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2·56299

L3006774

Larder Lake Mining Division
Dokis Township
District of Cochrane

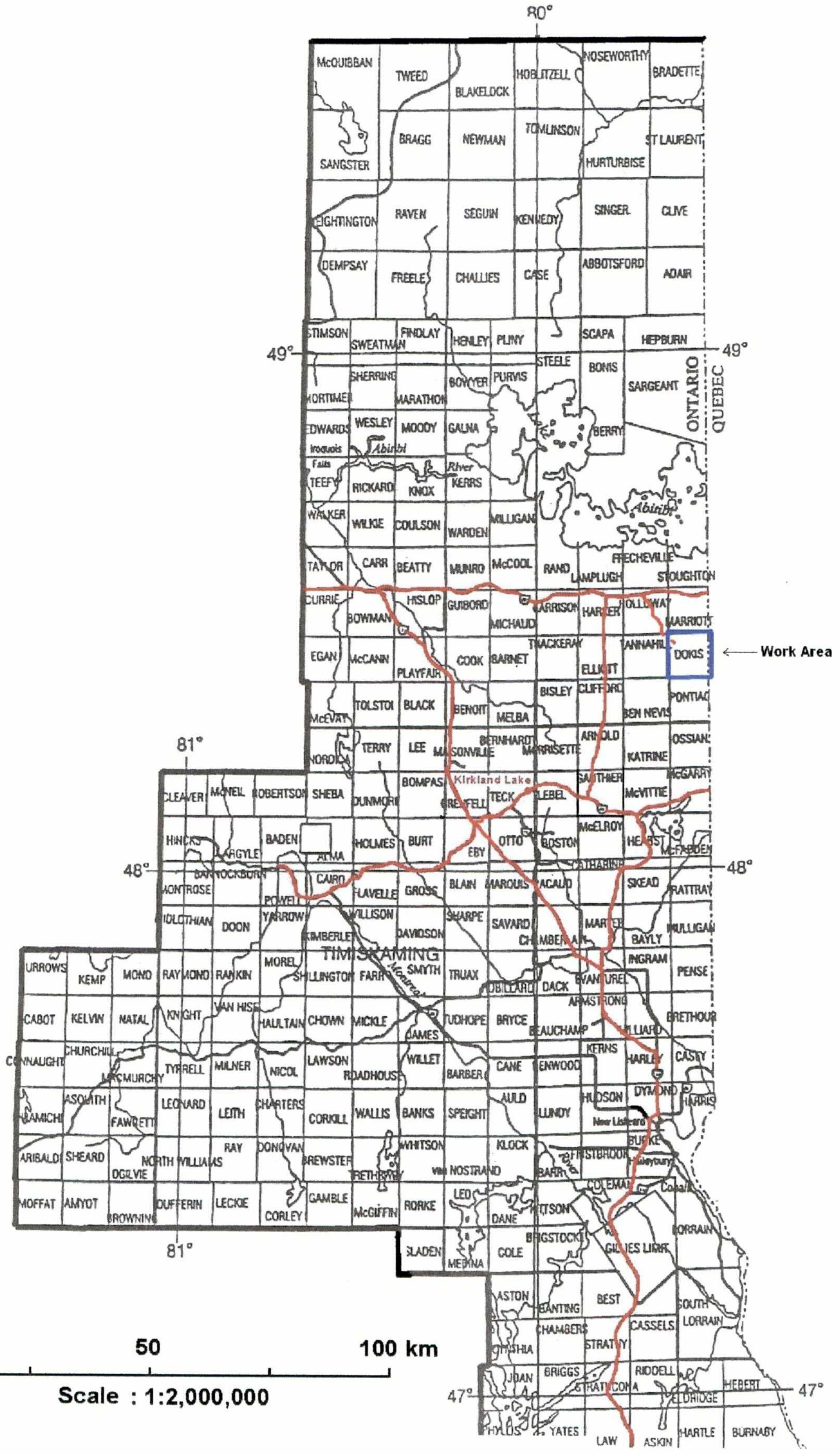
NTS 32D/5
48°24´30"N 79°35´00"W

Submission : Fall 2015

INDEX

FIGURES

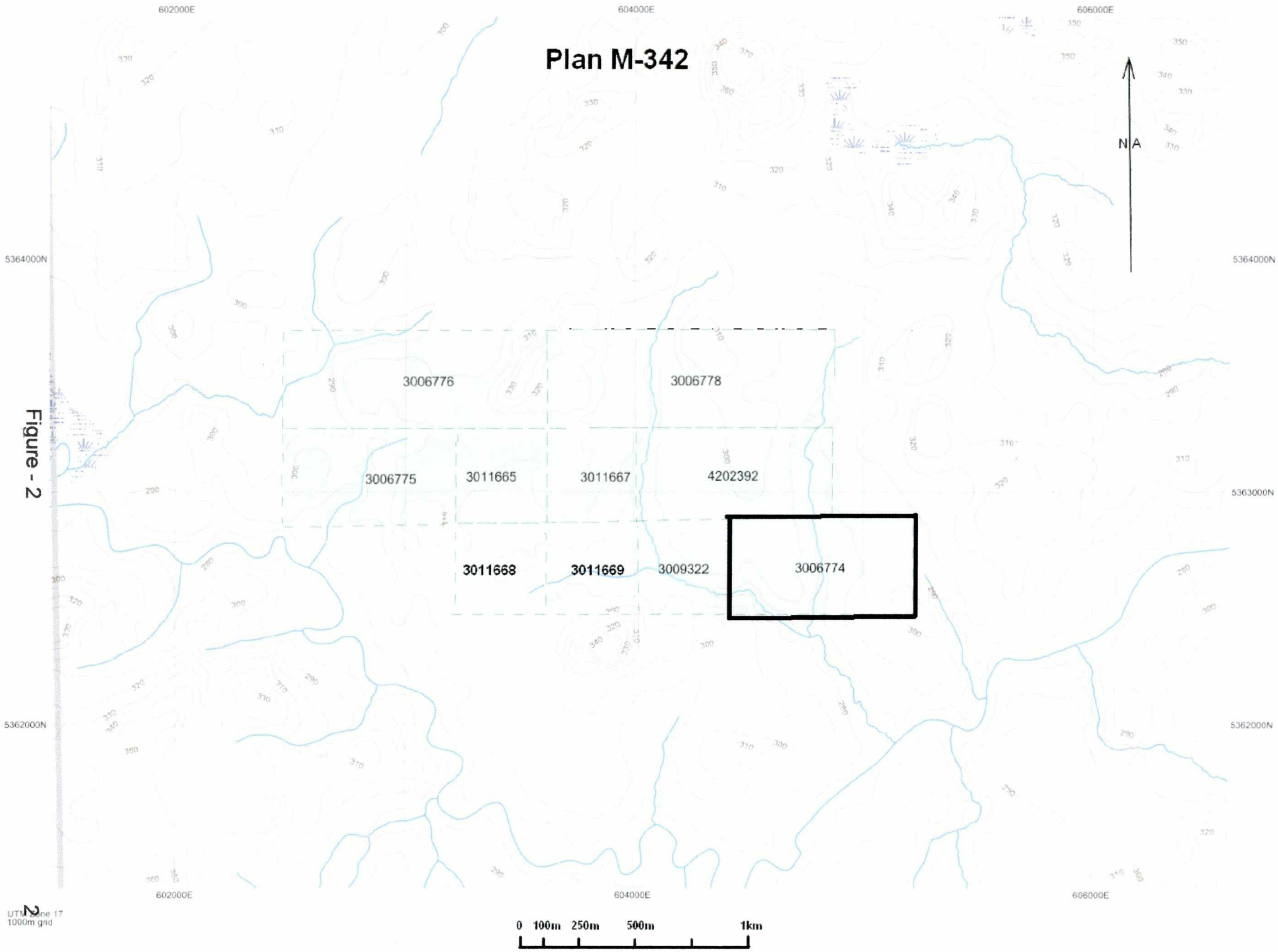
Kirkland Lake Resident Geologists District



50 100 km

Scale : 1:2,000,000

Figure - 1



Plan M-342
602000E
604000E
606000E
5364000N
5363000N
5362000N
N
A
3006776
3006778
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 claims cover the west central part of Dokis Township and can be found on map sheet NTS 32 D/5, with the geographic center of the claims being at approximately 48°24′30"N and 79°35′00"W. The eastern boundary of the claim lays about 3 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-west direction. Following this for about 14 kilometers south south-east will put you just onto the north central portion of the claim the claim breifly along the northern boundary. Former logging roads have given reasonable access to areas around the property. Since completing harvesting and reforestation activities many of the skidways and branch roads have begun to deteriorate, some significantly.

Claim

L3006774 is a 2 unit staked mining claim recorded on plan M-0342 of Dokis Twp. The claim lays about 45 kilometers north west of the Rouyn-Noranda mining Camp, about 45 kilometers North-East of the Kirkland Lake mining camp, about 14 kilometers south from the Holt and Holloway break features of the Porcupine-Destor regional fault, and about 22 kiloneters west of and roughly on strike of the Fabie Bay deposits (Quebec) in similar Blake River rocks.

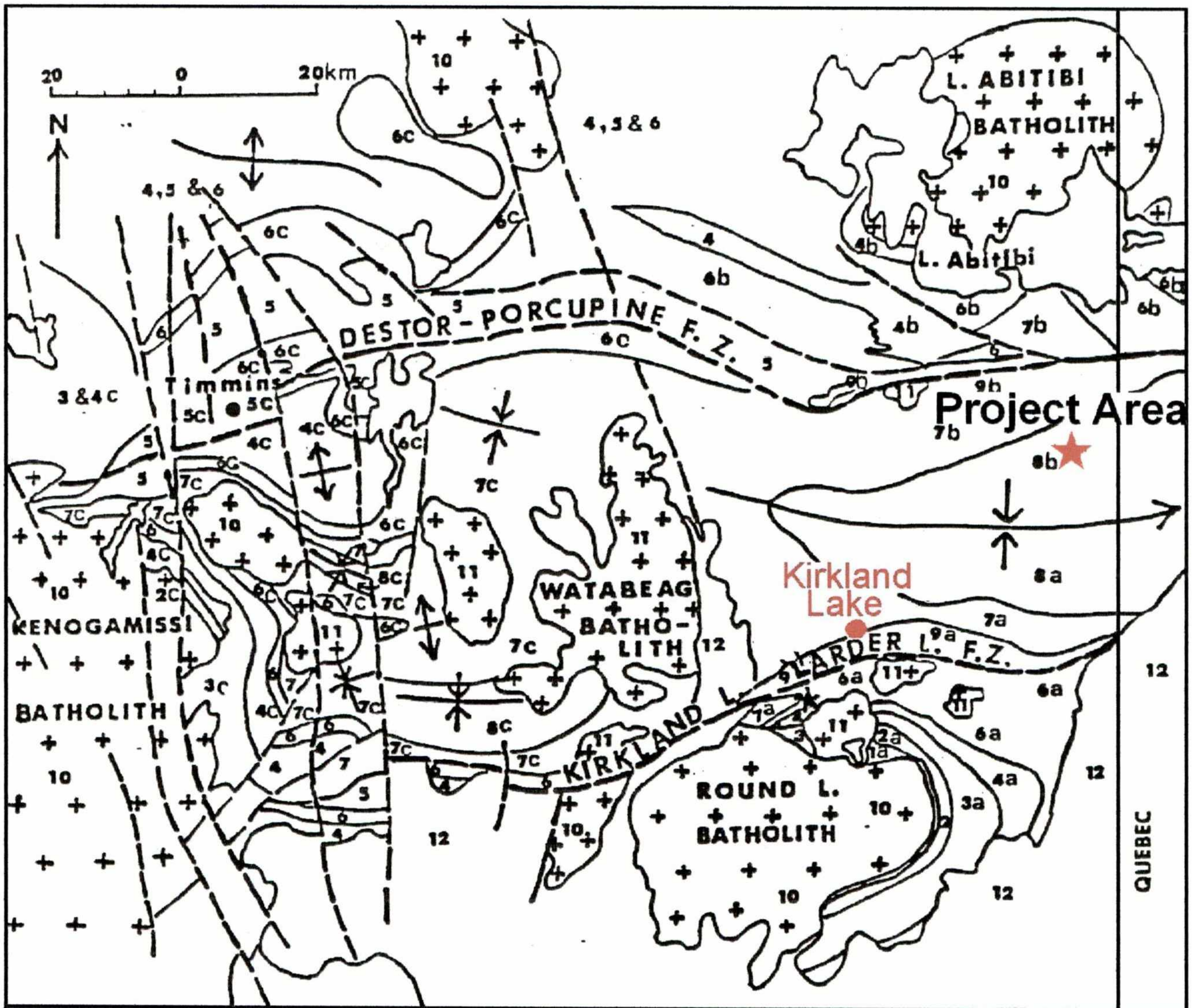
General/Claim Geology

This property lies in the Blake River Group of the Abitibi Greenstone Belt. To the north about 10 kilometers is the Porcupine-Destor Deformation Zone, which is a prolific host to gold deposits in the region. The Holt McDermott and Teddy Bear mines being only 14 kilometers north of this claim and the Ross, Glimmer and Stock mines further to the west of this claim. 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 to the north.

To the south about 7 kilometers are what have been interpreted to be two volcanic vental 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 vental 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 600 meters north-east of claim L3006774, 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 veins and are mainly concentrated immediately west of the rhyolite. Finely disseminated sulphide

General Geology of the Kirkland Lake Area



LEGEND

L.S. Jensen

Proterozoic
- Keeweenawan diabase (not shown)
- 12 Cobalt Group

Archean
- Matachewan 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

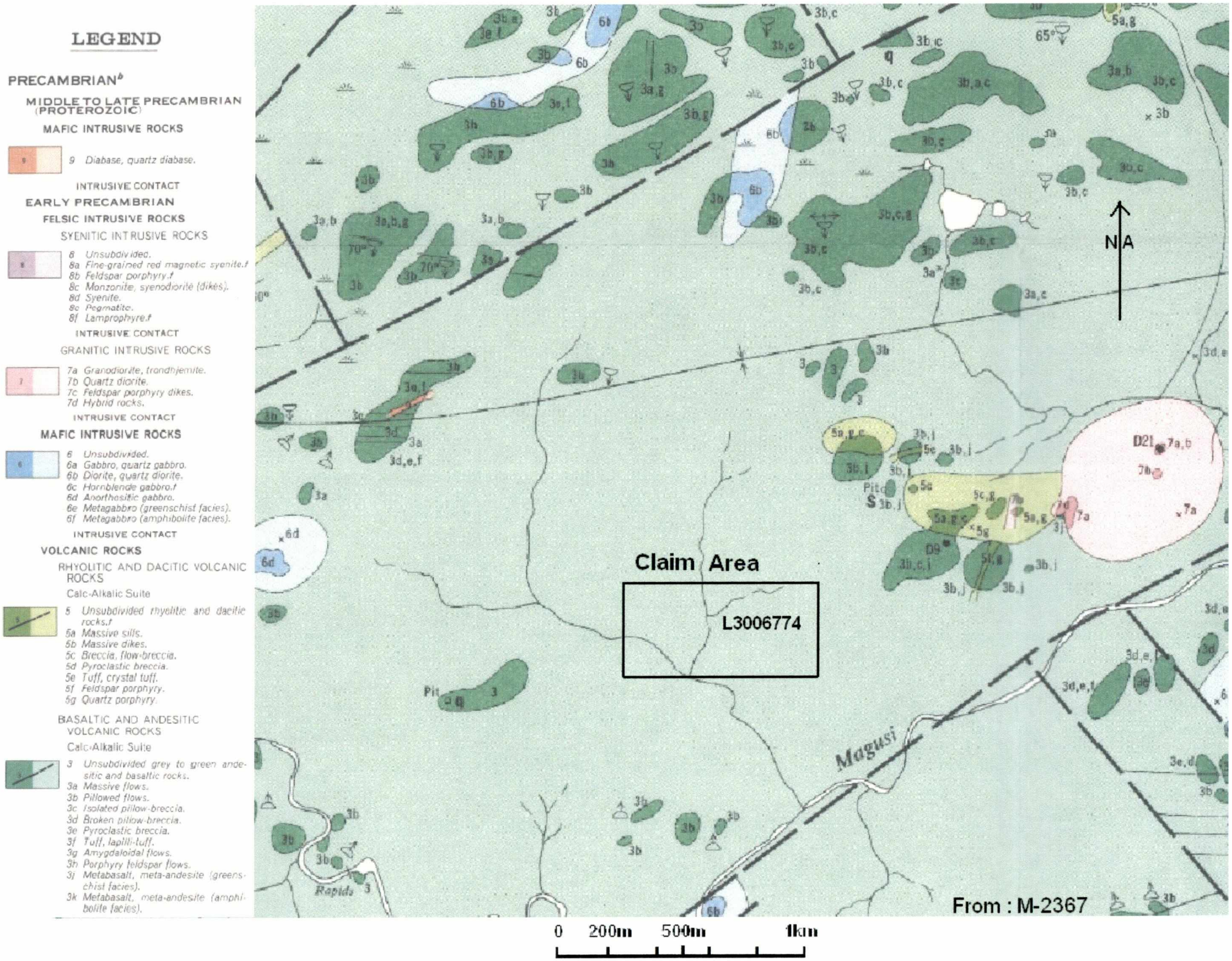
minerals of less than 3 percent are present in unfractured parts of the altered volcanic rocks. No sulphide minerals were noted in the rhyolite body or the granodiorite stock." The second occurance of ryolite is about two kilometers due north of the claim and is around 1km long by 400m thick.

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 them selves 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*)

Numerous cross faults trending slightly 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. Recent aerial geophysical work in 2003 by the Ontario Geological survey interpretation has generated compilation maps with "Keating" anomolies identified as being higher priority magnetic features of possible kimberlitic origin. Literally hundreds of these Keating anomoly targets remain untested in the region surrounding L3006774.

Gold mineralization to the south of L3006774 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 currently the 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. 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



LEGEND
PRECAMBRIAN
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.
8b Feldspar porphyry.
8c Monzonite, syenodiorite (dikes).
8d Syenite.
8e Pegmatite.
8f Lamprophyre.
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.
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.
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.
3j Metabasalt, meta-andesite (greenschist facies).
3k Metabasalt, meta-andesite (amphibolite facies).
Claim Area
L3006774
N A
Magusi
Rapids
From : M-2367
0 200m 500m 1km

Figure - 4

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.

This property 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 L3006774 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 ggains 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 1 kilometer west of claim L3006774, about 500 meters north of the Magusi River. Sonic hole 88-40 appears to have been located about 200 meters north west of L3006774 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. 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. DO-3 would be located in the NW corner area of L3006774. It is 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 region of the north boundary of L3006774.

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 L3006774 by Magusi River Exploration. No cause for the magnetic anomolies were determined. Grab sampling of an area north east of L3006774 gave scattered high 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 L3006774 property in the mid to late 1990's, a ground based geophysical survey involving VLF and I.P. methods was initiated in 1997 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 L3006774.

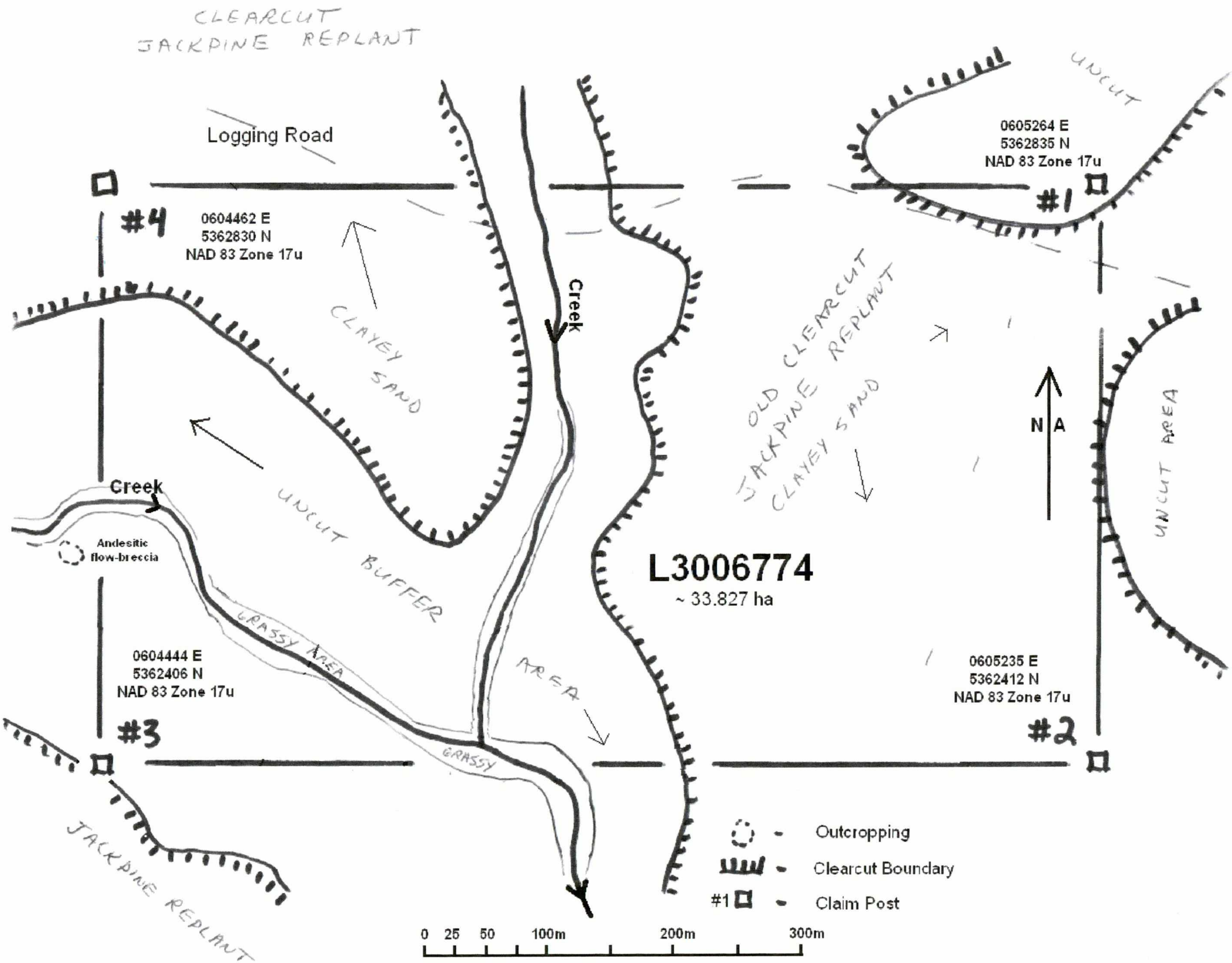

CLEARCUT
JACKPINE REPLANT
Logging Road
UNCUT
0605264 E
5362835 N
NAD 83 Zone 17u
#1
#4
0604462 E
5362830 N
NAD 83 Zone 17u
Creek
CLAYEY SAND
OLD CLEARCUT
JACKPINE REPLANT
CLAYEY SAND
N A
UNCUT AREA
Creek
Andesitic
flow-breccia
UNCUT BUFFER
L3006774
~ 33.827 ha
GRASSY AREA
AREA
0604444 E
5362406 N
NAD 83 Zone 17u
0605235 E
5362412 N
NAD 83 Zone 17u
#3
#2
GRASSY
JACKPINE REPLANT
Outcropping
Clearcut Boundary
#1 Claim Post
0 25 50 100m 200m 300m

Figure - 5

No other reported assessment work is available in the Kirkland Lake Assessment Files for the area covered by L3006774.

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

With the exception of the standard buffer areas around drainage features, most all of the claim area was clear cut about 13 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 intermittantly flowing creek 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 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. Walking along the open grassy beaver meadow along the creek can be tricky early in the season as the underlying clayey sediments, some likely just deposited this spring, are still somewhat wet and prone to sinking to the top of your boots.

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 system so far observed, in recent years no beavers or recent dam workings were noted, perhaps in connection with keeping the area roads accessible. Recent moose sign is abundant. No black bear sightings were made but their presence has been previously confirmed by the author.

Available MNDM and OGS mapping showed no outcroppings on the claim area. No rocks or boulders anywhere on or immediately around the claim area were encountered. A small north sloping 4 to 7 meter wide exposure of a fine grained, medium grey to grey green, non magnetic, andesitic agglomerate flow? was visited briefly. This occurs on the south west side of the east west creek just west of the claim. Odd scattered tiny rusty pyrite grains and cavities? were observed, but generally the rock is sparse of mineralization. A light carbonitization was noted to cause 5% HCL to bubble weakly. Clast margins are mostly indistinct with color variation, mineral abundance or textures being the visual indicator to clasts. Few tight calcite? wisps oriented at about 075° were noted. This rock would underlay the previously mentioned carbonate altered fault feature of interest by probably 60 to 100 meters with the east west creek possibly occupying the extrapolated surface expression area of the fault. A drill hole would resolve this.

Features were re-located and mapped. It is expected to return to this site to perform additional manual work exposing a larger section of the subcrop or exposing the bedrock further to the east, followed by sampling and assaying will be done if warranted. 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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Amax Exploration	File # 28
Southwest Potash Corporation	File # 2545
Santa Maria Mines Ltd.	File # 2455
Maurice Hibbard	File # 833
McIntyre Porcupine Mines Ltd.	File # 1825
Roger P. Harvey	File # 805
Edouard Poirier	File # 3474,3705
Dean R Cutting	File # 3899
Tannahill Township	
Sudbury Contact	File # 3228,3316, 3401 3402,3407,3408
Lac Minerals	File # 1507,1543,1544, 1541,1542,1545

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