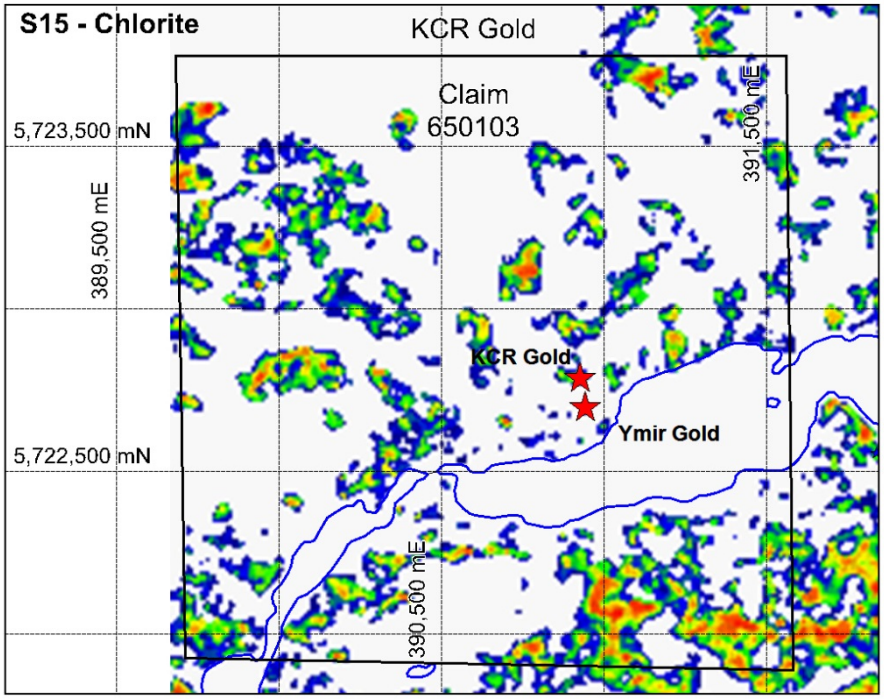


Figure 20: S 16 Chalcopyrite

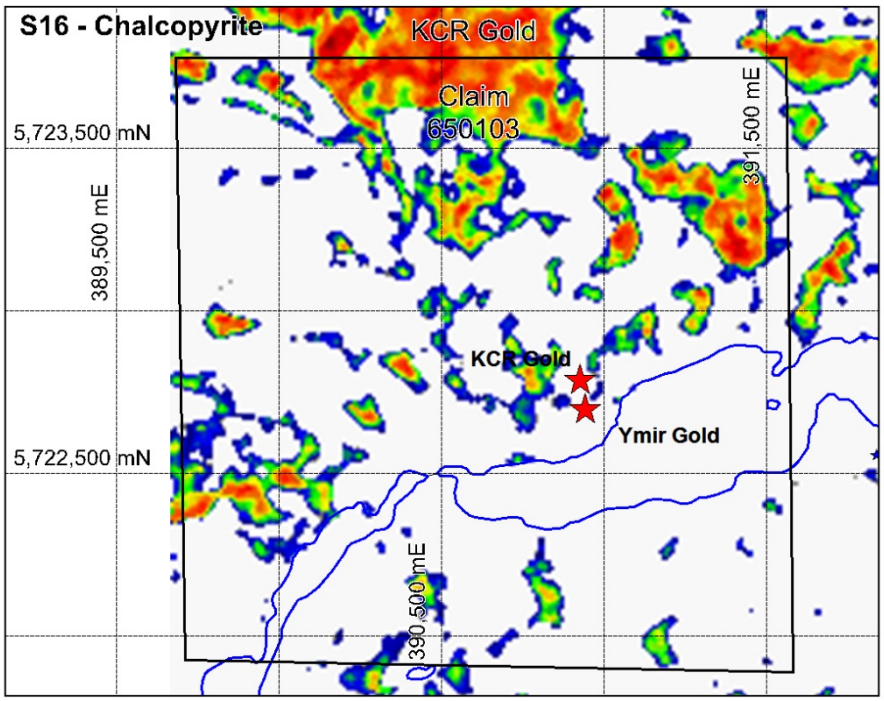
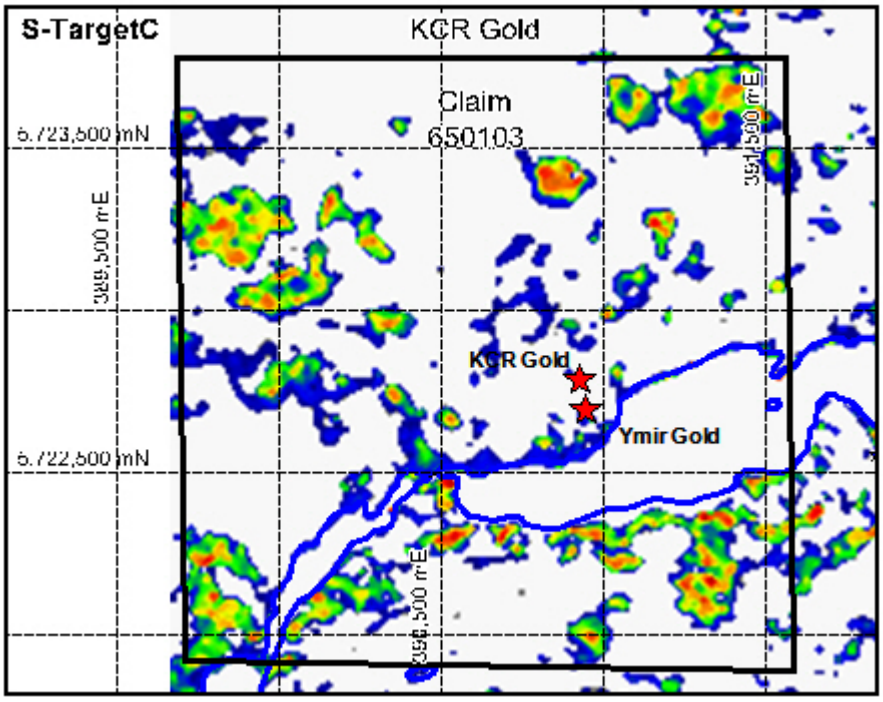


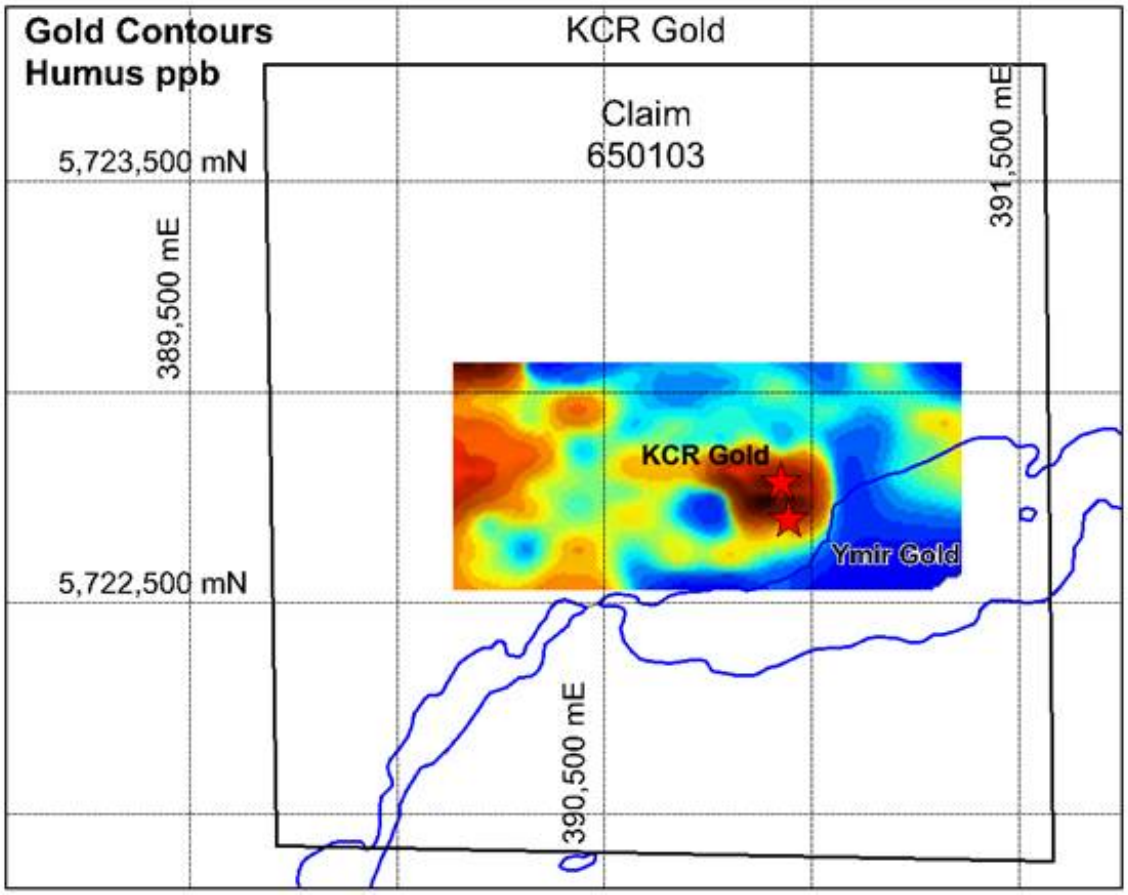
Figure 21: Sentinel Target C



ASTER SATELLITE

The ASTER satellite images are discussed in the Pendock report attached in Appendix II. The ASTER figures are based on the Latitude-Longitude projection and subject to distortion when opened in Mapinfo. See the Pendock report for more information on the Aster images.

Figure 22: Humus Geochemistry



Anomalous soils up to 150 ppb gold were detected in a previous geochemical survey as shown in Figure 22. It depicts a grid image of gold ppb derived from the humus survey.

10.0 CONCLUSIONS AND RECOMMENDATIONS

The following work is recommended to further advance the KCR Property.

- Prospecting and additional sampling along already defined shear/deformation zones should be completed.
- Structures that appear to be oblique to the regional stratigraphy should be prioritized before other stratigraphic targets. Any geophysical anomalies generated by the deep penetrating airborne geophysical survey, completed by the OGS, should be mapped/prospected in the field.
- Selective trenching of known linear areas of deformation and sulphide mineralization would be a cost effect method of evaluating these trends, however this would take appropriate pre-planning to overcome the logistical hurdles. The overburden at hole MK0819 (KCR Zone) is less than 8 feet, which would make

trenching with a small heli-portable excavator feasible and cost effective.

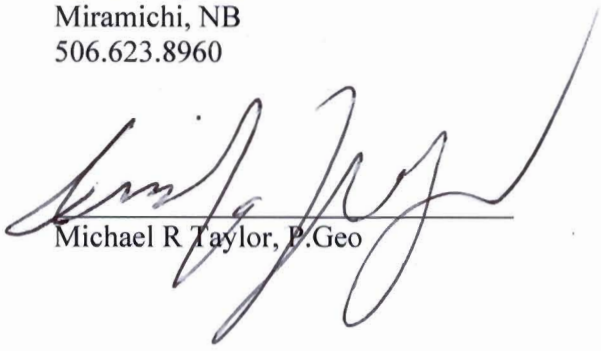
- Selective humus sampling could be completed over the interpreted strike extension of known areas of mineralization/deformation currently covered by overburden. In particular this should be completed in the area just to the north of the KCR zone where Bayne reported humus/soil values up to 150 ppb Au.
- Future drilling is warranted at the KCR zone to further delineate the occurrence. Two holes stepping to either side of the MM1001 hole would provide valuable insights to the geometry of the KCR zone mineralization. A third hole stepping even further to the North to further examine the soil geochemical anomaly flanking the KCR zone would also be helpful in delineating the mineralization.
- Several other known occurrences on the property should be further drill tested, such as the Baroque zone where, in 1984, hole M84-11 intersected 0.233 oz/ton gold over 4.0 feet within a 9 foot interval with 0.163 oz/ton gold.

This report is respectfully submitted by:

Rod Moore
Project Manager
SLAM Exploration Ltd.
Owen Sound, Ontario

And,

Michael R. Taylor, P.Geo
CEO, President & Director
SLAM Exploration Ltd.
Miramichi, NB
506.623.8960



Michael R Taylor, P.Geo

11.0 QUALIFICATIONS AND DISCLAIMER

This assessment report was written by Rod Moore, Project Manager and Mike Taylor, President and CEO of SLAM Exploration Ltd. The Qualified Person for this project is Michael R. Taylor, P.Geo. Mr. Taylor is a Registered Professional Geologist in Ontario and New Brunswick.

12.0 REFERENCES

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http://www.geologyontario.mndm.gov.on.ca/mndmfiles/afri/data/records/52P10NE0021.html

Ontario Drill Hole Database; Drill Hole Summary for Assessment File / Technical Report 52P10NE0026

http://www.geologyontario.mndm.gov.on.ca/mndmfiles/drillhole/data/records/DrillHoleSummary_52P10NE0026.html

Search Geology Ontario
https://www.geologyontario.mndm.gov.on.ca/index.html

Appendix I Statement of Expenditures

Appendix II Report On Sentinel and Aster Images

Sentinel-2 visible/near infrared [VNIR], shortwave infrared [SWIR] and Aster longwave infrared [LWIR] mineral mapping at Miminiska and Keezhik, Ontario

Dr. Neil Pendock
DIRT Exploration
117 Long Street, Cape Town
neil.pendock@gmail.com
16 December 2021

Exploration objectives

Remote sensing imagery provides several cost effective exploration datasets for generating targets over large geographic areas. Sentinel-2 satellite data covers the VNIR and SWIR regions of the electromagnetic spectrum at differing spatial resolutions: VNIR is useful for mapping iron minerals (at 10 m spatial resolution) such as pyrite; SWIR is useful for mapping alteration minerals (at 20 m spatial resolution) while longwave infrared [LWIR] at 90 m from the Aster satellite is useful for mapping buried metal sulphides and their alteration products under cover, using the emissivity property of minerals.

The Sentinel-2 VNIR/SWIR response is primarily surficial, although in the same way that the Mobile Metal Ion geochemical exploration technique [MMI] can provide information about buried deposits, so too does spectral unmixing of Sentinel imagery provide mineral abundances related to buried deposits.

LWIR signals have solar reflection and emission components and so some penetration of vegetation as well as the regolith is possible using temperature/emissivity separation followed by spectral unmixing.

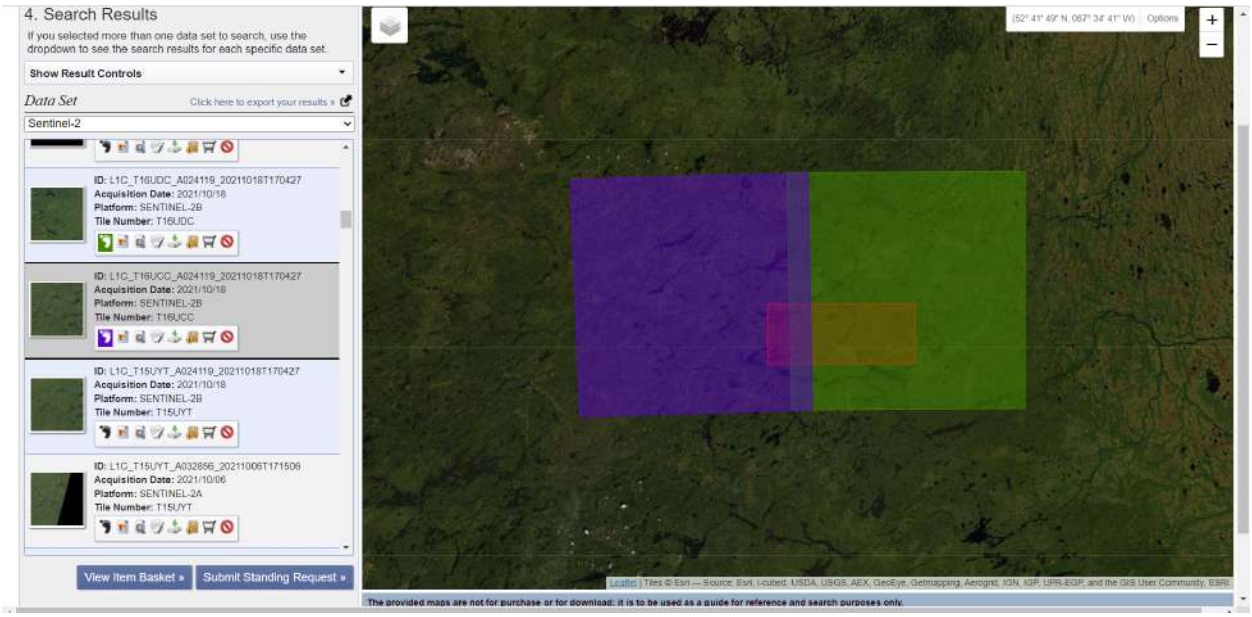
Our processing strategy will be to unmix the spectral responses of the VNIR/SWIR/LWIR images into spectral endmembers which will then be interpreted against a library of spectra measured by the USGS and Johns Hopkins University.

Targets may be generated from these mineral abundance distributions.

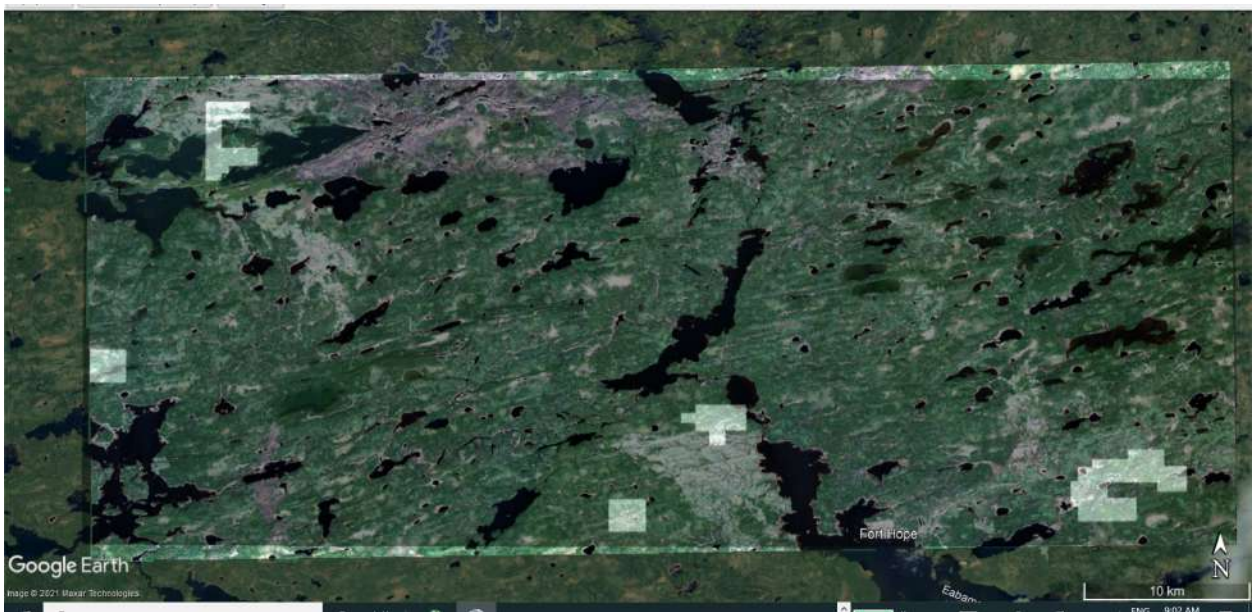
Imagery

The region of interest [ROI] consists of a dozen mineral claim tenements in five areas in northern Ontario between 51.55-51.8N and 88.6-87.6W, shown below.

A mosaic of two autumn Sentinel-2 scenes from 18 October 2021 is shown below in the USGS image database. The ROI is shown as a red polygon.



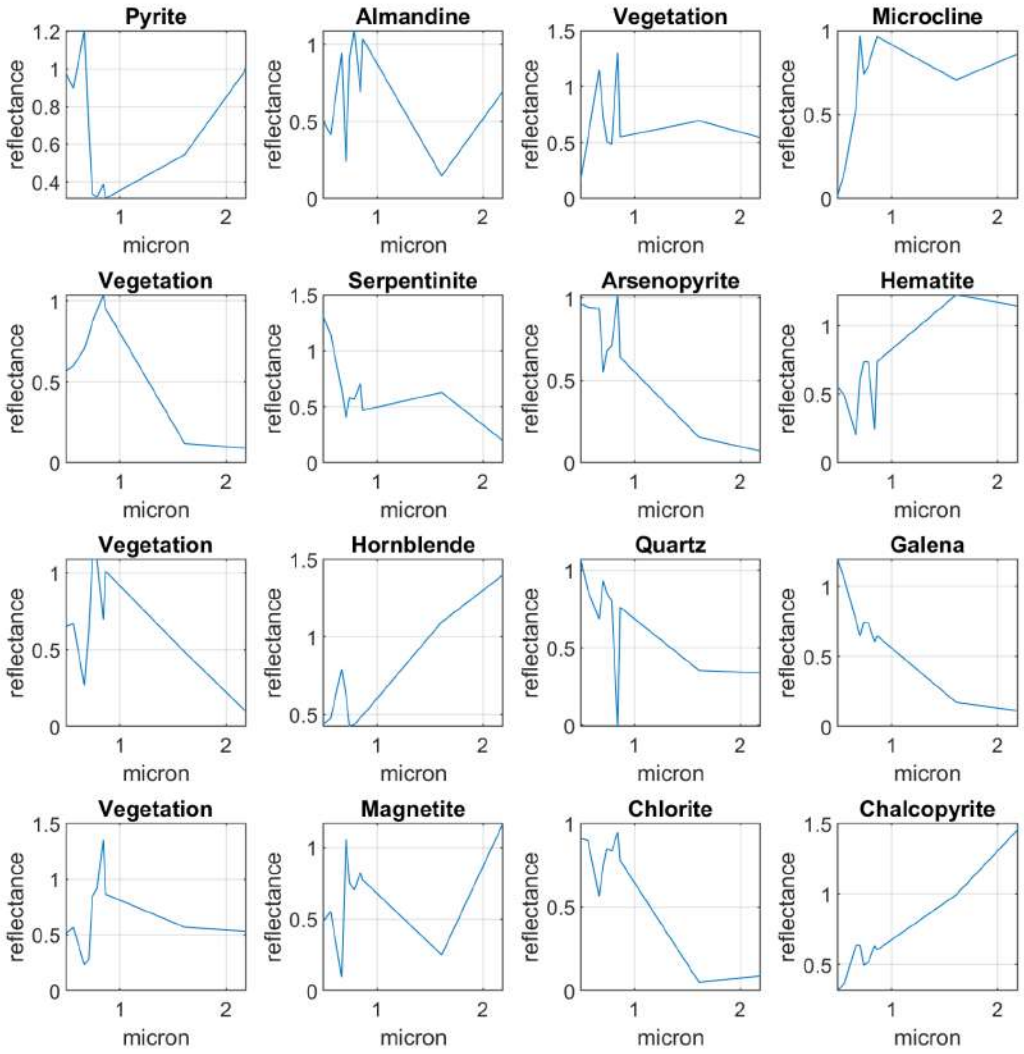
A false colour composite of the mosaic is shown below.



The prevalence of vegetation and water bodies is obvious in the above image.

VNIR/SWIR processing

Step one is to mask the lakes and then correct the data for atmospheric effects. All ten spectral bands of the scene were resampled to 10 m spatial resolution. 16 spectral endmembers were then derived for the image. Each endmember hopefully corresponds to a geologically meaningful unit and interpretation consists of the process of interpreting these endmembers, which are plotted overleaf.



To interpret these endmembers, they were correlated to 481 laboratory spectra from the USGS. The top ten matches for each spectrum are supplied in the text file s_interp.txt while the best matches are s_endmembers.txt listed below:

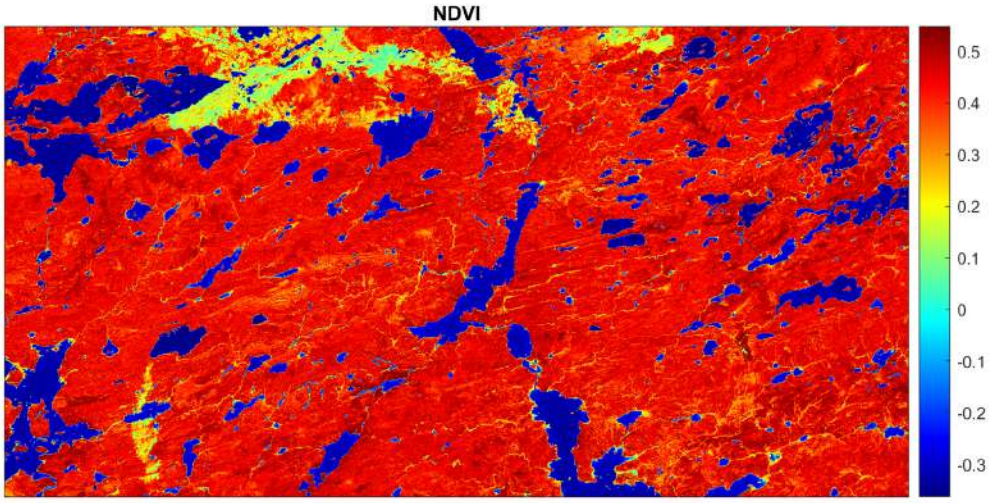
Endmember 1 mineral match Pyrite correlation 0.76
Endmember 2 mineral match Almandine correlation 0.67
Endmember 3 mineral match Vegetation correlation 0.60
Endmember 4 mineral match Microcline correlation 0.94
Endmember 5 mineral match Vegetation correlation 0.98
Endmember 6 mineral match Serpentinite correlation 0.95
Endmember 7 mineral match Arsenopyrite correlation 0.89

Endmember 8 mineral match Hematite correlation 0.84
Endmember 9 mineral match Vegetation correlation 0.78
Endmember 10 mineral match Hornblende correlation 0.94
Endmember 11 mineral match Quartz correlation 0.81
Endmember 12 mineral match Galena correlation 0.94
Endmember 13 mineral match Vegetation correlation 0.72
Endmember 14 mineral match Magnetite correlation 0.64
Endmember 15 mineral match Chlorite correlation 0.94
Endmember 16 mineral match Chalcopyrite correlation 0.97

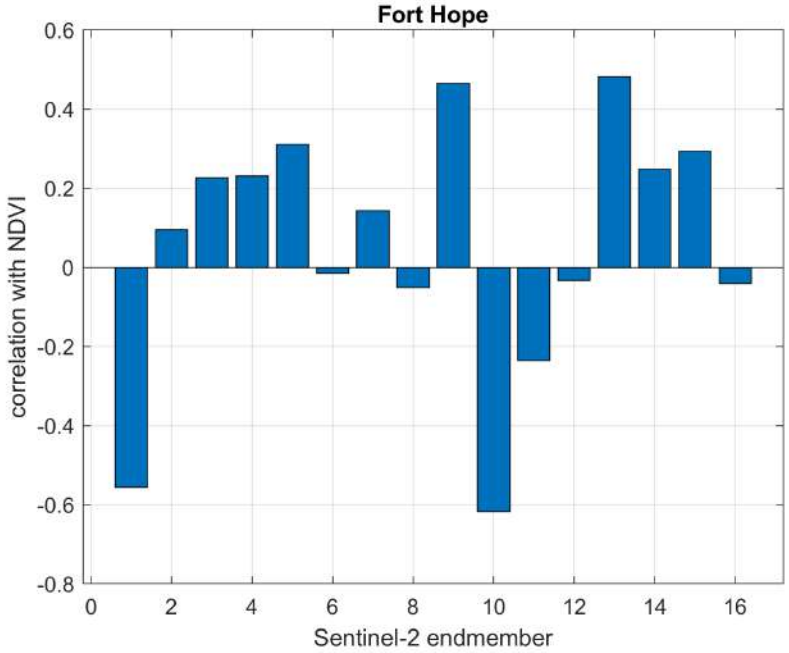
Endmember abundances are presented as s_1.tif … s_16.tif at 10 m spatial resolution.

Discussion

To decide which endmembers are vegetation, we estimated the Normalized Difference Vegetation Index [NDVI], a simple combination of Sentinel bands to highlight live vegetation.



The correlation of the NDVI with endmembers is shown overleaf.



Endmembers 3, 5, 9 and 13 are labeled vegetation.

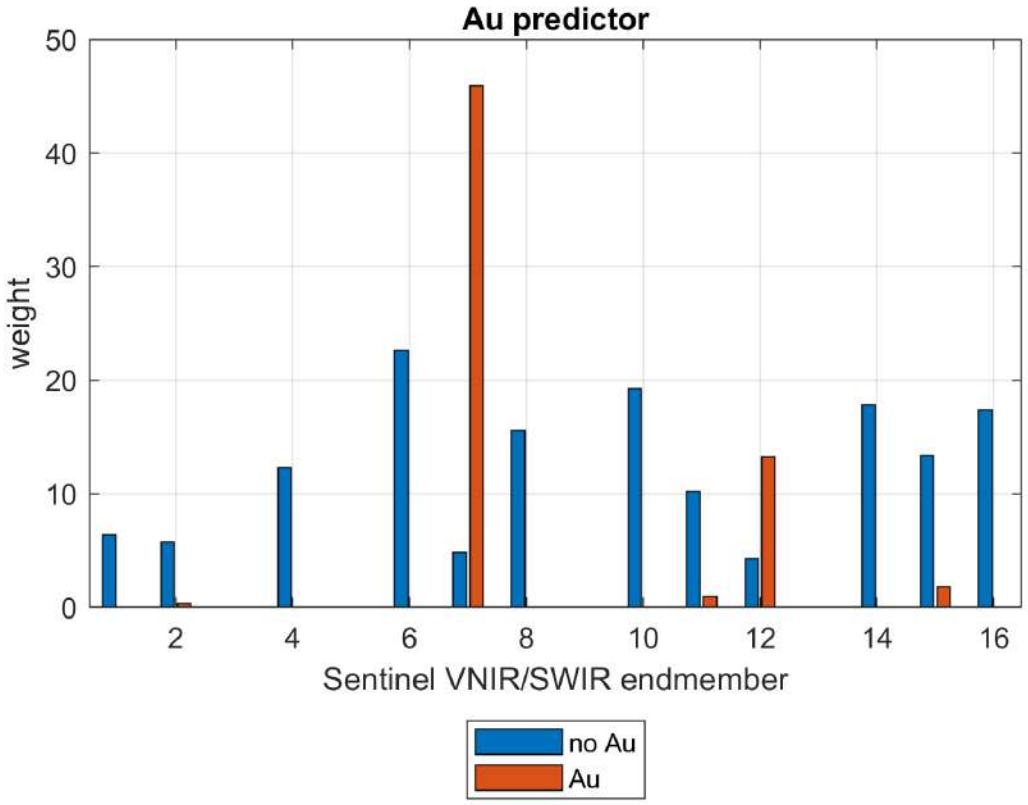
Interpretation of VNIR/SWIR endmembers

Some ground truth is available at Keezhik and is helpful in deciding which endmembers are useful for generating Au exploration targets.

Sample	UTM_E	UTM_N	Gold ppb	Gold g/t
10309	398484	5735251	> 3000	5.72
10311	398133	5736263	> 3000	148.00
10313	398216	5735373	240	0.24

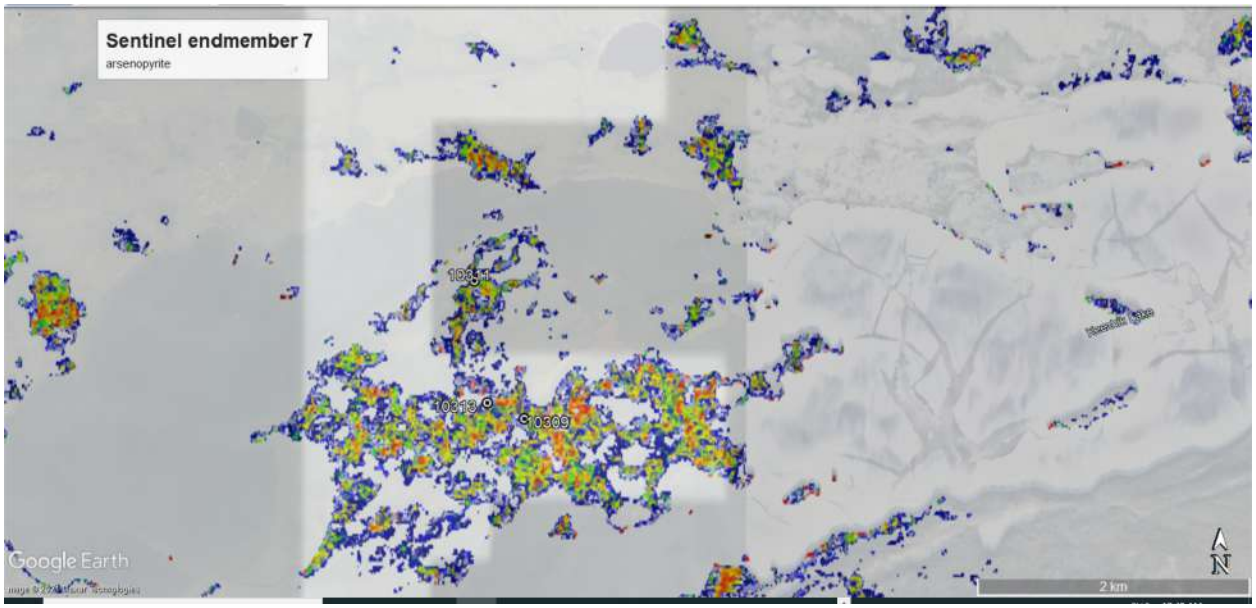
The sample spatial locations are plotted overleaf.

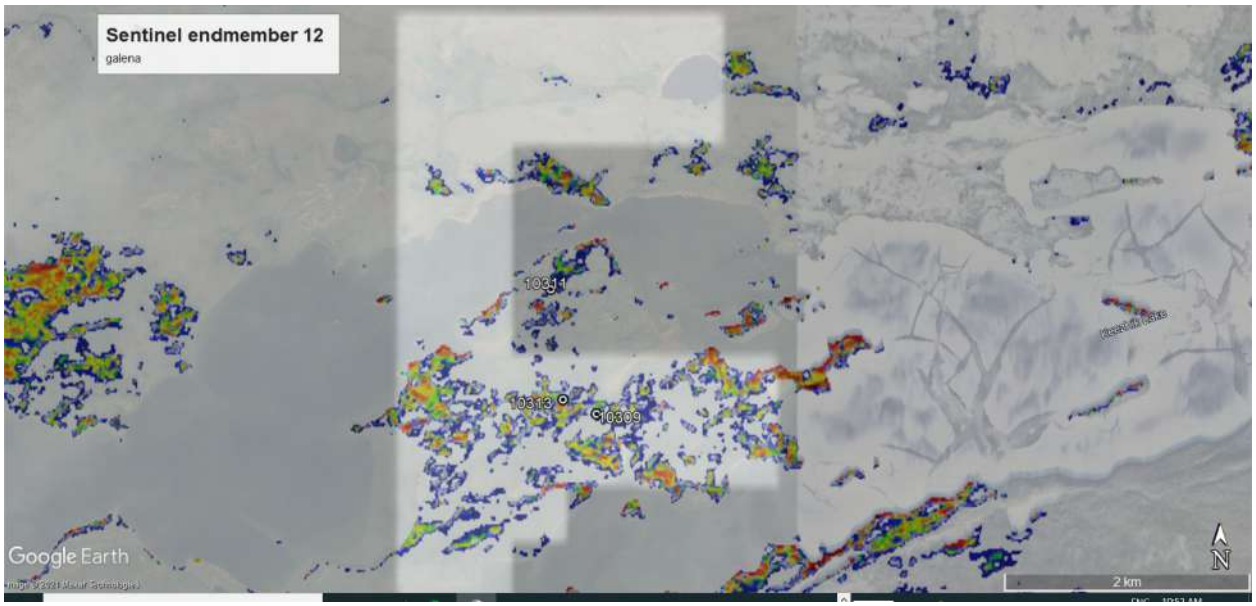
If we extract the 16 endmember abundances over these three sample locations, we may estimate the parameters of a multivariate statistical classifier to separate these spectra from the rest of the image. Classifier weights are shown below.



The most anomalous endmember is #7, interpreted as metal sulphide arsenopyrite.

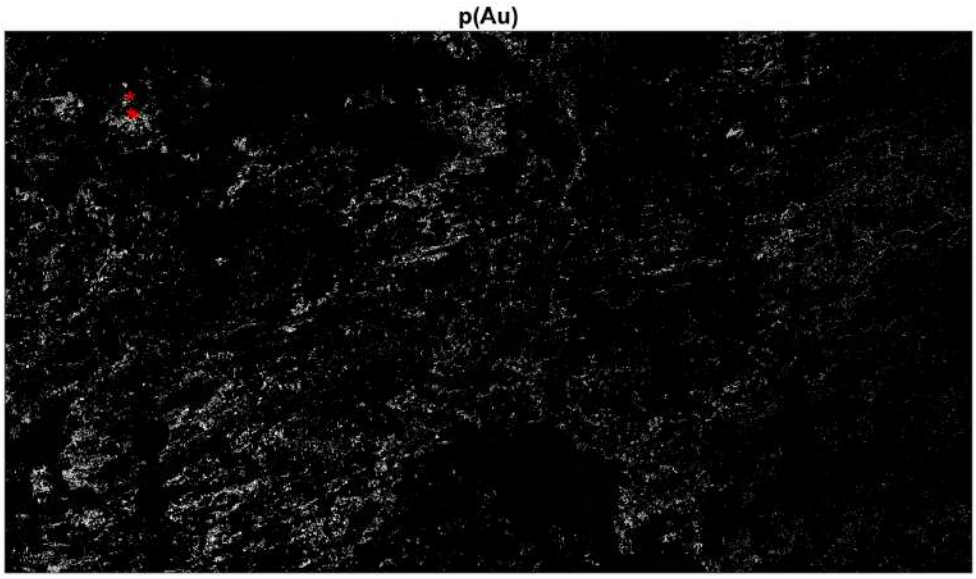
Endmember 12, interpreted as galena, is also anomalous. Of course with only ten spectral reflectances, the naming of these endmembers should be treated with caution and considered with other interpretations listed in s_interp.txt, in mind.



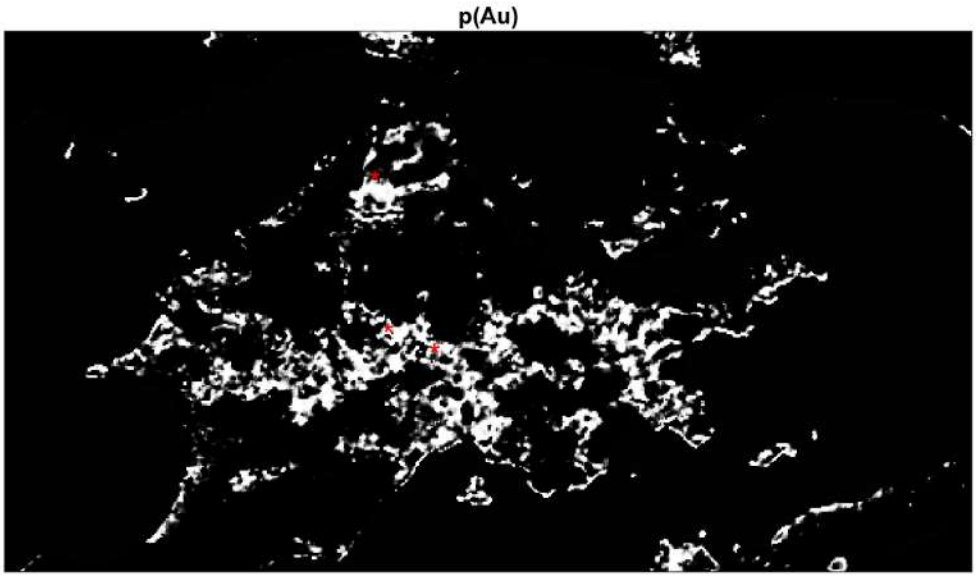


The identification of the endmember is not as important as the fact that it is anomalous over Au in field samples. Other areas in the image with similar signatures (whatever they may be) are exploration targets.

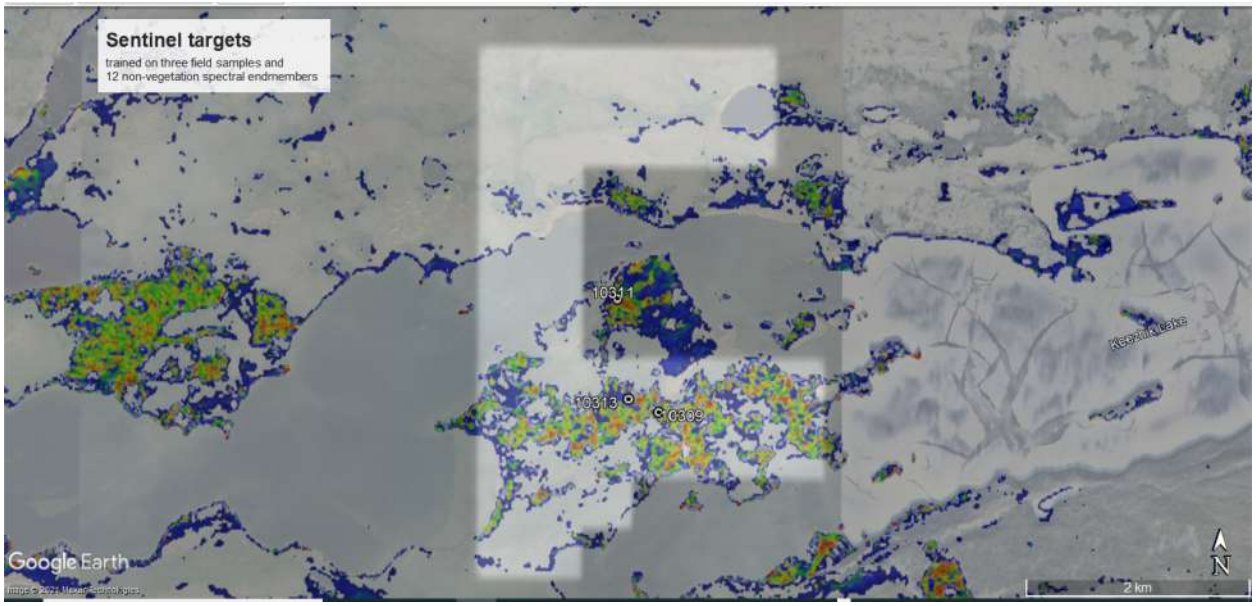
The Au probability map for the whole ROI is shown below, along with a coloured target map supplied as s_targetc.tif. The samples are represented by red asterisks.

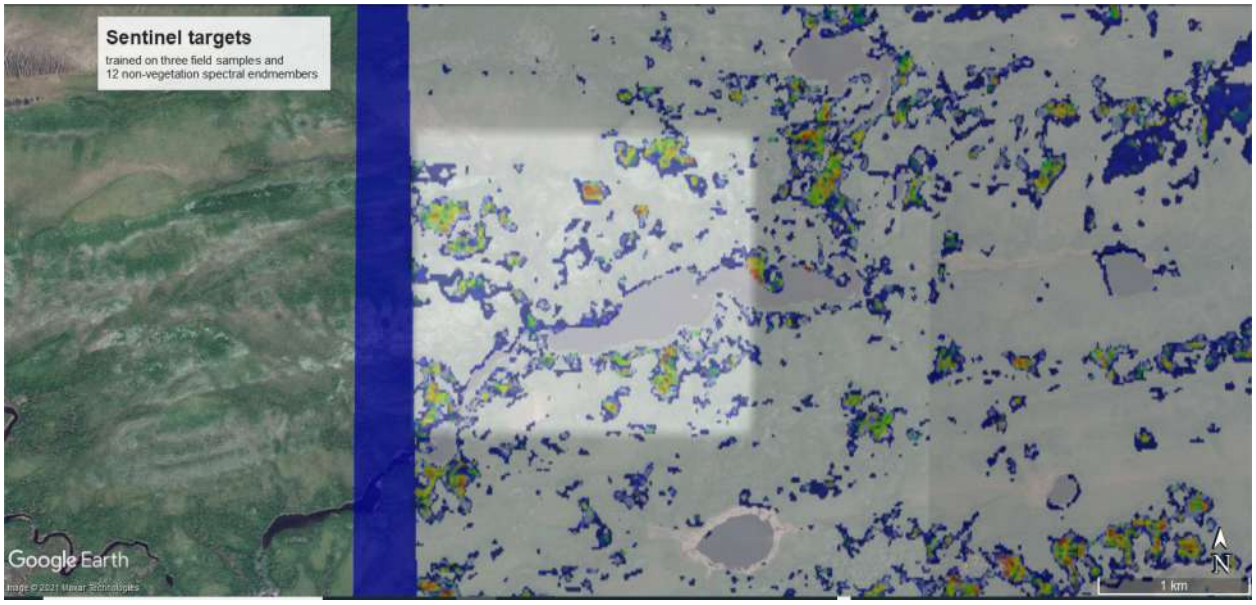


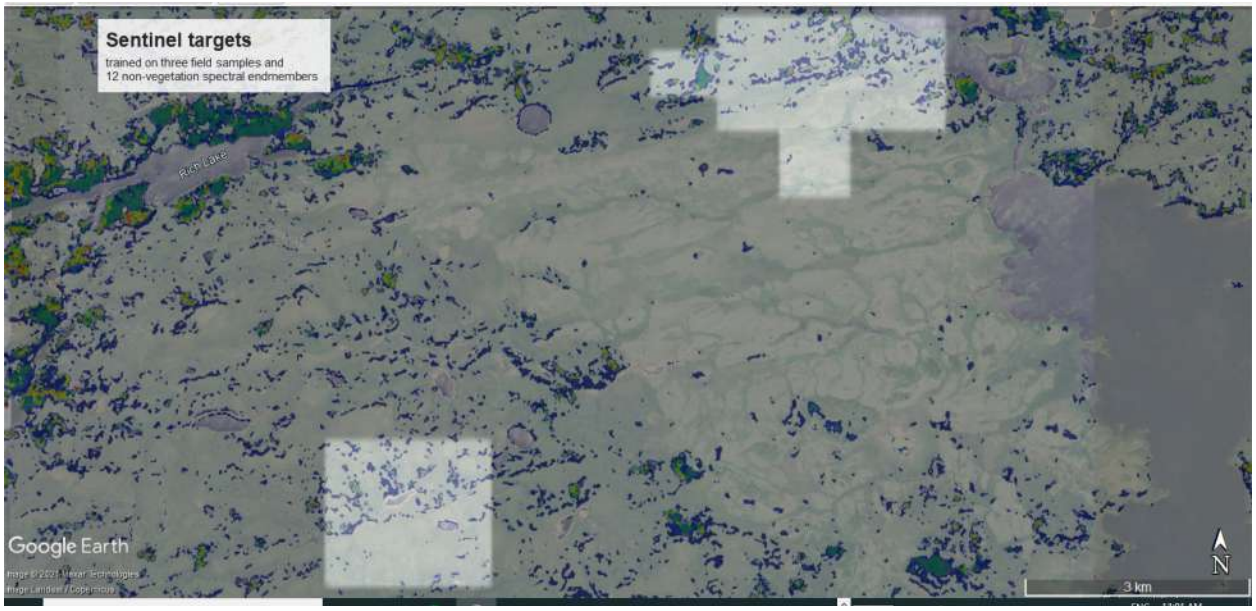
Zooming in on Keezhik Lake structure of the mineralization becomes visible.

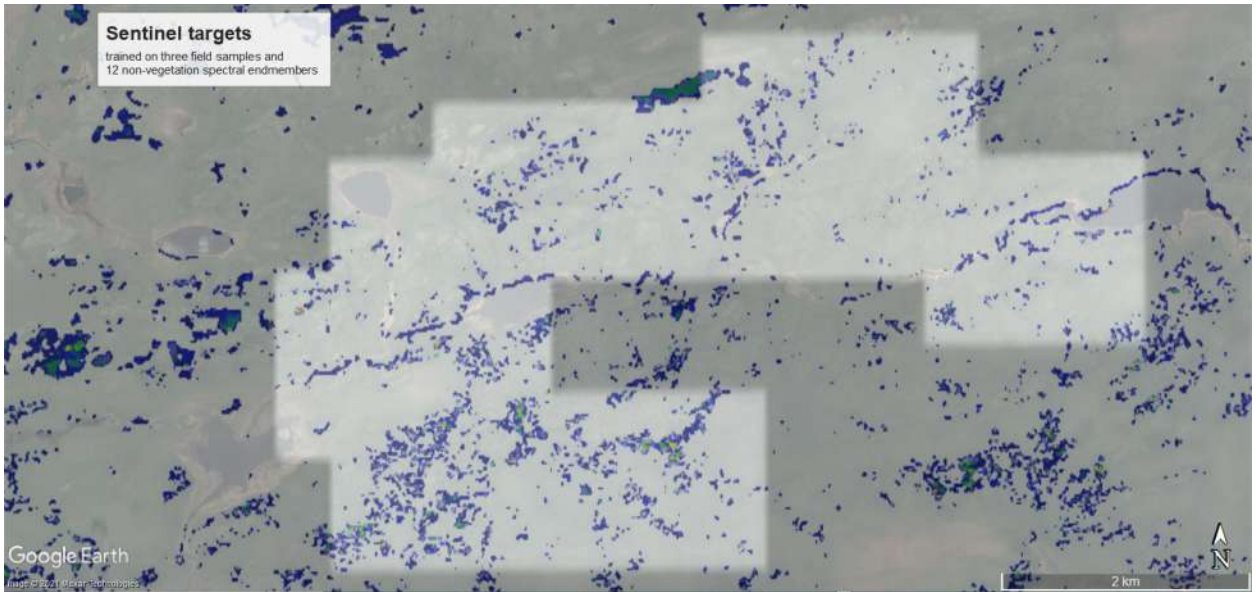


Targets are coloured on a temperature scale, so the warmer the colour, the better the target.



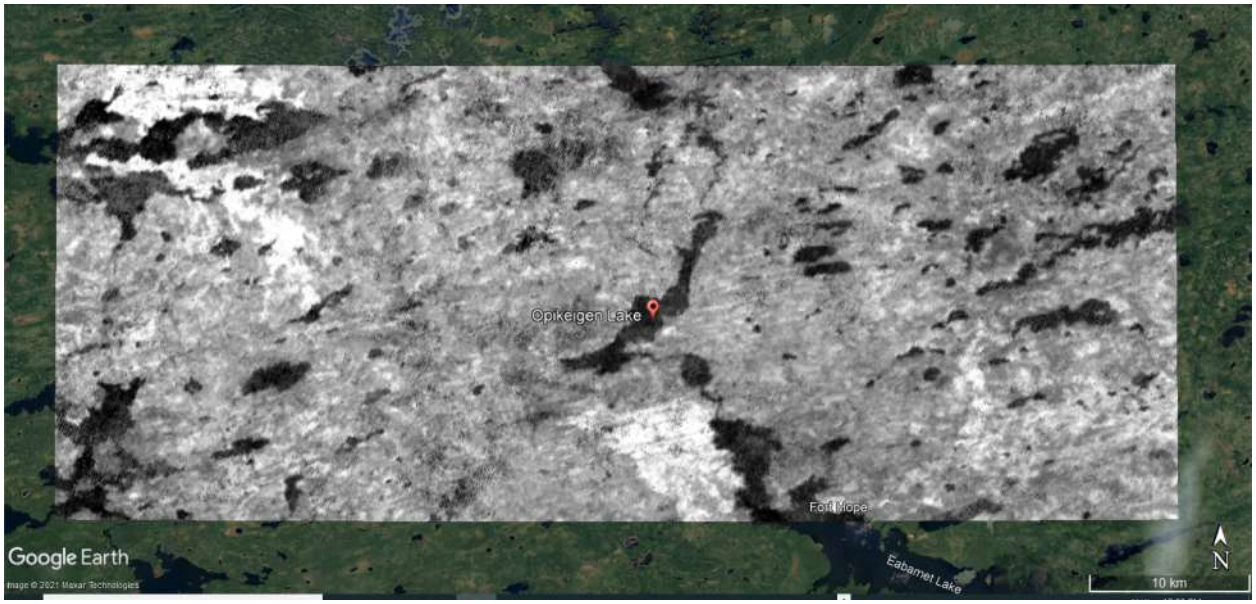






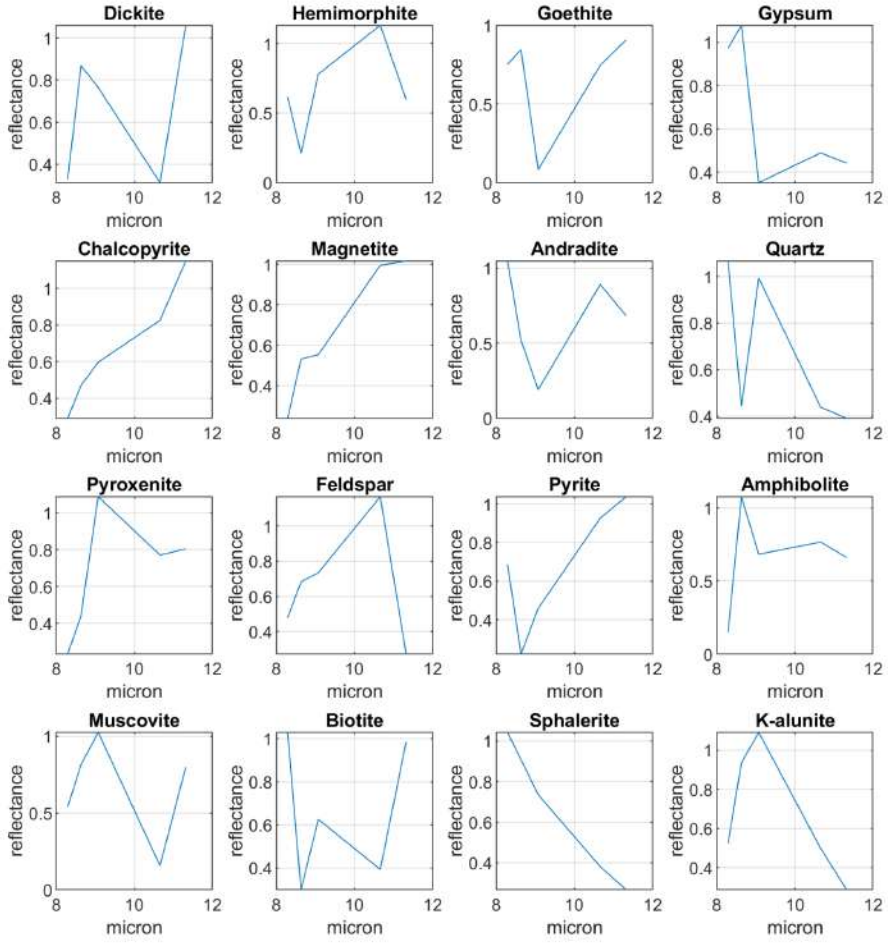
LWIR processing

A mosaic of 117 Aster thermal images collected between 2000 and 2021 over the ROI was assembled. Thermal reflectances at 9 micron wavelength are shown overleaf.



Sixteen spectral endmembers were estimated from this mosaic as it is assumed that each 90 x 90 m field of view is a nonnegative linear combination of sixteen pure (but unknown) endmembers. Sixteen is an arbitrary number, chosen on the assumption that it is sufficient to explain the geological variability of the scene.

Each pixel is then expressed as a sum of sixteen spectral abundances, most of which will be zero as they are estimated in such a way as to produce a sparse representation of the five dimensional data in sixteen dimensional space. Each endmember hopefully corresponds to a geologically meaningful unit and interpretation consists of the process of interpreting these endmembers which are plotted overleaf.



To interpret these spectral endmembers and assign the labels to the spectral plots above, we compared them to an appropriately resampled spectral library from Johns Hopkins University, which were measured in a laboratory. The closest matches are listed in tir_endmembers.txt and again below:

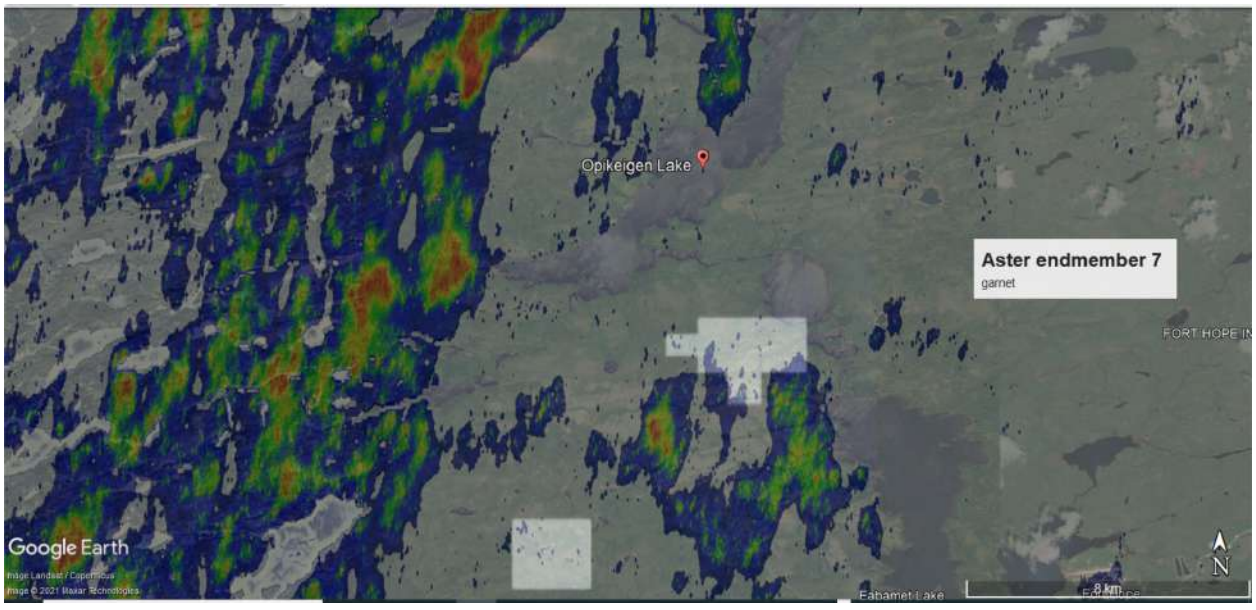
Endmember 1 mineral match Dickite correlation 0.85
Endmember 2 mineral match Hemimorphite correlation 0.92
Endmember 3 mineral match Goethite correlation 0.84
Endmember 4 mineral match Gypsum correlation 0.96
Endmember 5 mineral match Chalcopyrite correlation 0.99
Endmember 6 mineral match Magnetite correlation 0.98
Endmember 7 mineral match Andradite correlation 0.95
Endmember 8 mineral match Quartz correlation 0.95

Endmember 9 mineral match Pyroxenite correlation 0.99
Endmember 10 mineral match Feldspar correlation 0.97
Endmember 11 mineral match Pyrite correlation 0.97
Endmember 12 mineral match Amphibolite correlation 0.97
Endmember 13 mineral match Muscovite correlation 0.81
Endmember 14 mineral match Biotite correlation 0.85
Endmember 15 mineral match Sphalerite correlation 0.99
Endmember 16 mineral match K-alunite correlation 0.98

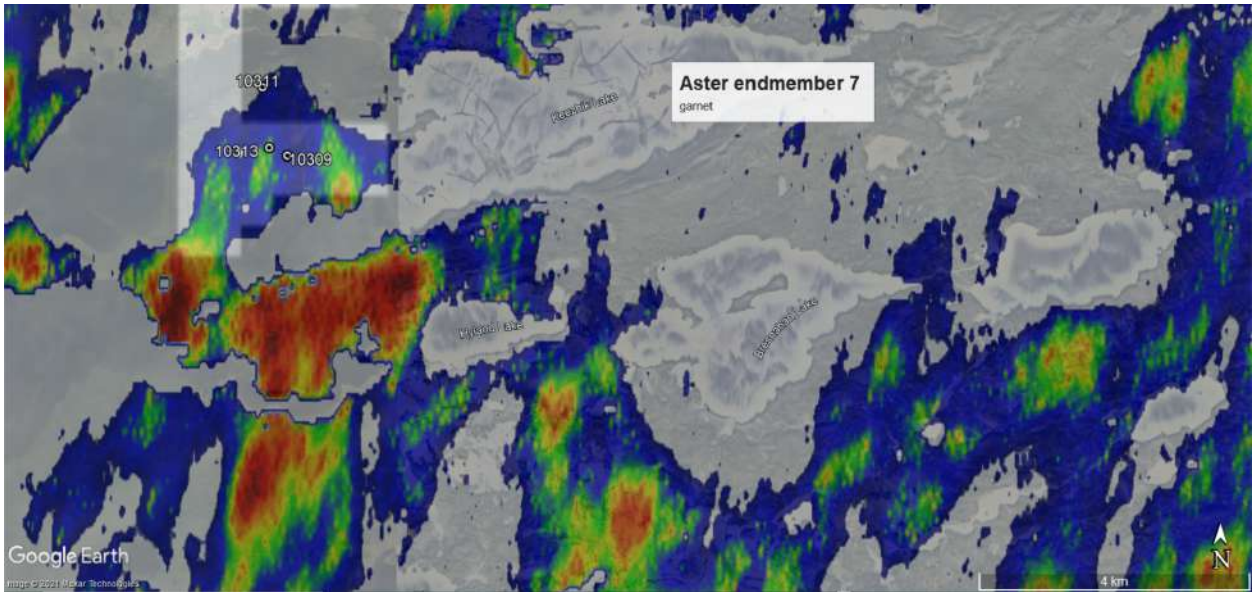
As only five LWIR bands are collected by the satellite, sins of commission are easy to make, and so the five closest spectral matches are included in the text file tir_interp.txt for use in refining the interpretation.

All sixteen spectral abundances are included as geographically located tiff files tir_1.tif … tir_16.tif resampled to 30 m spatial resolution.

Endmember interpretation

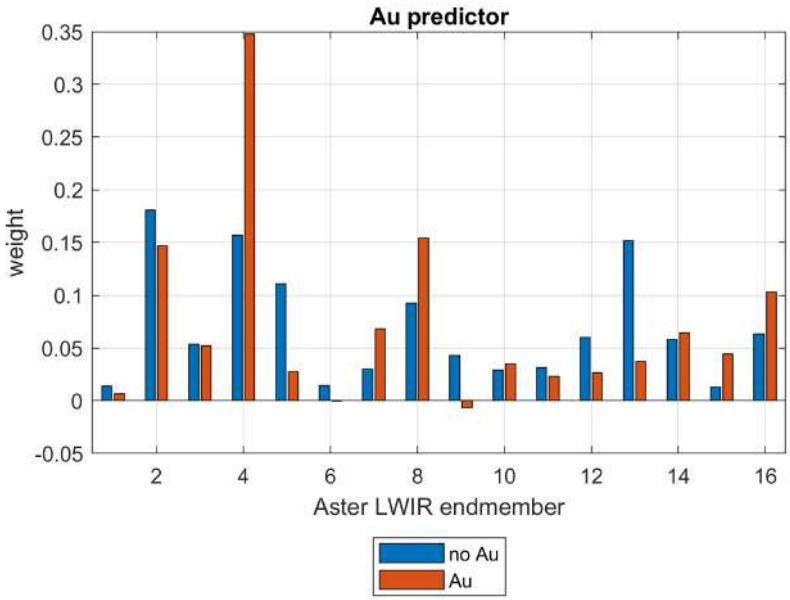


Endmember 7 is interpreted as the garnet almandine (which was also interpreted to endmember 2 in the Sentinel unmixing). Garnets are widely reported in the area [1] as well as being associated with contact with an intrusive at Opikeigan Lake.

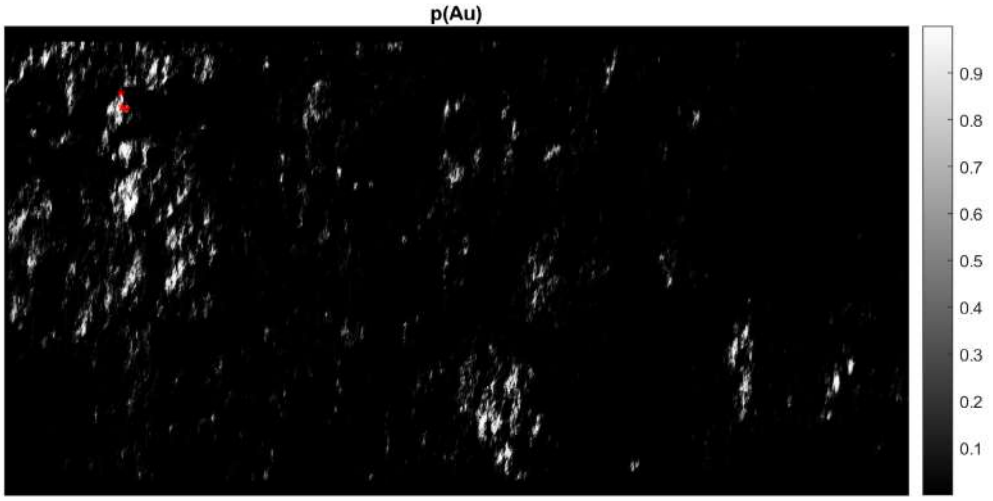


Multispectral classification

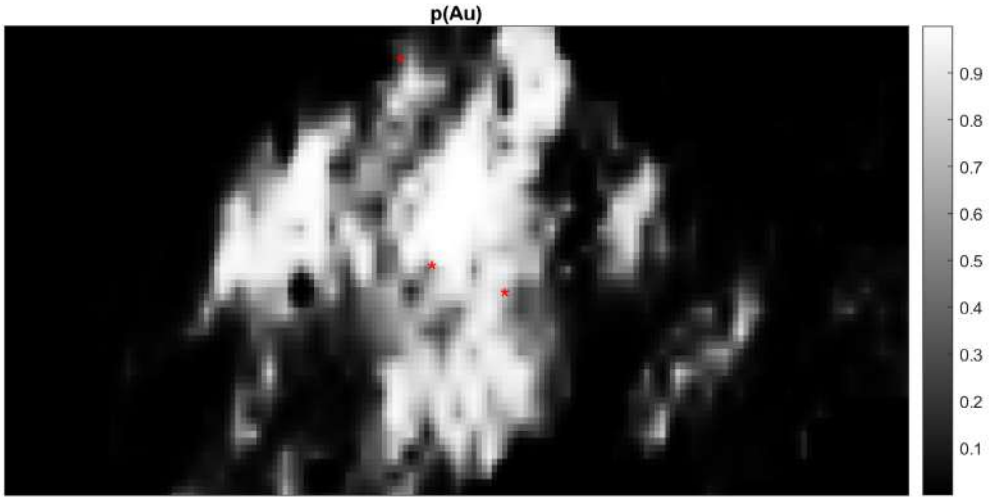
As before, we can use the three field samples and 16 LWIR endmembers to estimate the probability a pixel is mineralized to Au. The classifier that produced this estimate has the weights shown below.

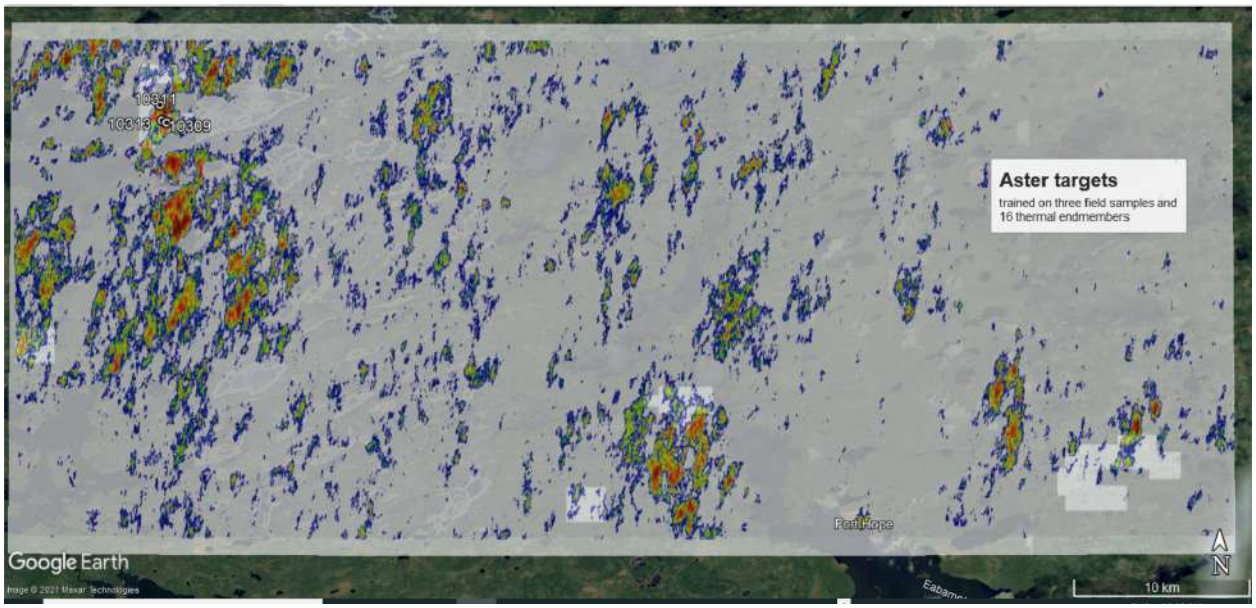


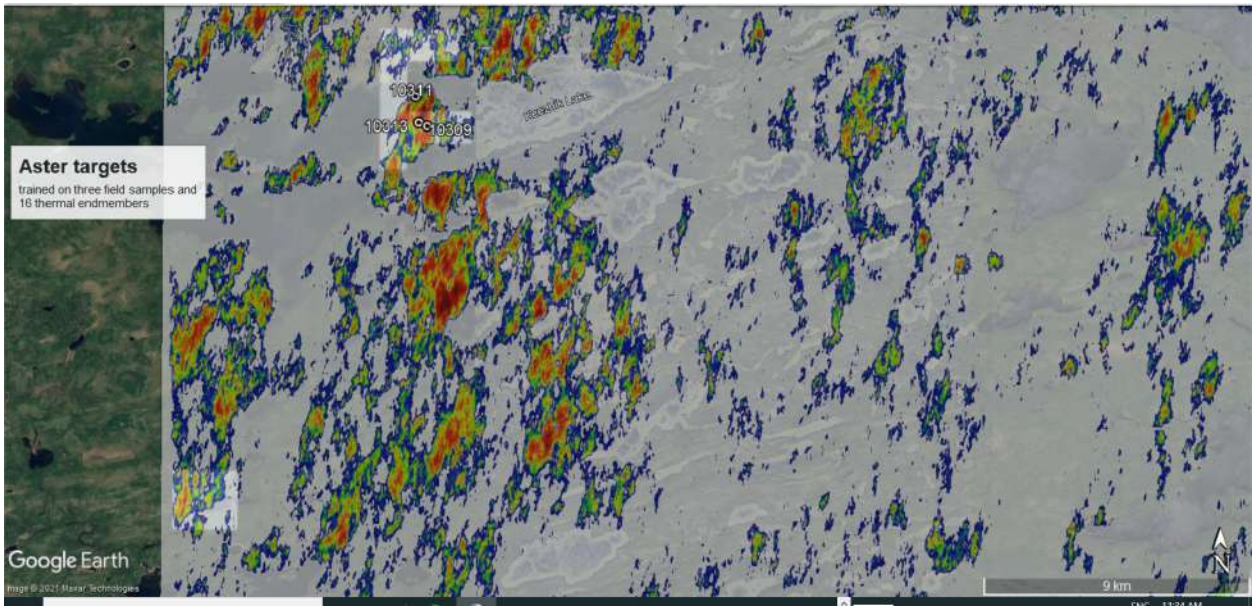
Applying the classifier to the whole scene we obtain a probability map for Au. It is presented overleaf and supplied as tir_targetc.tif, coloured on a temperature scale.

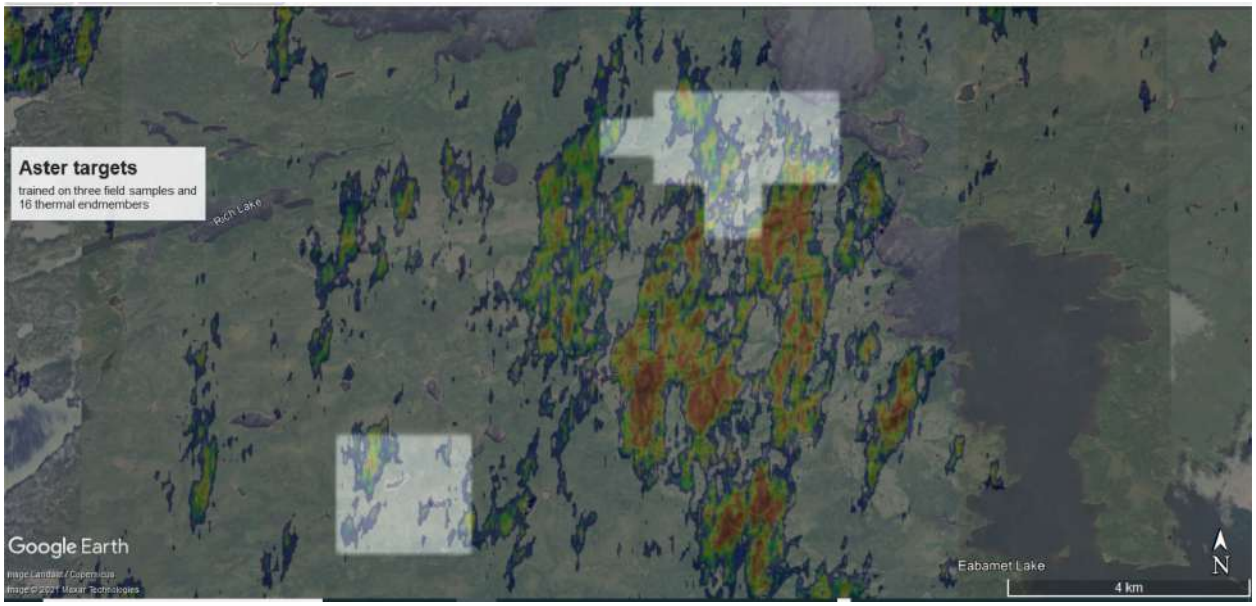


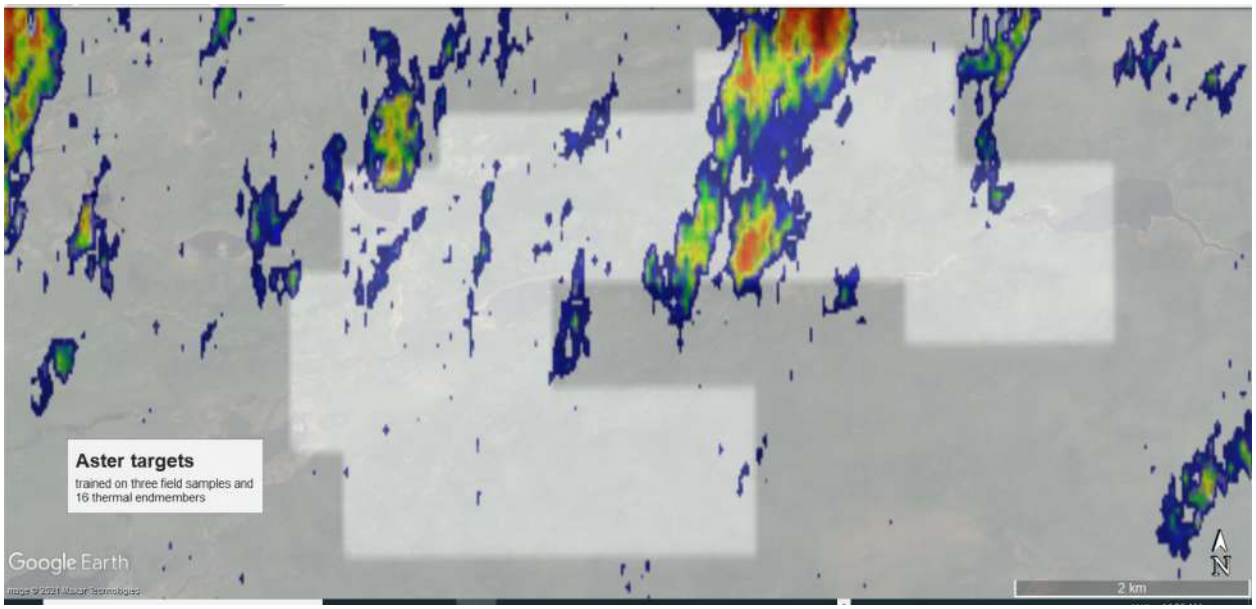
Zooming in to Keezhik Lake




10311
10313
10309
Aster targets
trained on three field samples and
16 thermal endmembers
Port Hope
Google Earth
Image © 2021 Maxar Technologies
10 km
N


10311
10313
10309
Aster targets
trained on three field samples and
16 thermal endmembers
Google Earth
Image © 2021 Maxar Technologies
9 km
N


Aster targets
trained on three field samples and
16 thermal endmembers
Ruch Lake
Google Earth
Eabamet Lake
4 km
N


Aster targets
trained on three field samples and
16 thermal endmembers
Google Earth
2 km
N

Conclusions

Various minerals were interpreted over the ROI through a spectral unmixing of VNIR/SWIR/LWIR data cubes imaged by two satellites: Sentinel-2 of the European Space Agency and the Japanese Aster system.

In VNIR/SWIR imagery, spectral endmembers interpreted as arsenopyrite and galena are spatially associated with three Au samples collected at Keezhik Lake.

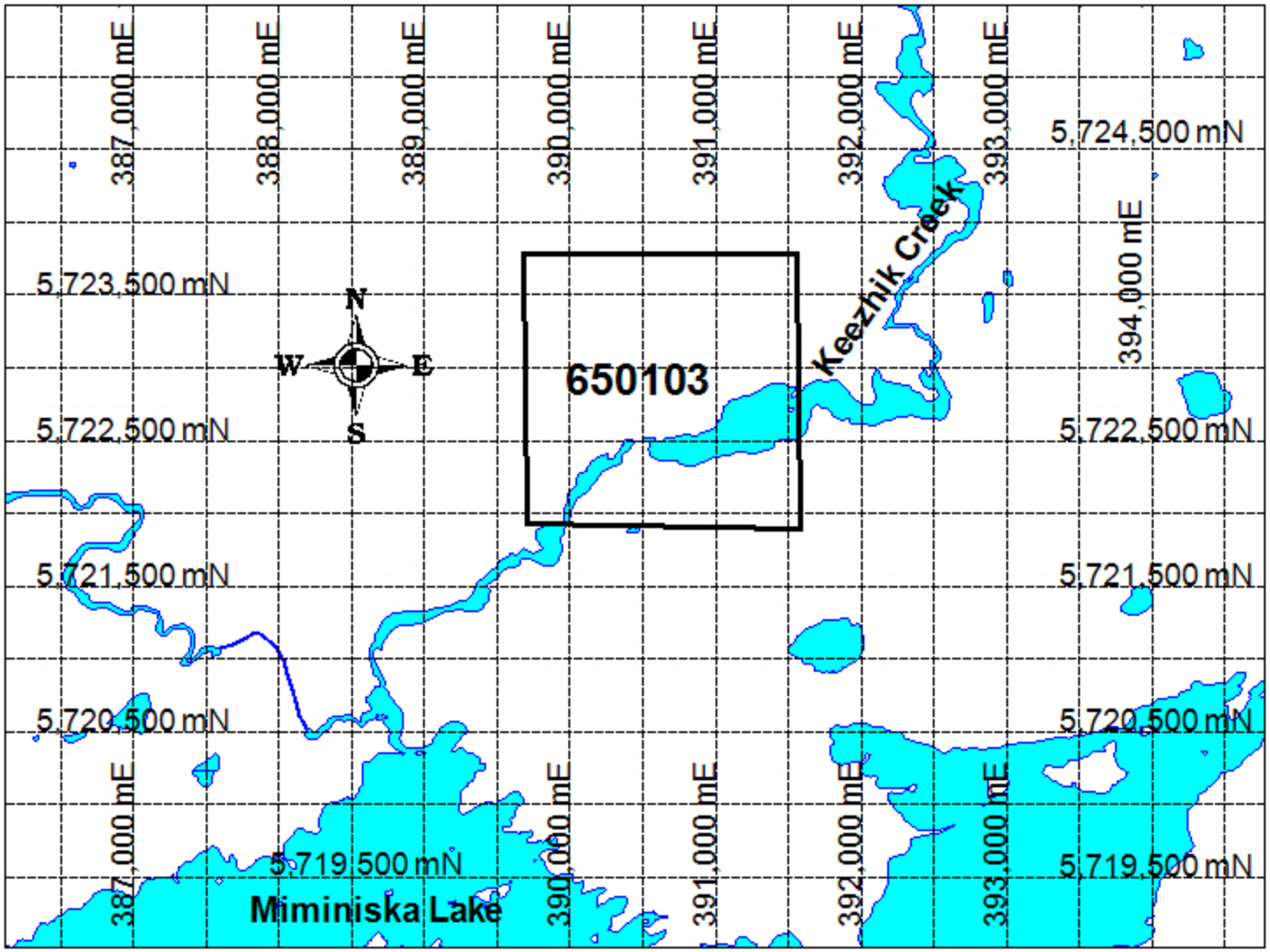
LWIR supplies a different view as it has some penetration of vegetation. A carbonate (gypsum) and quartz are interpreted as endmembers associated with Au along with the metal sulphide sphalerite and the garnet andradite.

Both data cubes are then used to generate Au exploration targets over the whole ROI using a multivariate statistical classifier trained on three Au samples from Keezhik Lake.

The relatively coarse spatial and spectral resolution (of especially Aster thermal), means that fieldwork for confirmation of any remote sensing interpretation is essential, as is integration with other exploration datasets such as aeromagnetics, gravity, EM and geochemical sampling.

Reference

[1] R185: Geology of the Opikeigan Lake area, District of Kenora (Patricia Portion) (gov.on.ca)



KCR Project
Claim Map
Claim 650103 Scale 1:10,000