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Physical Assessment

Report of Assessment Work

Mining claim: S.O. 1195060 S1/3, lot 31, con. XVII, Monmouth Township, Haliburton County



Prepared and submitted by: Christopher Fouts October 28, 1998

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Introduction

Mining claim S.O. 1195060 was staked October 19, 1995 on S1/3 lot 31, con. XVII, Monmouth Township, Haliburton County, by Chris Fouts (licence # A51813). This site is known as the Desmont Mine, and has been explored for molybdenum and uranium in the past. Physical assessment work was carried out on October 19, 26 and 27, 1998, for molybdenite and rare earth bearing minerals by the author.

Location and Access

The mining claim is situated on S1/3 lot 31, con. XVII, Monmouth Township, Haliburton County. Access is by the Cedar Lake Road, north off of the Essonville Road at a point 1.1 km west of Wilberforce, Ontario. This lot is Crown Land. The claim location is shown on figure 1.

The claim location is found on Topographic Map 31E/1 (Wilberforce sheet), Ontario Department of Mines (ODM), Geologic Map 1957b, and ODM Map 2174.

Regional geology

Monmouth Township, Haliburton County, is situated in the Grenville Province of the Canadian Shield. Rocks here date back 1.0 to 1.3 billion years. The region is underlain by marbles and metasediments intruded by granites, gabbros and nepheline syenites. The claim area is underlain by bands of sugary textured, green pyroxenite interbedded with marble, lime-silicates, and micaceous marble, and is cut by small dykes and irregular masses of granite pegmatite. It is reported that certain pyroxenite or diopside-calcite bands contain sparse disseminations of uranothorite, and certain lime-silicate and micaceous marble bands contain sparse desseminations of uraninite. These rocks strike north-northwest and dip 40° - 60° to the east.

Topography

The area is characterized by steep sided hills with an average relief of 50 metres. Numerous small ponds, lakes, creeks and streams are found between hills. Glacial till coverage is extensive limiting bedrock exposure. Thickness is between 30 cm and 1 metre. Drainage is to the south-southeast into the Irondale River, and south into the Trent River system.

The area is well forested, with maple 65%, birch 25%, pine 5%, with some oak and hemlock. The soil is very sandy and is often rather rusty coloured.

Previous work

Between 1954 and 1955 the Desmont Mining Corporation Limited, (formerly known as Homer Yellowknife Mines Limited), performed stripping and trenching assessment it their exploration of uranium bearing mineralization. Claims were held on lots 25 - 32, con. XVII; and lot 31, con. XVI, Monmouth Township. Lot 31, con. XVII was bulldozed and trenched, and 2,810 feet of diamond drilling was done. Further work was done in 1965 and 1966 in the search for molybdenum. A geochemistry survey and 2,688 feet of diamond drilling was performed by New Far North Exploration Ltd.

The site has been mineral collected in the past decade for various minerals. Sabina (1986) reports occurrences of the following minerals: diopside, actinolite, albite, pyrite, pyrrhotite, calcite, molybdenite, uranothorite, thorianite, apatite, titanite, garnet, serpentine, quartz, K-feldspar, chondrodite, scapolite, marcasite, gypsum, allanite, graphite, stillwellite, hydroxylbastnaesite, monazite, magnetite, goethite, tourmaline, sulphur, perrierite, sphalerite, and ancylite.

The author prospected formerly bulldozed trenches in 1996 and 1997. A number of these trenches showed interesting mineralogy (coarse grained molybdenite, albite, actinolite, diopside, calcite, titanite, and uranothorite), and warranted further investigation.

Assessment work

Travelling to the claim from Bancroft each day I worked the following schedule:

October 19 Chris Fouts 10 am to 5: 30 pm
Physical assessment - trenching to expose bedrock

October 26 Chris Fouts 9:45 am to 4:30 pm Physical assessment - trenching to expose bedrock

October 27 Chris Fouts 10:15 am to 3:00 pm Physical assessment - trenching to expose bedrock

October 19

Working in the trench labelled "A" in assessment done in 1996 (see figure 2 & 3), I worked to expose the bedrock at several places, (locations A, B, C, D, E & F on figure 2), to get a feel for the geology and the mineralization. Trenches cut in the 1950's and have partially filled in by weathering over time and by numerous mineral collectors who visit the site each season. Small boulders, cobbles and sand need to be dug out of the trenches to expose the bedrock for inspection.

Location "A":

An area roughly 3 metres long, 1.3 metres wide, and 2 cm to 30 cm deep was cleared off to expose the bedrock at the side of a trench cut the 1960's. Medium to fine grained, green, anhedral, interlocking diopside crystals create a sugary textured pyroxenite rock, which is cut by a thin (4 to 6 cm), discontinuous and irregular vein of coarse grained orange calcite. The pyroxenite rock by the vein shows minor molybdenite and pyrite mineralization. Molybdenite occurs as flakes 2 - 10 mm across; pyrite as cubes and pyritohedrons about 1 - 3 mm in size. The vein, and the mineralization appear to travel only a short distance from the trench.

Location "B"

An area 3 metres long, 1.3 metres wide, and 3 cm to 60 cm deep was cleared to bedrock at the side of the main trench. The bedrock, like location"A", is medium to fine grained, green pyroxenite rock. No apparent layering or banding in the rock is present. The rock shows numerous, small rusty zones, dark green, medium grained actinolite patches, and occasional small quartz lenses.

Location "C"

Digging out an area about 2 metres long, 1.3 metres wide, and 1 metre deep, I opened up a joint running off the trench, bearing 272°. In the medium grained pyroxenite rock surrounding this vein there is small irregular veinlets and patches with coarse grained diopside and coarse white albite feldspar. Associated with this is minor molybdenite and pyrite mineralization. The molybdenite occurs as flakes 2 - 5 mm across; pyrite as modified, and weathered cubes and pyritohedrons about 1 - 3 mm across. Rare actinolite blades and small apatite crystals occur in the veinlets and patches. Rust staining is very extensive along micro cracks and fractures in the rock.

October 26 and 27

Location "D"

Small area of about 1 metre diameter was exposed. The bedrock in the middle of the old trench is medium to coarse grained (2 mm to 1 cm), grey-white, calcite marble, containing abundant flakes of biotite (1 - 2 mm across), orange anhedral grains of chondrodite (1 mm across), and minor pyrite as crystals, less than 1 mm across. The pyrite weathers to give the marble a rusty appearance.

Location "E"

A small pit, about 1 metre in diameter and 75 cm deep was placed in an old bulldozer striping area which is the extension of trench "A". It is located about 5 metres from the west end of trench "A". The rock exposed is medium to coarse grained marble, grading into medium grained green pyroxenite rock.

The marble is light grey white calcite with a variable grain size common to metamorphosed sediments. The marble contains variable amounts of anhedral, light green diopside grains throughout, grading in areas to patches and layers of pyroxenite rock. The rock is very friable,

gaining competence with higher diopside content. The marble has abundant small crystals of pyrite (< 1 mm) throughout, which are badly weathered, giving the marble a rusty appearance. The marble shows a thin horizon (2 - 3 cm thick) of graphite mineralization. Coarse flakes 3 - 25 mm across can make up about 20% of the rock in this horizon.

The pyroxenite rock breaks along flat layers producing slabs. This may reflect original bedding or progressive zones of metamorphism. This layering strikes at 327°, dipping about 60° to the E. The rock is medium grained (1 - 2 mm grain size), and shows a lot of rust staining. Occasional vugs are long and thin and show poorly developed diopside crystals. Some long patches of massive, dark green actinolite was seen.

Looking at an old trench to the north, labelled trench "B" in 1996, the side of the trench near the west end was cleared, (labelled "F" in figure 2). About 2.3 metres long, 1.3 metres wide and 0.8 metres deep, this small excavation exposed a calcite vein running off trench "B". The vein bears 242° and looks perpendicular. It is very coarse grained yellow to orange calcite, carrying very little other mineralization. The calcite is very fractured and weathered. It probably was originally orange and became weathered to a yellow to white colour.

The calcite contains many small cavities (3 - 7 mm), commonly filled with soft red clay. This could be weathered remnants of pyrite or radioactive minerals. The calcite carries minor amounts of subhedral green diopside, occasional green prismatic apatite (up to 1 cm in diameter), rare dark green subhedral actinolite blades, and rare black modified cubes (2 - 3 mm) of uraninite showing small red hematite haloes.

The north side of the vein has a sharp contact with very friable, sugary green pyroxenite. The south side shows a sharp contact with fine to medium grained pyroxenite with a small, irregular (rather patchy) vein running horizontally into the bedrock. This vein shows coarse grained diopside, albite feldspar, green apatites up to 5 cm long with some relict calcite. The pyroxenite by this smaller vein contains minor amounts of molybdenite and pyrite. A hard pan layer (1 cm) of rusty iron (goethite?) has developed along the southern wall of the larger vein.

There is no development of coarser crystals along the walls of the larger calcite vein (which is rather unusual), while the smaller horizontal vein resembles the small patchy vein in trench "A" (location "C").

An outcrop (about 1.3 metres in diameter) on the opposite side of trench "B", across from the small excavation, shows medium to fine grained green pyroxenite with minor amounts of albite feldspar throughout. Thin discontinuous rusty horizons indicate an apparent strike of 322°, dipping about 60° NE. A minor amount of molybdenite and pyrite are present. Molybdenite in small flakes about 1 - 3 mm across, and pyrite as small cubes and pyritohedrons about 1 - 3 mm across.

Recommendations

Exploration reports from the 1950's indicate that radioactive and rare earth material occurred in the marble layers on this property. I would suggest from observations so far that this mineralization occurs associated with coarse grained calcite veins with cut the marble/pyroxenite sequence. Much more trenching to expose the bedrock must be done to test this theory. This is most easily done where bulldozing and trenching has been done in the past. These features have filled in considerably due to weathering and numerous mineral collectors.

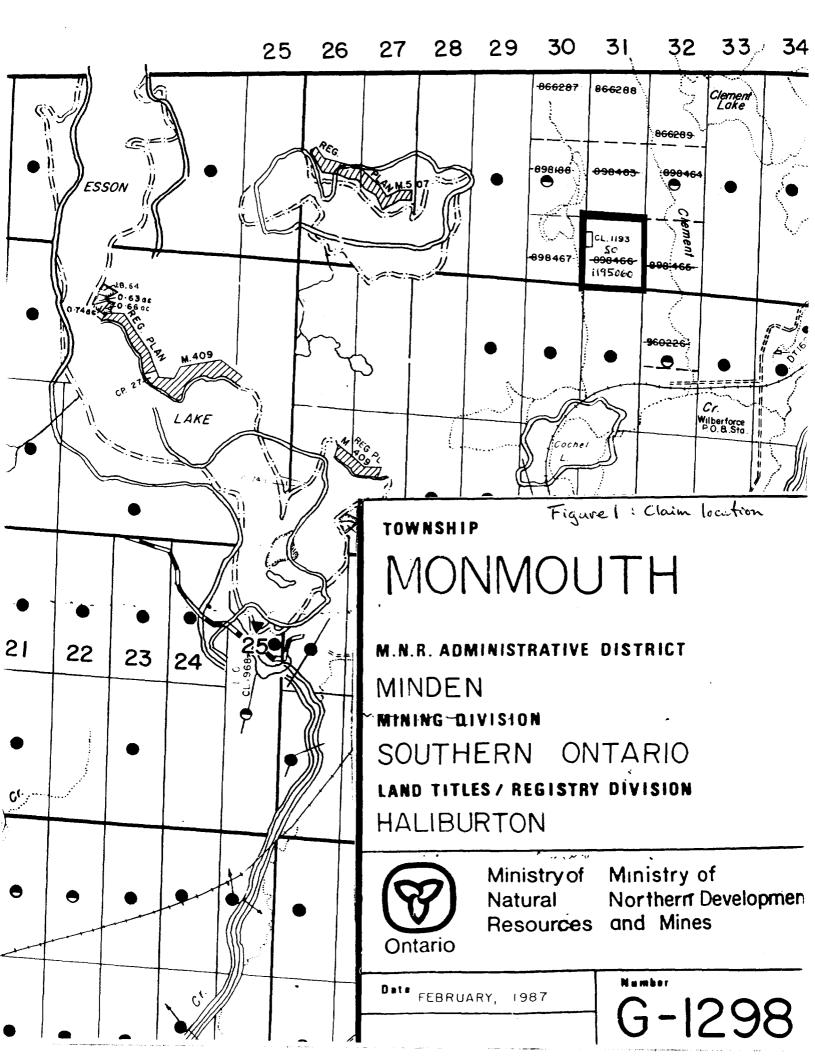
Geophysical methods (magnetic and radiation surveys) would likely be very useful in outlining mineralized zones.

Christopher Fouts

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References

- Armstrong, H.S. and Gittins, J., 1968: Geology of Glamorgan and Monmouth Townships, Haliburton County; Ontario Department of Mines, Open File Report 5021, 210 p.
- Johnston, F.J., 1968: Molybdenum deposits of Ontario, Ontario Department of Mines, Mineral Resources Circular No. 7, 98p.
- Karvinen, W.O., 1973: Metamorphogenic molybdenite deposits in the Grenville Province; unpublished Ph.D. thesis, Queens University, Kingston, ON, 252 p.
- Satterly, J., 1957: Radioactive mineral occurrences in the Bancroft area, Ontario; Ontario Department of Mines, Annual Report, v. 65, pt. 6.
- Sabina, Ann, 1986: Rocks and Minerals for the Collector: Bancroft Parry Sound area and southern Ontario; Geological Survey of Canada, Miscellaneous Report 39E, 182 p.



West end of Trench 'A', Desmont Mine area

Stylot 31, XVII, Monmonth Twp. S01195060

- graphite

Legend

1 - Marble

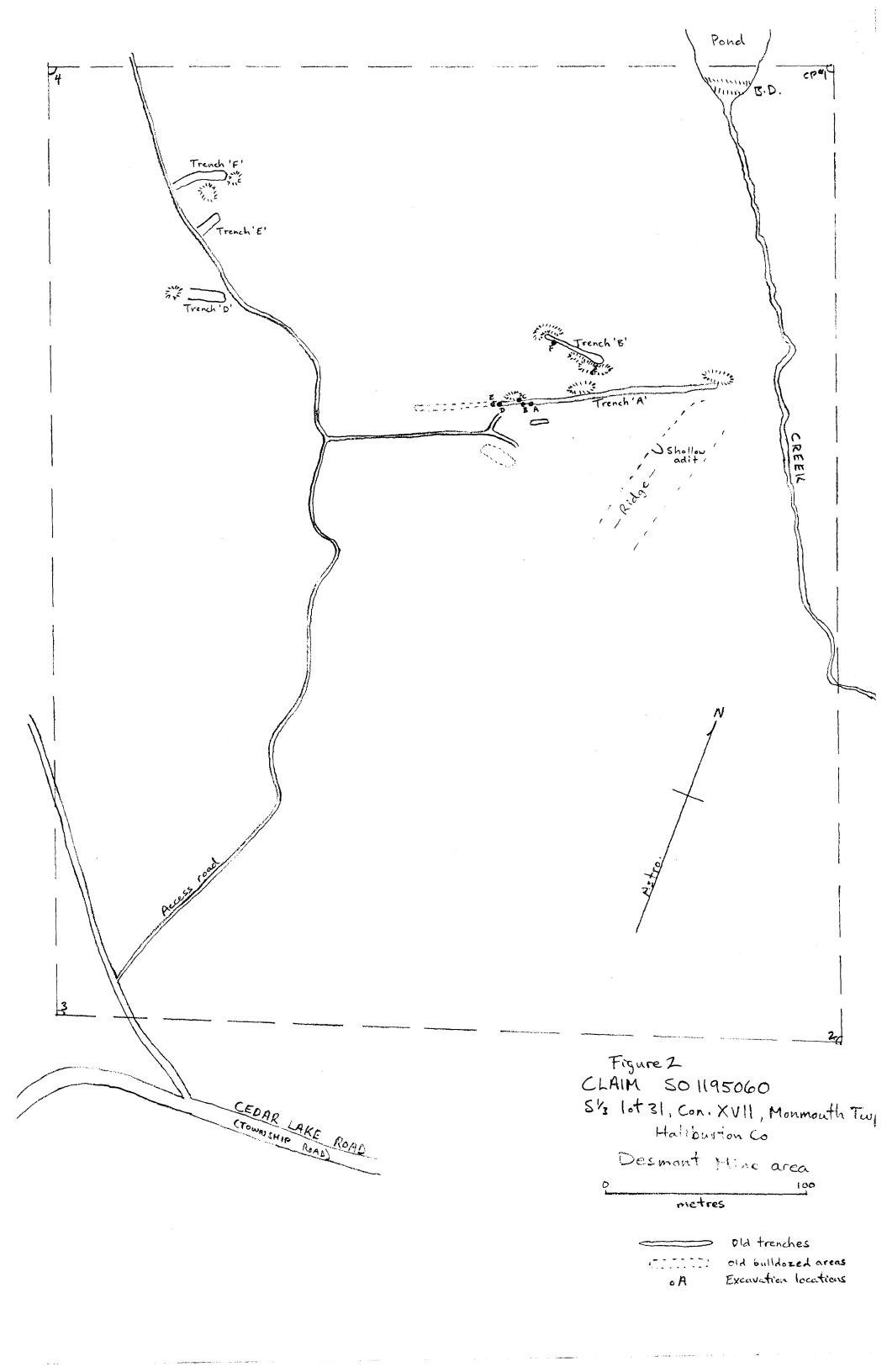
2 - Green pyroxenite (diopside)

2a - Pyroxenite /albite

3 - Coarse calcite vein

M. - Molybdenite

o metres





Ministry of Northern Development and Mines

Declaration of Assessment Work Performed on Mining Land

Mining Act, Subsection 65(2) and 66(3), R.S.O. 1990

Transaction Numb	er (office use)
W9890.	00052
Assessment Files	Research Imaging



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r of subsections 65(2) and 66(3) of the Mining Act. Under section 8 of the to review the assessment work and correspond with the mining land holder. g Recorder, Ministry of Northern Development and Mines, 6th Floor,

- For work performed on Crown Lands before recording a claim, use form 0240. Instructions: - Please type or print in ink. Recorded holder(s) (Attach a list if necessary) Client Number 613 01/ Telephone Number Address ax Number Type of work performed: Check (>) and report on only ONE of the following groups for this declaration. Physical: drilling, stripping, Geotechnical: prospecting, surveys, assays and work under section 18 (regs) Rehabilitation trenching and associated assays Office Use Work Type gtobedrock Commodity Total \$ Value of Work Claimed Dates Worl Performed 10 98 (0 NTS Reference Global Positioning System Data (If available Mining Division Monmouth M or G-Plan Number Resident Geologist District Please remember to: - obtain a work permit from the Ministry of Natural Resources as required;
- provide proper notice to surface rights holders before starting work;
- complete and attach a Statement of Costs, form 0212; - provide a map showing contiguous mining lands that are linked for assigning work; - include two copies of your technical report. Person or companies who prepared the technical report (Attach a list if necessary) Fax Numbe Address Name Telephone Nu Address <u>oct 3 0 1900</u> GEOSCIENCE AGSESSMENT 4. Certification by Recorded Holder or Agent

GORPON

613-332-1513

_, do hereby certify that I have personal knowledge of the facts set

October 28

613-332-2119

Deemed Jan. 28 | 1999

forth in this Declaration of Assessment Work having caused the work to be performed or witnessed the same during

its completion and, to the best of my knowledge, the annexed report is true.

5. Work to be recorded and distributed. Work can only be assigned to claims that are contiguous (adjoining) to

the mining land where work was performed, at the time work was performed. A map showing the contiguous link must accompany this form. W9890.00052 Value of work Mining Claim Number. Or if Number of Claim Value of work Value of work Bank. Value of work applied to this assigned to other Units. For other performed on this to be distributed work was done on other eligible mining land, show in this mining land, list claim or other mining claums. at a future date. column the location number hectares. mining land. indicated on the claim map. TB 7827 16 ha \$26, 825 N/A \$24,000 \$2,825 90 1234567 12 \$24,000 0 **e**9 \$ 8, 892 2 \$ 4,000 0 \$4,892 1234568 •0 \$524· \$524. 0 0 SO 1195060 2 3 4 5 6 7 8 9 10 12 13 14 15 \$ 524. \$524. O Column Totals 0 , do hereby certify that the above work credits are eligible under subsection 7 (1) of the Assessment Work Regulation 6/96 for assignment to contiguous claims or for application to the claim where the work was done. Signature of Resided Holder or Agent Authorized in Writing Instructions for cutting back credits that ere not approved. Some of the credits claimed in this declaration may be cut back. Please check (~) in the boxes below to show how you wish to prioritize the deletion of credits: 1. Credits are to be cut back from the Bank first, followed by option 2 or 3 or 4 as indicated. 2. Credits are to be cut back starting with the claims listed last, working backwards; or 3. Credits are to be cut back equally over all claims listed in this declaration; or 4. Credits are to be cut back as prioritized on the attached appendix or appen 64.01 A OCT 3 0 10 GEOSCIENCE ASSESSMENT OFFICE Note: If you have not indicated how your credits are to be deleted, credits will be cut back from the Bank first, followed by option number 2 if necessary. For Office Use Only Received Stamp Deemed Approved Date Date Notification Sent Date Approved Total Value of Credit Approved Approved for Recording by Mining Recorder (Signature)

0241 (02/96)



Ministry of Northern Development and Mines

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Statement of Costs for Assessment Credit

Transaction Number (office use)

Personal information collected on this form is obtained under the authority of subsection 6(1) of the Assessment Work Regulation 6/96. Under section 8 of the Mining Act, the information is a public record. This information will be used to review the assessment work and correspond with the mining land holder. Questions about this collection should be directed to the Chief Mining Recorder, Ministry of Northern Development and Mines, 6th Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6BS.

Work Type	Units of Work Depending on the type of work, list the number of hours/days worked, metres of drilling, kilo-	Cost Per Unit of work	Total Cost	
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make this certification.				
	Signature	Date	<u> </u>	
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Ministry of Northern Development and Mines Ministère du Développement du Nord et des Mines

January 26, 1999

Gordon Mackey
BANCROFT & DISTRICT CHAMBER OF COMMERCE
30 STATION STREET
Box 539
BANCROFT, ONTARIO
K0L-1C0

Ontario

Geoscience Assessment Office 933 Ramsey Lake Road 6th Floor Sudbury, Ontario P3E 6B5

Telephone: (888) 415-9846 Fax: (877) 670-1555

Visit our website at: www.gov.on.ca/MNDM/MINES/LANDS/mlsmnpge.htm

Dear Sir or Madam:

Submission Number: 2.18985

Status

Subject: Transaction Number(s):

W9890.00052 Approval

We have reviewed your Assessment Work submission with the above noted Transaction Number(s). The attached summary page(s) indicate the results of the review. WE RECOMMEND YOU READ THIS SUMMARY FOR THE DETAILS PERTAINING TO YOUR ASSESSMENT WORK.

If the status for a transaction is a 45 Day Notice, the summary will outline the reasons for the notice, and any steps you can take to remedy deficiencies. The 90-day deemed approval provision, subsection 6(7) of the Assessment Work Regulation, will no longer be in effect for assessment work which has received a 45 Day Notice. Allowable changes to your credit distribution can be made by contacting the Geoscience Assessment Office within this 45 Day period, otherwise assessment credit will be cut back and distributed as outlined in Section #6 of the Declaration of Assessment work form.

Please note any revisions must be submitted in DUPLICATE to the Geoscience Assessment Office, by the response date on the summary.

If you have any questions regarding this correspondence, please contact Steve Beneteau by e-mail at steven.beneteau@ndm.gov.on.ca or by telephone at (705) 670-5855.

Yours sincerely,

ORIGINAL SIGNED BY

Blair Kite

Supervisor, Geoscience Assessment Office

Mining Lands Section

Work Report Assessment Results

Submission Number:

2.18985

Date Correspondence Sent: January 26, 1999

Assessor: Steve Beneteau

Transaction Number

First Claim

Number Township(s) / Area(s)

Status

Approval Date

W9890.00052

1195060

MONMOUTH

Approval

January 26, 1999

Section:

10 Physical PTRNCH

Correspondence to:

Resident Geologist

Tweed, ON

Assessment Files Library

Sudbury, ON

Recorded Holder(s) and/or Agent(s):

Gordon Mackey

BANCROFT & DISTRICT CHAMBER OF COMMERCE

BANCROFT, ONTARIO

