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L3011669

Larder Lake Mining Division
Dokis Township
District of Cochrane

NTS 32D/5
48°24´31"N 79°35´50"W

Submission : Spring -2016

INDEX

FIGURES

Kirkland Lake Resident Geologists District

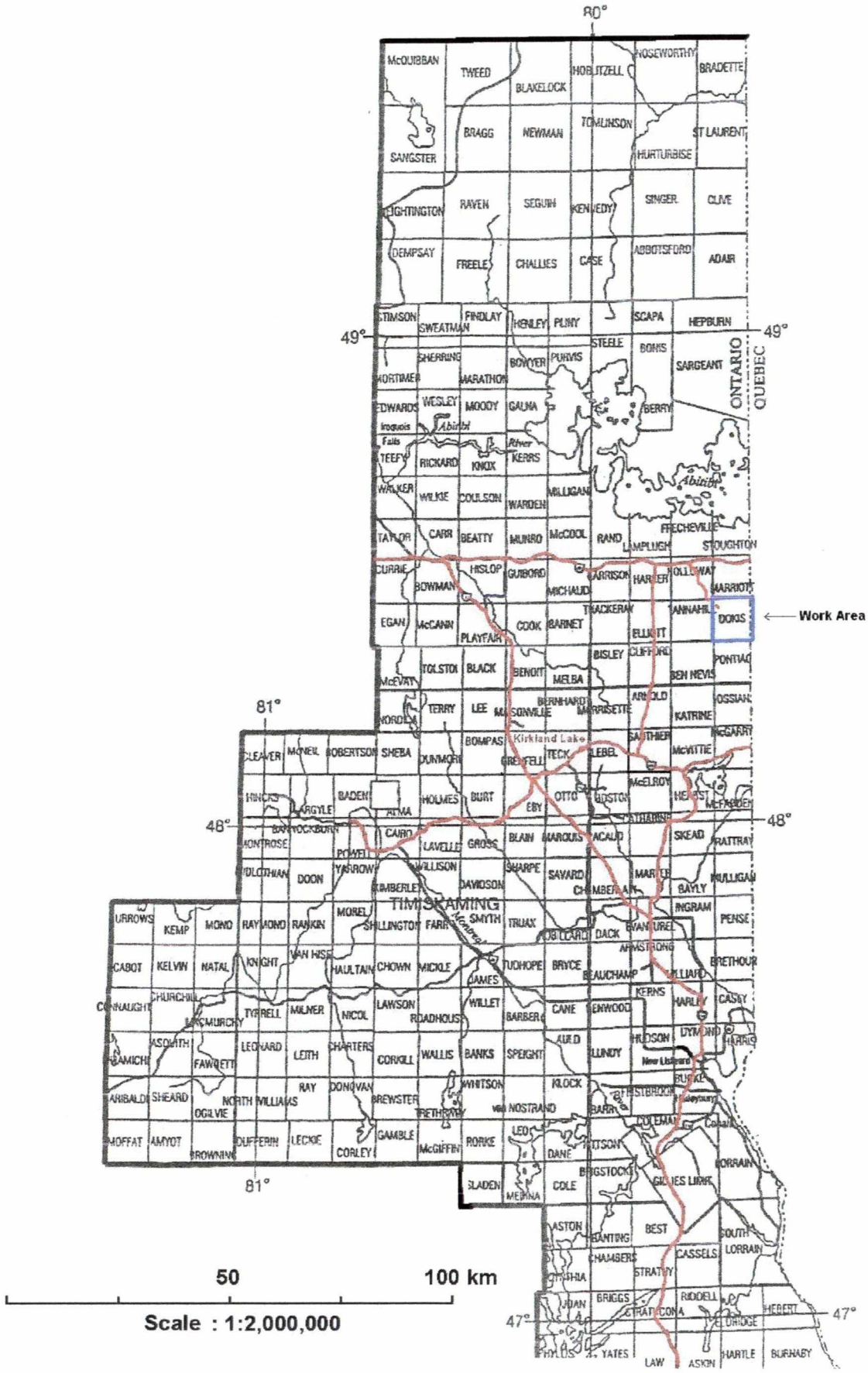
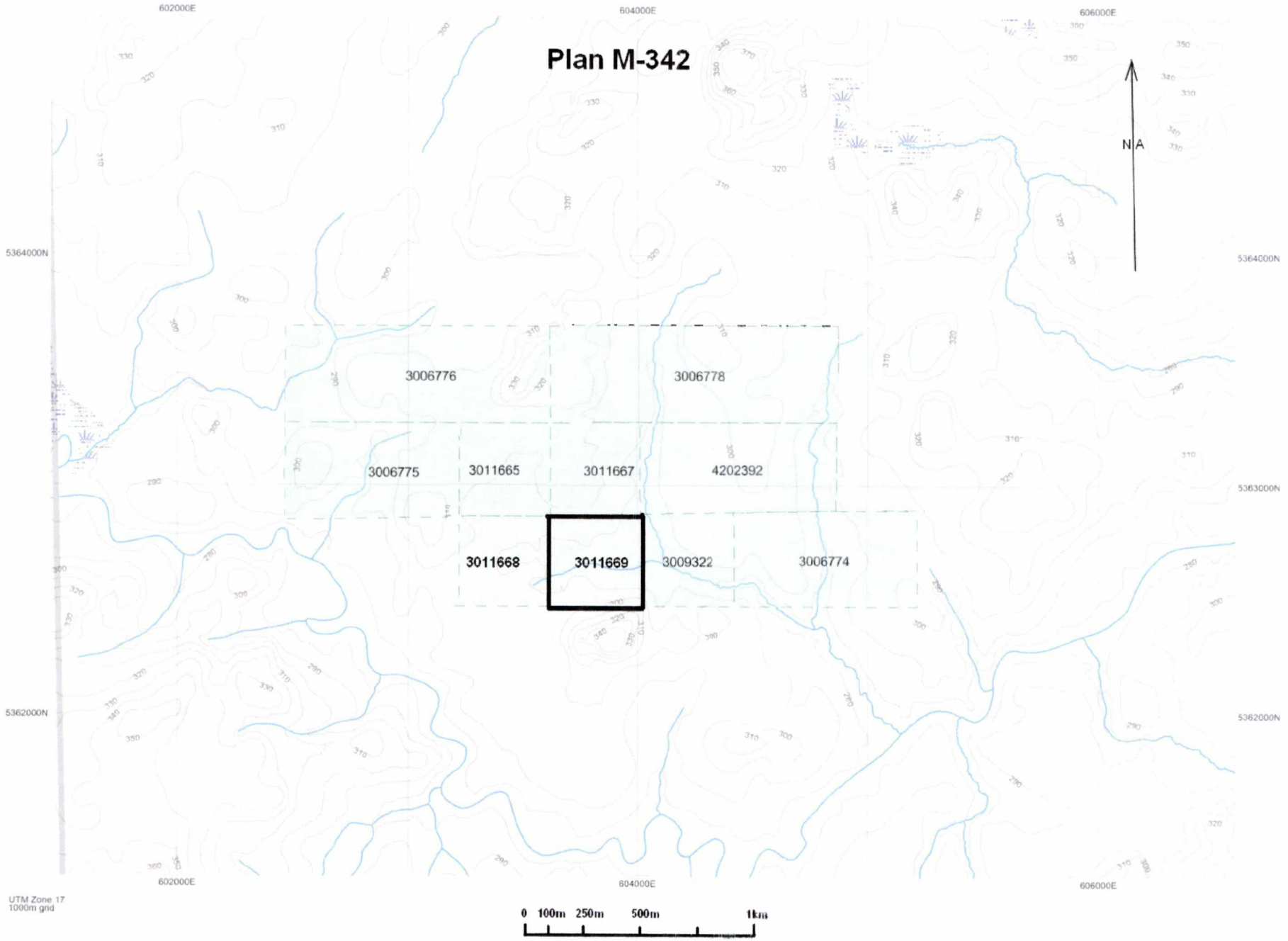


Figure - 1


Plan M-342
602000E
604000E
606000E
5364000N
5363000N
5362000N
N
A
3006776
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3006775
3011665
3011667
4202392
3011668
3011669
3009322
3006774
UTM Zone 17
1000m grid
0 100m 250m 500m 1km

Figure - 2

Property Location

This property is located in the Larder Lake Mining Division and is part of the Kirkland Lake Resident Geologist District. The claim covers about 40 acres in the west central part of Dokis Township and can be found on map sheet NTS 32 D/5, with the geographic center of the claim being at approximately 48°24´31"N and 79°35´50"W. The eastern boundary of the claim lays about 5.5 kilometers west from the Ontario-Quebec interprovincial border.

Access

To get the claim, one would drive east from the historic gold producing town of Kirkland Lake on Highway # 66 for 13 kilometers then turn north on Highway #672(locally known as Esker Park Road).Driving north for about 46 kilometers will bring you to a reasonably well surfaced highway 101. Following this east for 10½ kilometers takes you to a logging Road #46, which continues southeasterly. Staying on this branch for 11½ kilometers brings you to the start of Logging Road # 52 which continues to trend in a south-east direction. Following this for about 14 kilometers south south-east will put you just to the north of the claim the claim about 300 meters. Former logging roads have given fair access to the area around L3011669. Since completing harvesting and replant activities many of the smaller branch roads have begun to deteriorate, some significantly.

Claim

L3011669 is a 1 unit staked mining claim recorded on plan M-0342 of Dokis Twp. The claim lays about 45 kilometers north west of the historic base metal and gold Rouyn-Noranda mining Camp, about 45 kilometers North-East of the Kirkland Lake gold mining camp, about 14 kilometers south from the Holt and Holloway mines on break features of the Porcupine-Destor regional fault, and about 22 kiloneters west of and roughly on strike of the Fabie Bay base metal deposits (Quebec) in similar Blake River rocks.

General/Claim Geology

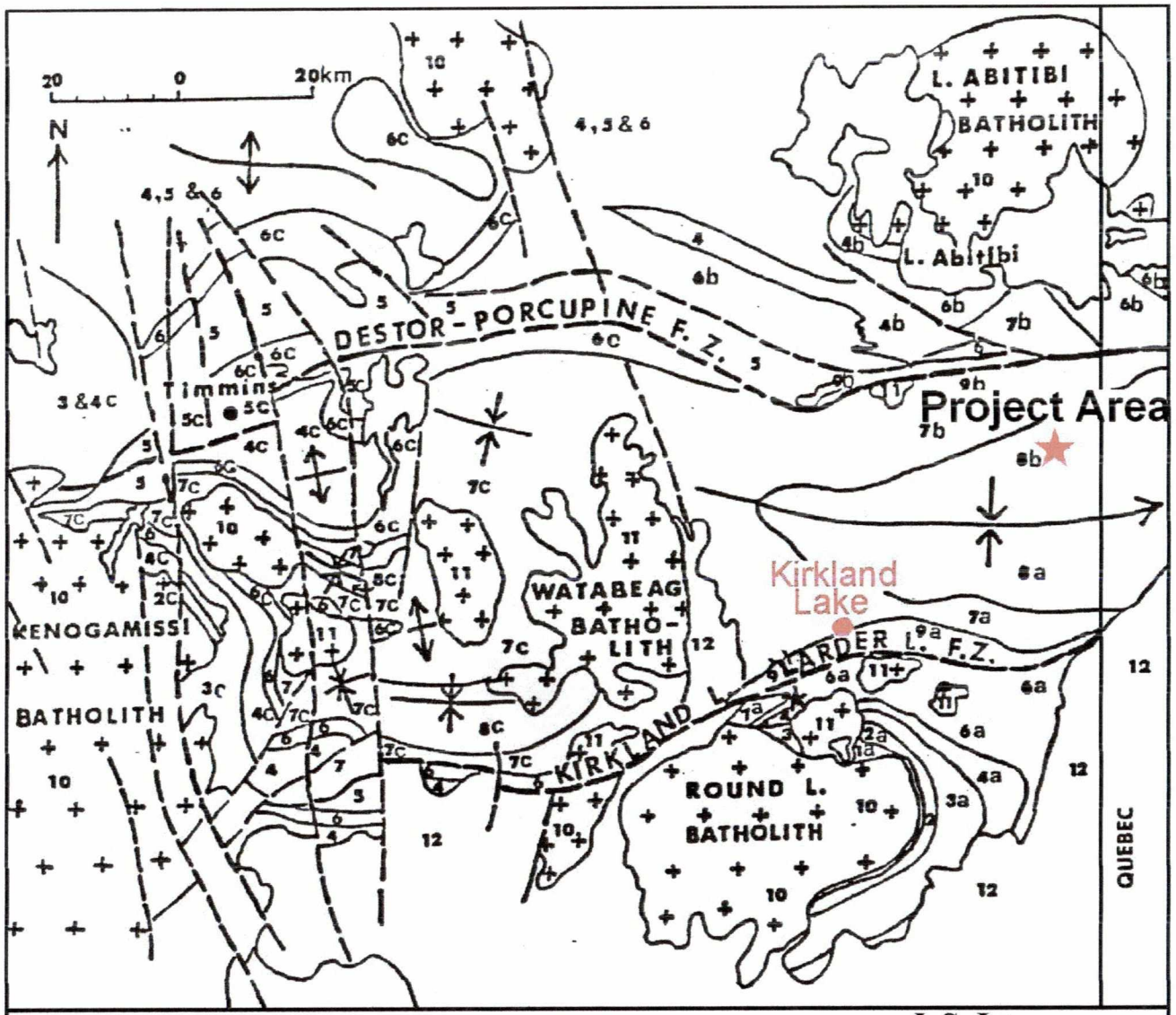
This property lies in the Blake River Group (or BRG) volcanic sequences in the southern area of the Abitibi Greenstone Belt. The BRG, with its ~375 million tonne including production, reserves and resources, contains almost half of the entire Abitibi greenstone belt VMS tonnage The Rouyn-Noranda mining district in the eastern portion of the Blake River Group represents one of Canada's most important mining districts. Over the past 85 years, there has been discovery and mining of over 20 economic volcanogenic massive sulphide deposits in that district.

The Abitibi greenstone belt was formed over a period that spans approximately 150 m.y. (2790-2640 Ma). It has been subdivided into eight episodes of major submarine volcanic activity based on recent regional and detailed mapping and compilation. 1) ~2790 Ma; 2) ~2758 Ma; 3) 2750-2735 Ma; 4) 2734-2724 Ma; 5) 2723-2720 Ma; 6) 2719-2711 Ma; 7) 2710-2704 Ma; 8) 2704-2695 Ma. However, the 2704-2695 Ma volcanic episode represents the richest in terms of total accumulation of metals. Although numerous major faults and high-strain corridors cut across the Abitibi greenstone belt, stratigraphic sections are commonly well preserved.

The Blake River Group locally comformably overlies the volcanic rocks of the 2710-2704 Ma Tisdale volcanic episode in the western part. No such comformable contacts are present in the eastern part of the BRG. The Blake River Group is also locally unconformably overlain by the polymictic conglomerates and alkalic volcanic rocks of the Timiskaming Group (~2680 to 2669Ma), and by the Proterozoic conglomerates of the Cobalt Group. Some Archean synvolcanic (gabbro, diorite, tonalite) and syntectonic intrusions (syenite, diorite, granodiorite, granite), and Proterozoic gabbro dykes (diabase) cut the Blake River Group volcanic rocks.

The BRG consists of a number of submarine volcanic and volcaniclastic sequences. The volcanic rocks are predominantly bimodal in composition (basalt – basaltic andesite – andesite versus rhyodacite – rhyolite). Some volcaniclastic units are pyroclastic in origin but most result from flow fragmentation with varying importance of transport processes during brecciation.

General Geology of the Kirkland Lake Area



LEGEND L.S. Jensen

Proterozoic

Keeweenawan diabase (not shown)

12 Cobalt Group

Archean

Metachewan diabase (not shown)

Granitic rocks

11 Granodiorite, monzonite, quartz monzonite, syenite

10 Massive to gneissic quartz diorite, tonalite, trondhjemite

Upper Supergroup

9 9a* Timiskaming Group, 9b** Destor-Porcupine Complex

8 8a, 8n, Blake River Group, 8c*** Blake River (Upper Fm., Tisdale Group)

7 7a, 7b, Kinojevis Group, 7c Kinojevis Group, (Middle Fm., Tisdale Group)

6 6a Larder Lake Group, 6b Stoughton Roquemaure Group, 6c Lower Fm., Tisdale Group

5 5c Porcupine Group

Lower Supergroups

4 4a Skead Group, 4b Hunter Mine Group, 4c Upper Fm., Deloro Group

3 3a Catherine Group, 3c Middle Fm. Deloro Group

2 2a Wabewawa Group, 2c Lower Fm. Deloro Group

1 1a Pacaud tuffs****

*a refers to Kirkland Lake Area, south limb of synclinorium (Jensen 1978c, 1979).
**b refers to Kirkland Lake Area, north limb of synclinorium (Jensen 1976, 1978b).
***c refers to Timmins Area (Pyke, 1980).
**** (Goodwin, 1965).

Figure - 3

For most of their areal extent, the BRG is bounded by two major fault zones: the Porcupine-Destor fault to the north, and the Larder Lake-Cadillac fault to the south. Rocks of the BRG were subjected to major north-south shortening events (regional D2). However, the deformation is heterogeneously distributed within the BRG; the central part is characterized by tilting of the strata and by the presence of major folds, whereas the northern and southern margins are characterized by the presence of laterally extensive shears and tight folds. The BRG rocks are affected by lower greenschist (north) to lower amphibolite (south) grade metamorphism

About 50km east-south-east of this claim area is the prolific Rouyn-Noranda base metal - gold camp. Volcanic rocks of the Noranda area constitiute the youngest central volcano complex in the Archean Blake River Group of the Abitibi greenstone belt. The 7 to 9 kilometer thick Noranda complex is interpreted to be a large shield volcano approximately 35 kilometers in diameter. It is composed of rhyolitic, andesitic and basaltic flows with minor pyroclastic rocks. The complex has been divided into five sequences which young to the east. Each cycle typically consists of an andesitic/basaltic basal unit and a bimodal upper unit composed of andesite-basalt and rhyolite.

Although mafic to intermediate volcanic rocks make up 65 to 90 percent of the cycles, the majority of massive sulphide deposits in the Rouyn - Noranda area are associated with rhyolite and andesite flows occuring within a volcanic subsidence structure related to the partial emptying of the underlying magma chamber termed the Noranda Cauldron. Most of these deposits are under 5 million tonnes and are Cu Zn rich concordant mounds associated with interflow horizons structurally linked to vent dome areas providing hydrothermal fluids.

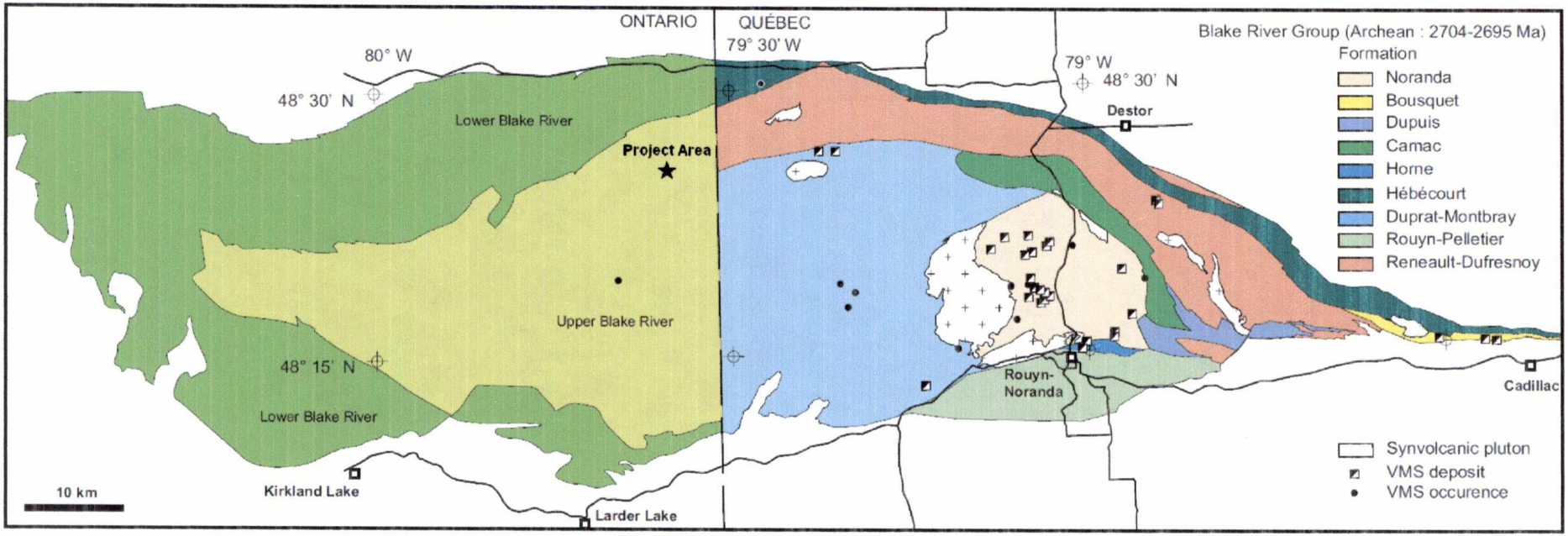
The three major Horne deposits formed by extensive sub-seafloor sulphide precipitation, are signifigantly larger being 20 to 150 million tonnes and are Au-Cu rich but Zn poor.These deposits formed on the flank of a rhyolitic vent complex in a fault bounded, sediment filled graben. Recent continued drilling work in 2015 indicates good mineralization continues beyond previous study and mined area.*(Ref:Falco Resources- http://uk.reuters.com/article/idUKnCCN7TyMl+ea+MKW20150916)*

The Rouyn - Noranda intracauldron sulphide deposits lie within a bimodal, flow dominated sequence consisting mainly of andesite/basalt and high silica rhyolite, with a small percent of pyroclastic rocks whereas the Horne orebodies occur in felsic fragmental rocks and rhyolite flows in a sequence almost devoid of mafic volcanic rocks. Compared to the smaller intra cauldron deposits, the rhyolites of the Horne sequence show a marked depletion of incompatible trace elements such as high fiueld strength and rare earth elements possibly indicating different magmatic evolutions between the two areas.

These differences in deposit characteristics, paleoenvironment of formation, the physical and geochemical volcanology of their host volcanic rocks suggest that the smaller intracauldron deposits and the larger Horne mine deposits may have formed at different stages of the evolution of the Noranda cauldron. *(ref:Ker & Gibson 1993)*

To the south about 7 kilometers are what have been interpreted to be two volcanic ventral areas, which may be the source of some of the Blake River rocks. The rocks in the surrounding region are folded in a series of synclines and anticlines, which tend to reflect these domal areas. Mafic intrusives are present through out the area and limited drilling by previous companies on these mafic plugs(*sub cropping mag features were tested as kimberlitic targets*) has inadvertently defined at least one gabbro exhibiting chlorite/serpentine/sulphide altered layering with related anomalous Ni Cu Au values and in retrospect anomalous Pd.(*ref:KL3401 assessment file,Grid "B")*

Ryolitic rocks, though quite abundant in the ventral areas, are limited to only two mapped exposures in Dokis Twp. One is directly to the west of a possible side vent area in the center of Dokis township which also has associated local copper/sulphide showings.This is about 800 meters north-east of claim L3011669, the calc-alkaline basalt and andesite which have been intruded by a small rhyolite body, cut in turn by a granodiorite stock. The volcanic rocks to the west of the granodiorite surrounding the rhyolite are metamorphosed to hornblende hornfels. In places, fractures 1mm to 2cm wide filled with quartz, epidote, calcite and hornblende are present in the volcanic rocks. Sulphide minerals including pyrite, pyrrhotite, and minor chalcopyrite also occur as fracture fillings in some veins. The sulphide minerals range from massive to disseminated in the



Distribution of the Blake River subdivisions in Quebec (formations) and Ontario (assemblages).

Figure - 4

veins and are mainly concentrated immediately west of the rhyolite. Finely disseminated sulphide minerals of less than 3 percent are present in unfractured parts of the altered volcanic rocks. No sulphide minerals were noted in the rhyolite body or the granodiorite stock." The second occurance of ryolite is about two kilometers due north of the claim and is around 1km long by 400m thick.

To the north of the claim area about 10 kilometers is the Porcupine-Destor Deformation Zone, an major east-west deformation zone which is a prolific host to gold deposits in the region. The Holt McDermott and Teddy Bear mines in Holloway Township is situate only 14 kilometers north of this claim with the Garrison Twp, Ross, Glimmer and Stock mines further along strike to the west. Literally tens of advanced stage projects and defined resources also occur along this regional deformation corridor. South-west trending splays of the PDDZ are proven to be gold bearing and are being mined at both Holloway Twp. mines.

Numerous strike faults, possibly PDDZ splays dominantly at 60° to 65° cross the area. Many of these appear to begin at the PDDZ and run all the way to the Larder-Cadillac Break, a regional feature similar to the PDDZ, about 30 miles to the south and running parallel allong a sinuous belt of Temiskaming sediments.

The discovery by Noranda Inc. of the Lightning gold zone in Holloway Township—with the top of the deposit being nearly 300 m below surface—is a major breakthrough for the exploration of "blind" gold deposits. Noranda identified a geological setting favourable for gold deposits and diamond-drill tested, to a greater depth, a previously known sericite-carbonate-rich alteration zone. The alteration zone which comes to surface is apparently in the same plane as the gold-bearing zone and locally contains minor sections of silicified rock containing small amounts of pyrite and anomalous gold values. The gold zone is characterized by silicification and the formation of pyrite which apparently contains most of the gold. Undoubtedly, the Archean lode-gold deposits were formed by high temperature hydrothermal systems. At a specific temperature-pressure range (possibly the boiling point), silica and gold precipitated forming the gold zones. Such a hydro-thermal system would require either a permeable medium, such as hyaloclastite, pumice, conglomerate or similar lithology prior to complete diagenesis, or open fractures, breccia zones, shear zones or similar such environment. In the case of open fractures, quartz veins would develop from the walls inwards and reaction with the wall rocks would be minimal. Where hydrothermal solutions pass through rock via a maze of minute conduits, extensive hydrothermal alteration occurs. A complex interaction between the hydrothermal solutions, which themselves have differred in chemistry from one site to another, and the chemistry, mineralogy, permeability and solubility of the host rock determine the final ore type formed. The gold zones in this type of deposit are characterized by silicification and preservation of some original rock textures. Of greatest significance, for exploration purposes, is the recognition of continued hydrothermal alteration above and in the general plane of such gold-mineralized zones. At the Lightning Zone, this alteration zone requires thorough research to determine other diagnostic mineralogical and geochemical features which might indicate a favourable zone for blind gold mineralization. The favourable temperature-pressure range for hydrothermal gold deposition must have been related to the earth's surface. With subsequent deformation and given the present erosion surface, some gold deposits would have been eroded away while others would occur at or below the present erosional surface. (*from:Lightning Zone MP158 1992, p275-6*)

Several cross faults trending west of north are also present .The eastern most of these, roughly central township in both Tannahill and Dokis Twps., appear to be on strike of the Quinze Dam Fault, a feature belonging to the Timiskaming Rift System. On strike in the province of Quebec this fault has spatially associated diamondiferous kimberlitic rock which doubtless adds to the diamond potential of the area. Earlier exploration work among these parallel faults west of the Quinze Dam fault as early as the 1970's resulted in the discovery of kimberlite in Ontario north east of Kirkland Lake. Eventually the diamond bearing C-14 kimberlite in Clifford Township at a location 19 kilometers W-S-W of the claim was discovered by drilling magnetic "bulls eye" targets. Numerous other kimberlite pipes and dikes have been discovered in the area west and south west of the claim area but economic diamond has not yet been encountered. Aerial geophysical work performked in 2003 by the Ontario Geological survey and its interpretation has generated

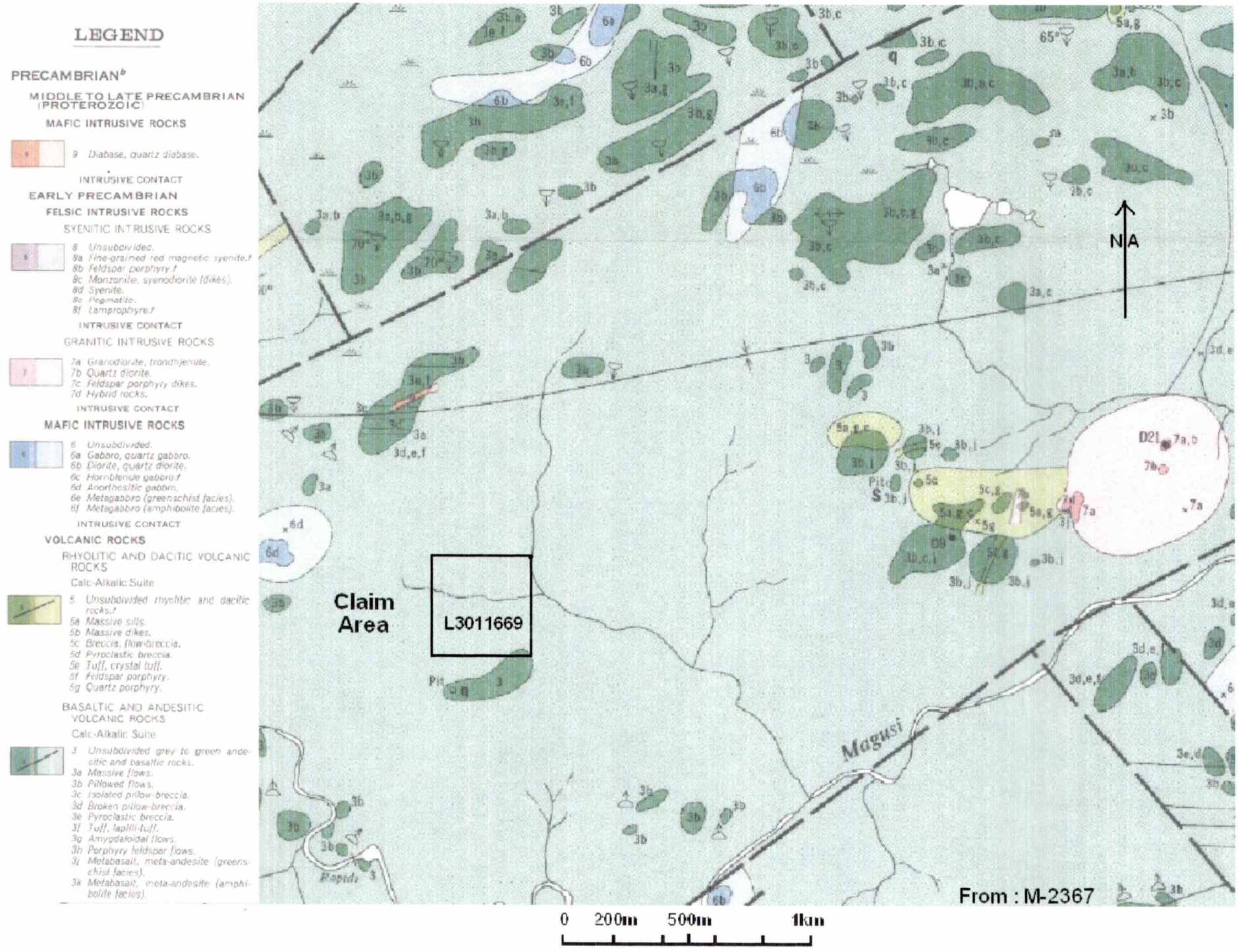

LEGEND
PRECAMBRIAN[b]
MIDDLE TO LATE PRECAMBRIAN (PROTEROZOIC)
MAFIC INTRUSIVE ROCKS
9 Diabase, quartz diabase.
INTRUSIVE CONTACT
EARLY PRECAMBRIAN
FELSIC INTRUSIVE ROCKS
SYENITIC INTRUSIVE ROCKS
8 Unsubdivided.
8a Fine-grained red magnetic syenite.f
8b Feldspar porphyry.f
8c Monzonite, syenodiorite (dikes).
8d Syenite.
8e Pegmatite.
8f Lamprophyre.f
INTRUSIVE CONTACT
GRANITIC INTRUSIVE ROCKS
7a Granodiorite, trondhjemite.
7b Quartz diorite.
7c Feldspar porphyry dikes.
7d Hybrid rocks.
INTRUSIVE CONTACT
MAFIC INTRUSIVE ROCKS
6 Unsubdivided.
6a Gabbro, quartz gabbro.
6b Diorite, quartz diorite.
6c Hornblende gabbro.f
6d Anorthositic gabbro.
6e Metagabbro (greenschist facies).
6f Metagabbro (amphibolite facies).
INTRUSIVE CONTACT
VOLCANIC ROCKS
RHYOLITIC AND DACITIC VOLCANIC ROCKS
Calc-Alkalic Suite
5 Unsubdivided rhyolitic and dacitic rocks.f
5a Massive sills.
5b Massive dikes.
5c Breccia, flow-breccia.
5d Pyroclastic breccia.
5e Tuff, crystal tuff.
5f Feldspar porphyry.
5g Quartz porphyry.
BASALTIC AND ANDESITIC VOLCANIC ROCKS
Calc-Alkalic Suite
3 Unsubdivided grey to green andesitic and basaltic rocks.
3a Massive flows.
3b Pillowed flows.
3c Isolated pillow-breccia.
3d Broken pillow-breccia.
3e Pyroclastic breccia.
3f Tuff, lapilli-tuff.
3g Amygdaloidal flows.
3h Porphyry feldspar flows.
3i Metabasalt, meta-andesite (greenschist facies).
3k Metabasalt, meta-andesite (amphibolite facies).
Claim Area
L3011669
Magusi
Rapids
Pit
N
A
From : M-2367
0 200m 500m 1km

Figure - 5

compilation maps with "Keating" anomolies identified as being higher priority magnetic features of possible kimberlitic origin. Literally dozens of these Keating anomoly targets remain untested in the region surrounding L3011669.

Gold mineralization to the south of L3011669 may be associated with the several north-east or north-west striking fault/shear zones crossing the area. One of the principal targets historicaly was the north-east striking Murdock Creek-Kennedy Lake fault and is an ongoing focus of significant Au, Cu, and Zn exploration on properties along its length to the south-west in Pontiac, Ben Nevis, Clifford, and Arnold townships and into Morrisette Townships. This cross structural feature appears to roll into the Larder Cadillac break in the region immediately to the south of the historic Kirkland Lake gold camp. In the early years of exploration much work was done on this fault feature close to Kirkland Lake and documented values over up to 12 meters feet with sections of up to 4 grams per tonne across 3 meters have been encountered. The north-east extension of the fault passes in proximity to the Iso-Magusi massive sulphide deposit in Quebec. This fault system may have had some connection to the mineralizing fluid conduit system. Similarly, most submitted gold exploration work in the region surrounding the claim appears to have been concentrated in the areas associated with or secondary to the more prominant structural features.

Conjugate splays branching off to the south of the Porcupine Destor fault zone are mapped as occuring and have shown favourable mineral potential. L3011669 (and surrounding group) is located approximately 19 km west-southwest of the Magusie and Fabie Bay Deposits, and on strike with the Magusie-Fabie Bay geological trend, as well as about 14 km south of the Destor-Porcupine Fault. This area has received very little attention regarding mineral exploration, and therefore archived data is limited.

"Mafic" intrusions in the Blake River Group volcanics have been either host to, or related to, gold deposits in the Beauchastel, Dasserrat, and Montbray townships of Quebec, two of these being the Francoeur (Diorite in the hanging wall) and El Coco (mineralized shear zone breaking through the Dioritic intrusion). The exposed mafic intrusives in the claim area are quite limited and available descriptions reveal little layering or zonation. Several sulphide showings with negligible base and precious metal value are mapped as occuring to the east of L3011669 generally along the Magusi river. These have not been field visited by the author.

Previous Work

The earliest published information on the area was written in 1901 by W.J. Wilson. He had examined the rocks and topography along the canoe route from Webster Lake along the Magusi River to the interprovincial border.

In 1919, C.W. Knight did a reconnaissance of the area for the Ontario Department of Mines. Geological map No. 29e of the Ben Nevis Gold Area was produced from this work.

A second map of the Ben Nevis Gold Area, map No. 37g was produced by T.L. Gledhill in 1928.

In 1960, Southwest Potash corporation geologically mapped the central part of Dokis Township. This map can be found

In 1968, a geochemical study of the volcanic rocks surrounding area, including Dokis Township was conducted by W.H. Barager and published in the Canadian Journal of Earth Sciences.

In 1971, L.S. Jensen performed mapping and geochemical studies in Thackery, Elliott, Tannahill and Dokis with the Ontario Geological Survey and produced geological Report #165, accompanied by colored maps at a scale of 1 inch to a half mile. Of the geochemical work done by Jensen on this project, a sample of the granodiorite is from this claim area. Sample data for sample D-21 is found on page 45 of his report. The 62% silica rock is described as a quartz diorite. " The stock in central Dokis Township consists of fine grained pink to light grey granodiorite which has rough, light colored, weathered surfaces. The granodiorite is composed of the following : 40 to 45 percent plagioclase 2 to 4mm in size, 20 to25 percent quartz; 20 to 25 percent hornblende; 3 to 5 percent chlotite; and 1 to 2 percent magnetite. Orthoclase, biotite, and apatite form the accessory minerals. Anhedral grains of quartz, 0.1 to 0.5 mm in size, occur interstitially to subhedral laths of plagioclase and hornblende 0.1 to 2 mm long. In most places, the plagioclase

grains have been deuterically replaced by clinozoisite, albite, and chlorite. The granodiorite is very similar in composition and texture to the granodiorites that are present in Clarice Lake in Pontiac Township * km to the south and in Clifford Township 19 km to the southwest. Like the stocks in Pontiac Township and Clifford Township, the granodiorite cuts a massive subvolcanic rhyolite body."

In 1988, three sonic drill hole were put down by the Ontario Geological Survey as part of an extensive initiative to promote and explore the Black River - Matheson area This program,(BRIM), covered the area north of the height of lands to Lake Abitibi from the Quebec border on the east, to Highway 11 on the west. This program involved many sonic drill holes, basil till, and back hoe trenching and a complete analysis and compilation of the results. Of the three holes performed in Dokis Township, (88-38, 88-39 & 88-40) hole 88-39 encountered a bedrock section of unknown affinity, completely altered to a clay-sericter-iron carbonate rock. This hole may be about in the west central of claim L3011669, about 500 meters north of the Magusi River. Sonic hole 88-40 appears to have been located about 200 meters easterly of L3011669 along the grassy creek flood plain that cuts the claim in an east west direction. The sonic drilling logged two separate glacial sediment packages as occuring in the region of the claim associated with the latest or Laurentide Ice Sheet, the most recent of several massive ice sheets that have covered North America. The upper sediments are logged as being associated with an ice advance of about170° to 180° in the region. Local glacial stria would support this. The lower sediments are believed to be associated with an ice advance of about 225° to 240°. A marked shift in magnetic content coincides with the lower sediments as well as a shift if base metal indicators. No bedrock source has been correlated with the tills to explain the anomolous values.

Subsequent core drilling in about 1999 and 2005 in two drill holes DO-3 and DO-5 did encounter a 50 to 70 meter wide fault controlled carbonate-sericite alteration zone. DO-3 would be located to the east of the NE corner area of L3011669, and DO-5 would be just north west of the number 4 post location of L3011669. If related and contiguous, defines an east-west structure which may be an acute conjugate splay to local major E-NE faults and shears within the Lower Blake River Group. The nature of the type of low-sulphide alteration hosting anomalous gold content is generally geophysical blind with respect to standard geophysical exploration methods. It was hypothesised that gold may be present as 30-50 micron blebs in occasional pyrite grains, or as 2-5 micron flakes within sericite cleavage planes. The zone is open along strike and down-dip. If undisplaced by cross faulting, this feature should subcrop in the central region of L3011669, in a roughly east - west orientation.

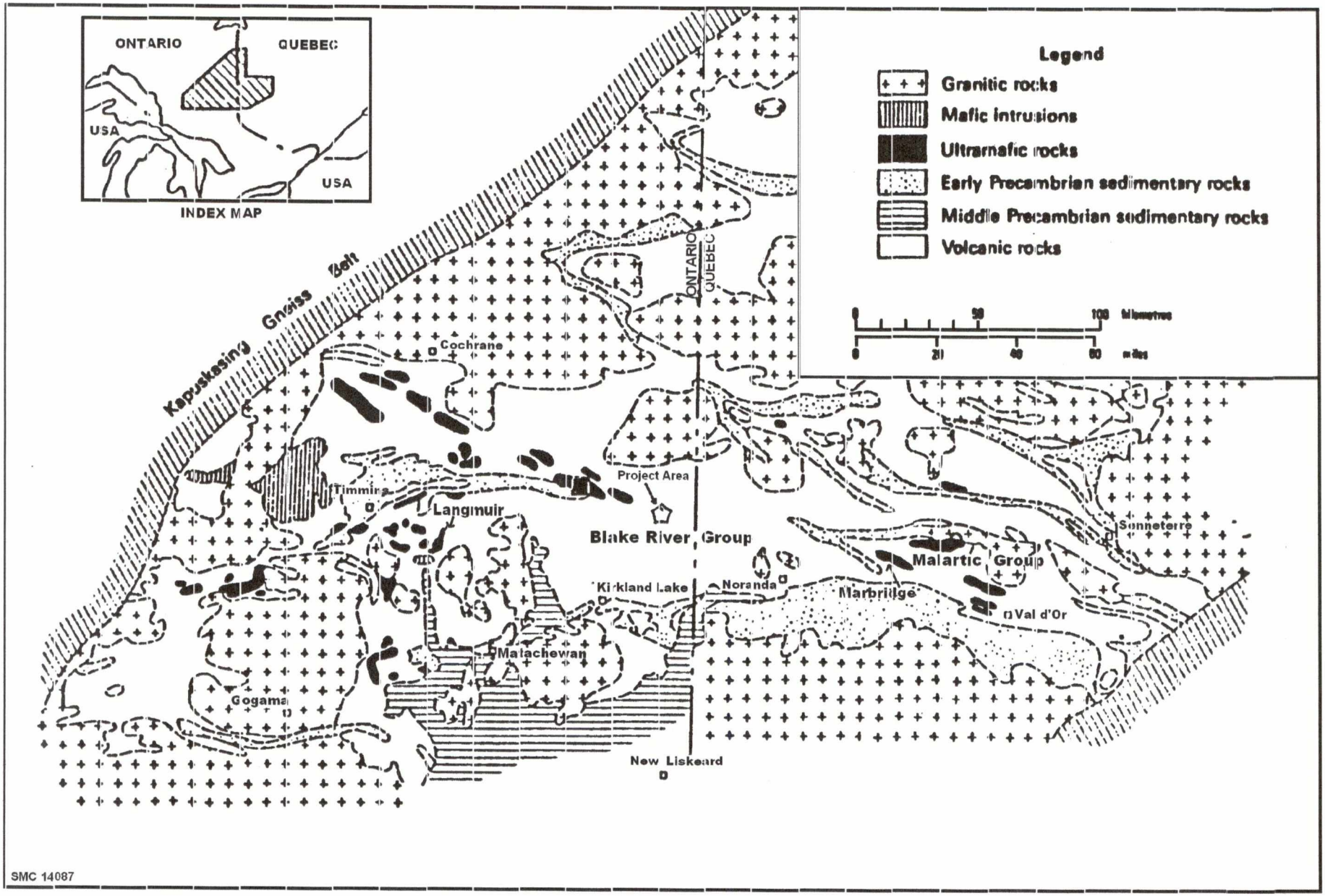
No submitted assessment work anywhere in this township was filed at the Resident Geologists office prior to 1972. Various staked claim groups on older claim maps would indicate that some activity was present.

Interest in the base metal potential of this area was high in the early 1970's after the discovery of the 4 million ton Copperfields-Iso copper zinc gold silver deposit in the adjoining Hebecourt Township(Quebec) which is just over 7 kilometers south east of this claim. The rocks in this "Ben Nevis" area are of the same geologic sequence as those hosting the Rouyn- Noranda base metal mines. Before this, only minimal exploration had been conducted.

In 1972 grid work, magnetometer and sampling by Magusi River Explorations was performed covering the part of the township just to the east and north east of L3011669 by Magusi River Exploration. No cause for the magnetic anomolies were determined. Grab sampling of an area north east of L3011669 gave scattered copper values on select samples of finely divided chalcopyritic mineralization in volcanic rocks. Drilling on geophysics and soil anomolies was suspended after three short drill holes failed to encounter encouraging results. No cause of the soil anomolies has been determined.

Staking activity has always been light historically due mostly to poor rugged access and over the last 15 to 20 years scarcely four dozen claims have been staked in the whole township. Consequently much of the area is underexplored. Being in the same geology as the productive Rouyn-Noranda base metal and gold camp, only about 30 miles as the crow flies, one would have expected a more intense once over of the township.

After acquiring a larger group of claims around the L3011669 property in the mid to late 1990's, a ground based geophysical survey involving VLF and I.P. methods was initiated in 1997



Map of Part of the Abitibi Greenstone Belt, after Goodwin and Ridler (1970)

Figure - 6

and 1999 on a north-northwest grid, and executed by Remy Belanger. Data interpretation was performed by Gerard Lambert. Although several very weak conductor axes were surmised, the data appears to more accurately represent conductive overburden thicknesses. While follow up trenching did show rare thin quartz calcite veining and some weak carbonate alteration, no signifigant mineralization was exposed in any of the half dozen locations where bedrock was reached. Eventual drilling (2005) on marginally conductive responses showed interstitial pyrite concentrations in a pillowed to agglomeratic andesitic rock to be the cause of the I.P. response.

In about 2004, a ground magnetometer survey was perpormed on a portion of the previous grid in attempts to define the area of possible alteration encountered in the OGS sonic drilling. Attempts to drill a possible mag survey defined target were hampered by deep overburden cover at that site. The second attemped hole in 2005 encountered a target as a broad area of carbonate alteration. Weak gold values were encountered from within this alteration.

Due to the geomorphological context of the exploration target in question, it was postulated that specialized geophysical methods and diamond drilling are necessarily the only viable exploration tools that can be applied in order to evaluate the economic gold potential of the general area around L3011669.

No other reported assessment work is available in the Kirkland Lake Assessment Files for the area covered by L3011669.

Present Work/Rationale

In early September of 2015 mapping and prospecting was done by the claim holder and the author to correlate and tie previous information to the current claim fabric. Almost all the sought for features were field located and re-mapped. Clear cuts and regrowth have mostly obliterated the previous grids on the property and no evidence of the previous gridwork was encountered. If required, correlation with found grid work adjacent to the claim could be undertaken.

Results/Conclusions

Most of the adjacent to the north, south and east of the claim area was clear cut about 14 years ago and much of the very thick jackpine replantation is about 15 to 20 feet tall now. These same replanted areas have a slightly sandier content to the exposed soils than the gently sloping areas flanking both sides of the prominant west-east creek which traverses the claim area. The claim lies entirely within a section of forest left uncut along drainage and creek features.The intermittantly flowing creek which runs west east across the center of the claim averages about two to four feet wide in its regular channel, and has a 10 to 25 meter wide grassy flood plain mostly along either side for most all of its length and provides reasonable walking access to those parts. The western end of the creek begins at a 2 to 3 hectare ponded marshy area quite rough to get across until past the western end. Down stream just before the eastern limit of the, the creek widens into an abandoned open beaver pond about 10 to 15 meters wide and about 50 meters long providing a convenient water sources for core drilling. The gently sloping areas about 100 or so meters on either side paralleling the creek has a mature spruce poplar alder mix with isolated birch and jackpine groves, with average to thin underbrush in most areas, and soils a little moister and clayey soil than the flatter areas further from the creek.

These exposed clayey soils are the remnant lake bottom sediments of proglacial Lake Barlow and or Lake Ojibway as mapped by the OGS in their sonic drill program. Previous work has shown these sediments to be as deep as 120 feet locally, have varved sections up to 70 feet thick and that they overlay remnant sediments from an previous ice advance. Varves averaging about 3mm thick can be observed in the clays easiest along the steeper side terrain-banks of the creek system. During previous work, organic material such as small sticks and stems were seen in certain layers. No record of depth or strata markes were noted. Very little of what could be considered mineral grains were obtainable from several spots checked along the creek as finer material was composed of mostly tiny sized clay aggregates and organic material.

No fish life has ever been noted in the foggy clayey water of the creek system or any of the small pools. It is very unlikely that this is habitat for fish of any sort. As with most of the creek

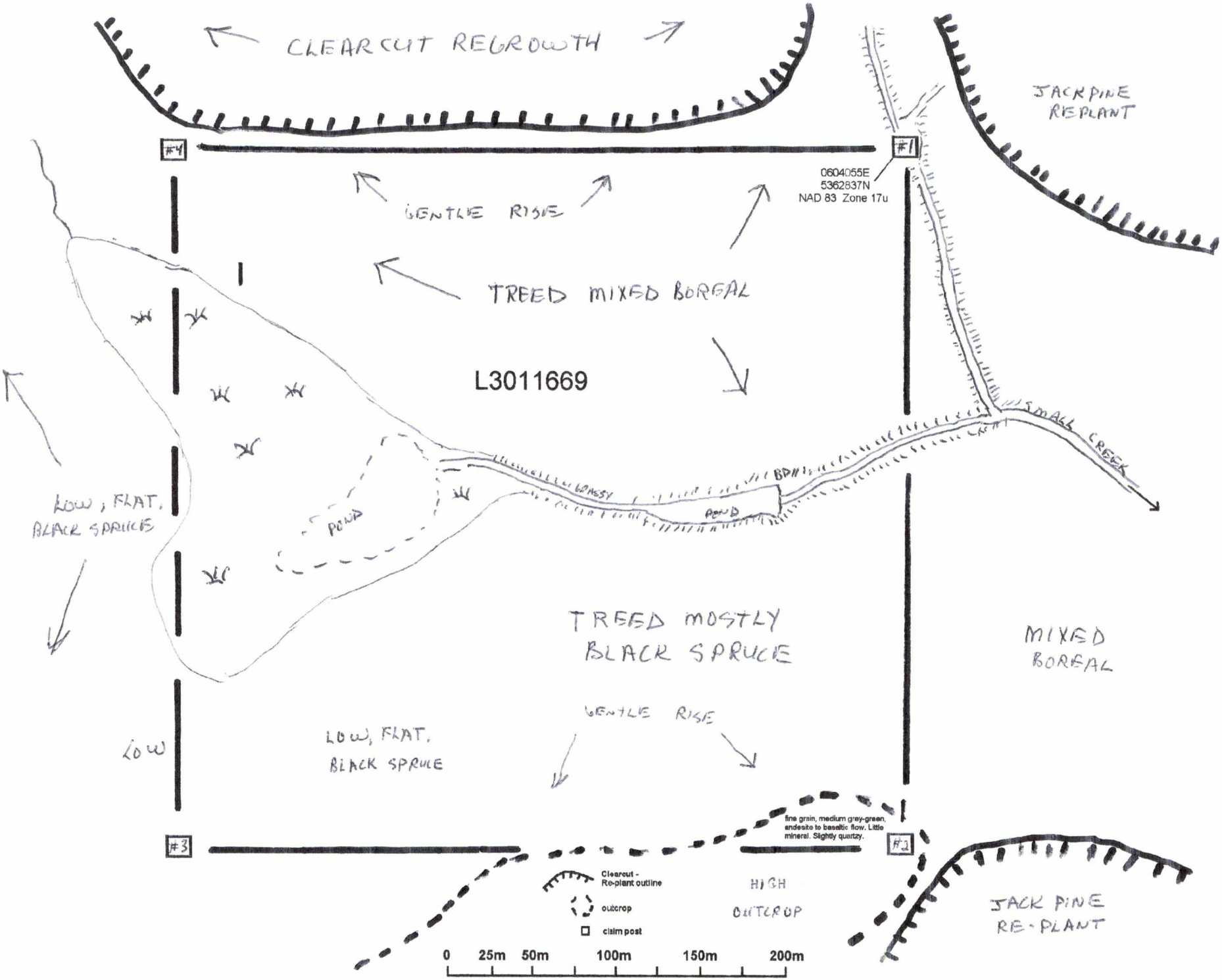

CLEARCUT REGROWTH
JACKPINE REPLANT
#4
#1
0604055E
5362837N
NAD 83 Zone 17u
GENTLE RISE
TREED MIXED BOREAL
L3011669
SMALL CREEK
BOGGY
POND
POND
LOW, FLAT, BLACK SPRUCE
TREED MOSTLY BLACK SPRUCE
MIXED BOREAL
GENTLE RISE
LOW
LOW, FLAT, BLACK SPRUCE
#3
#2
fine grain, medium grey-green, andesite to basaltic flow. Little mineral. Slightly quartzy.
Clearcut - Re-plant outline
outcrop
claim post
HIGH OUTCROP
JACK PINE RE-PLANT
0
25m
50m
100m
150m
200m

Figure - 7

system so far observed, in recent years no beavers or recent dam repairs or workings were noted. This is in sharp contrast to the period prior to about 2006 when several groups inhabited the various branches of the creek system and fresh cuttings were always evident. As no known ongoing trapping is seen to be occurring, the local beaver population may have moved to a more bountiful area of the watershed. Recent moose sign is abundant. Several black bear sightings were made both on the general claim area and on the access road. The odd grouse and rabbit occur in the area but none were noted on these days.

Available MNDM and OGS mapping showed no outcroppings on the claim area 3011669 with the exception of the prominant outcrop at the extreme south east corner of the claim. The rock noted is a medium to dark green fine grained volcanic rock previously mapped as andesitic. Very few volcanic features were evident in the rock area on the clam corner, but 20 to 30 meters south of the number 2 corner post the rock is exposed as it rises rather sharply. Here wispy odd calcite/quartz occurs randomly. Very little sulphides were noted. Roughly agglomeratic with odd amygdaloidal patches and fragments showing some calcite/quartz replacement or filling.

Most of the sought for features were re-located and mapped. Several pickets from the previous grid work were also noted and should allow correlation of prior work. The feature of interest would be the sericite/carbonate alteration which is believed to run east west across the center of the claim. Unfortunately this would subcrop under fifty meters plus of till and clays. The current protracted down cycle of the mining industry and poor market conditions make finding exploration partners for even the best of projects virtually impossible. A thorough round of deep sensing geophysics detailing previous drill indicated features with follow up core drilling would be the preferred and most determinative type of program. It is expected to return to this site and surrounding claims to perform additional manual work. Looking at a larger section of bedrock further to the south or west of the claim to ascertain planar features is also anticipated. Since limited outcrop occurs on the claim, geophysical methods, MMI or diamond drilling would be a method to further explore the rest of the claim area.

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