



42A14SE0102 2.10738 TULLY

010

REPORT ON GEOLOGICAL MAPPING
DURING AUGUST - SEPTEMBER, 1987

RECEIVED

JAN 18 1988

MINING LANDS SECTION

TULLY PROJECT

TULLY TOWNSHIP
PORCUPINE MINING DIVISION
ONTARIO

NTS 42A/14

ESSO MINERALS CANADA
A DIVISION OF
ESSO RESOURCES CANADA LTD.

DECEMBER, 1987
DISK. 435

MARTIN H. LENTERS

Qual.
2.10367



42A14SE0102 2.10738 TULLY

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1. INTRODUCTION

Esso Minerals is conducting a gold exploration program on their Tully claim group. The project area was previously explored, during the 1960's and early 1970's, for base-metal mineralization. The most recent of this work was conducted by Hollinger Mines Limited (HML), between 1969 and 1973, and included ground geophysics (Alexander, 1971a & b, 1973), and 8 diamond drill holes, (MacKenzie, 1970 to 1973). One of these drill holes contained a significant gold assay value across a short interval.

1.1 Location and Access

The Tully claim group is located 35 km NNE of Timmins in north-central Tully Township (Figure 1). It lies within the NTS 42A/14 (Buskegau River), 1:50,000 topographic map sheet.

The property is very flat and poorly drained. It is mostly covered by spruce bog which was partially harvested during the late 1960's. Several old logging roads, most of which are useable by track mounted equipment, exist throughout the property.

Access to the property is via Hwy 101 east to Hoyle (23 km from Timmins), and then north on Hwy 610 to Ice Chest Lake Road (28 km). Gravel roads continue north into Little Township where a road branches to the west, towards the Tully property, at a distance about 1.5 km along the westerly branch of a fork in the road, where a sign indicates that the eastern branch goes towards the Frederick House River. The last 9 km of road within Tully Township is poorly drained and requires a 4-wheel drive truck in order to ensure arrival.

Road distance from Timmins to the center of the claim group is 63 km, and driving time is approximately 1 hour and 45 minutes.

1.2 Property Description

The Tully property consists of 25 contiguous claims covering parts of lots 4,5,6, and 7 of Concession IV, and lots 5 and 6 of Concession III in Tully Township (Figure 2). The claim group is 3.2 km long and from 1 to 2 km wide.

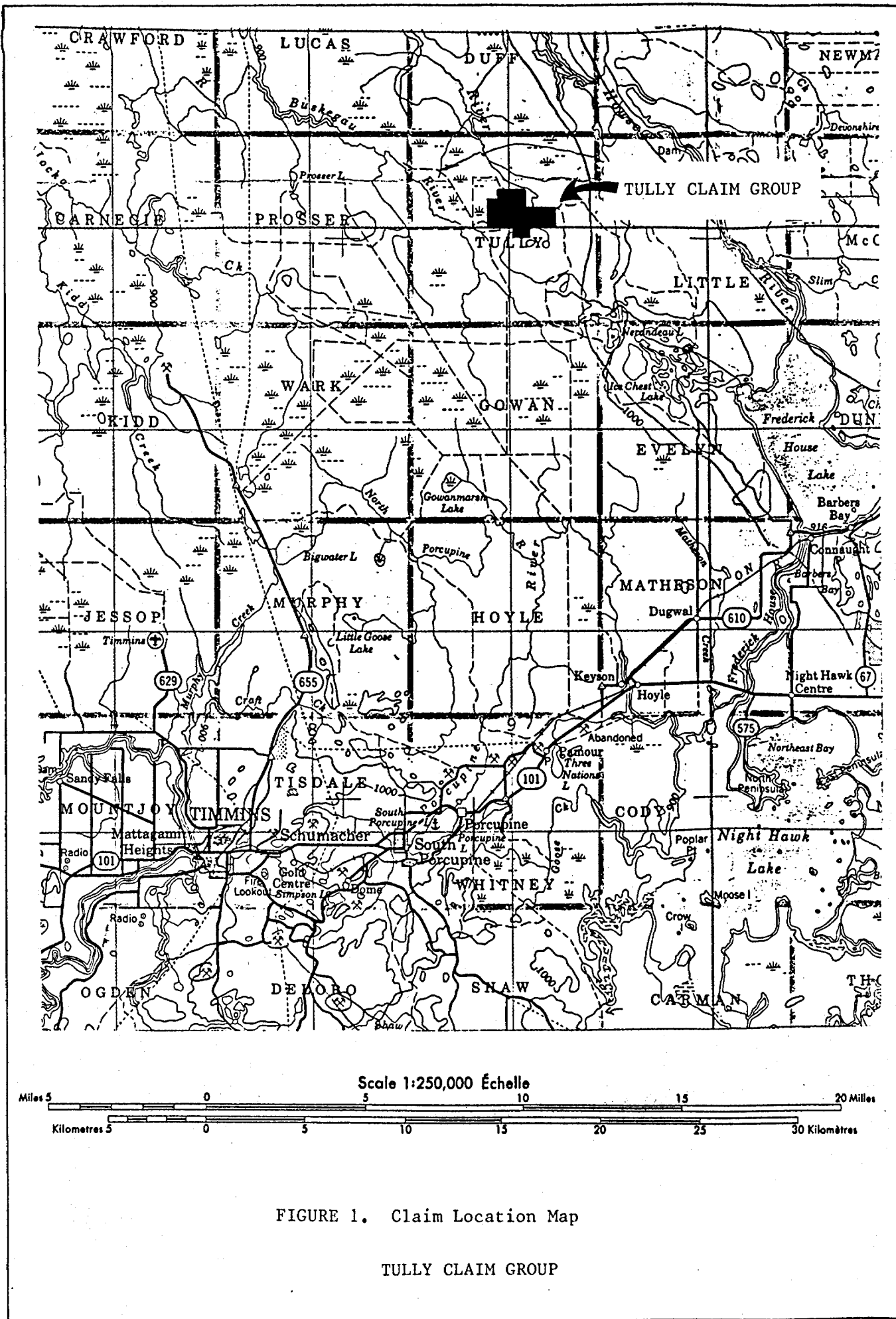
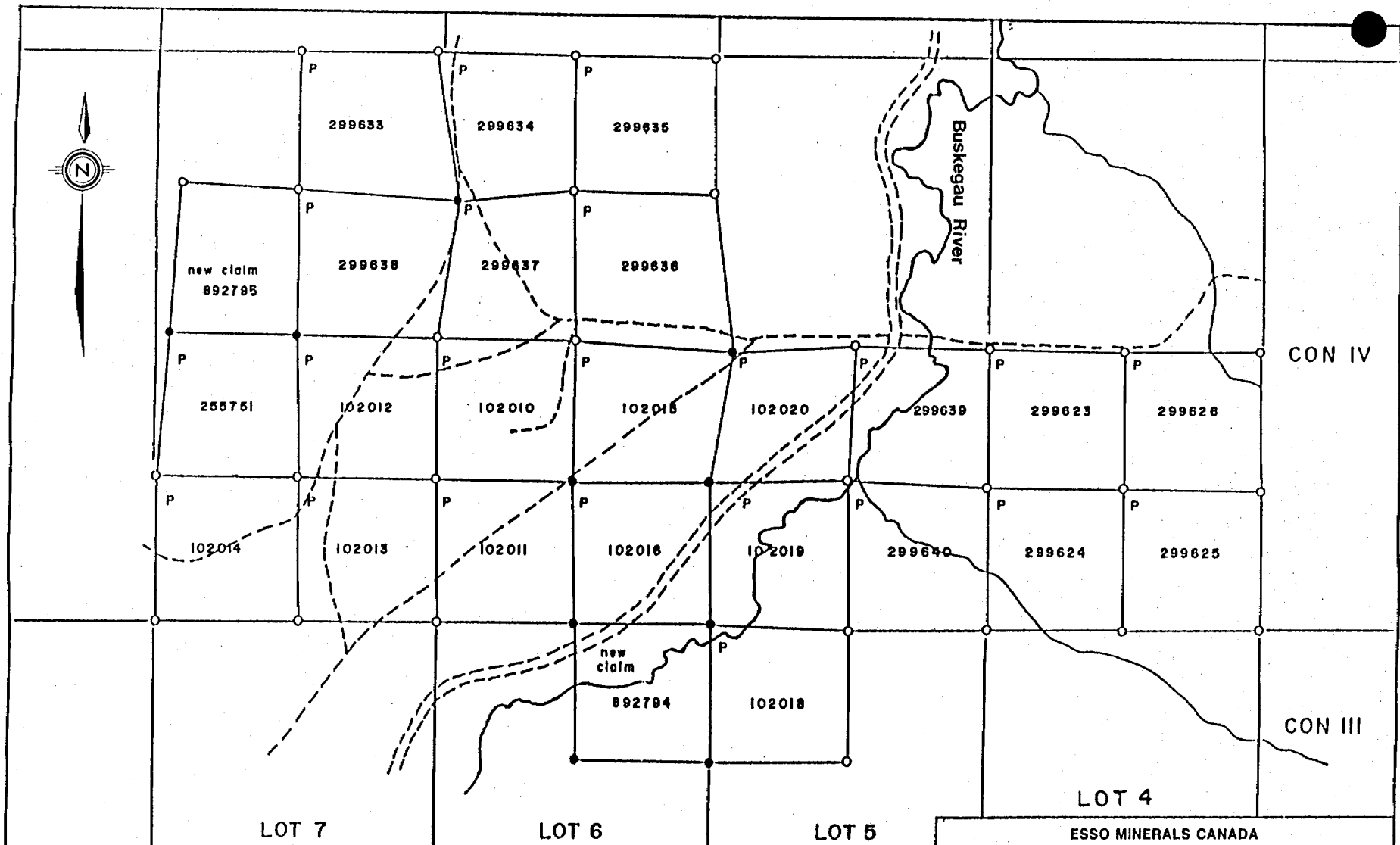
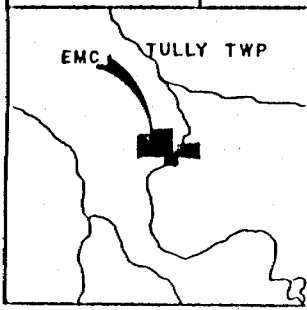


FIGURE 1. Claim Location Map

TULLY CLAIM GROUP

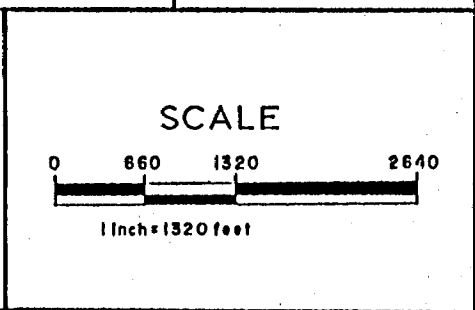


1
3
1



SYMBOLS

- POSTS LOCATED
- ASSUMED LOCATION
- BUSH ROAD
- - - WINTER ROAD



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FIGURE 2
Claim Location Map

Project Tully NTS 42A/14
 Lat. 48°45'N Long. 81°07'W
 Scale 1:15,840
 Base Map _____

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Twenty-three of the claims are held under lease 103940 from the Ontario Ministry of Natural Resources, while two additional claims were staked during the past year. A list of the Tully claims, with the appropriate staking and expiry dates, is given in Table 1.

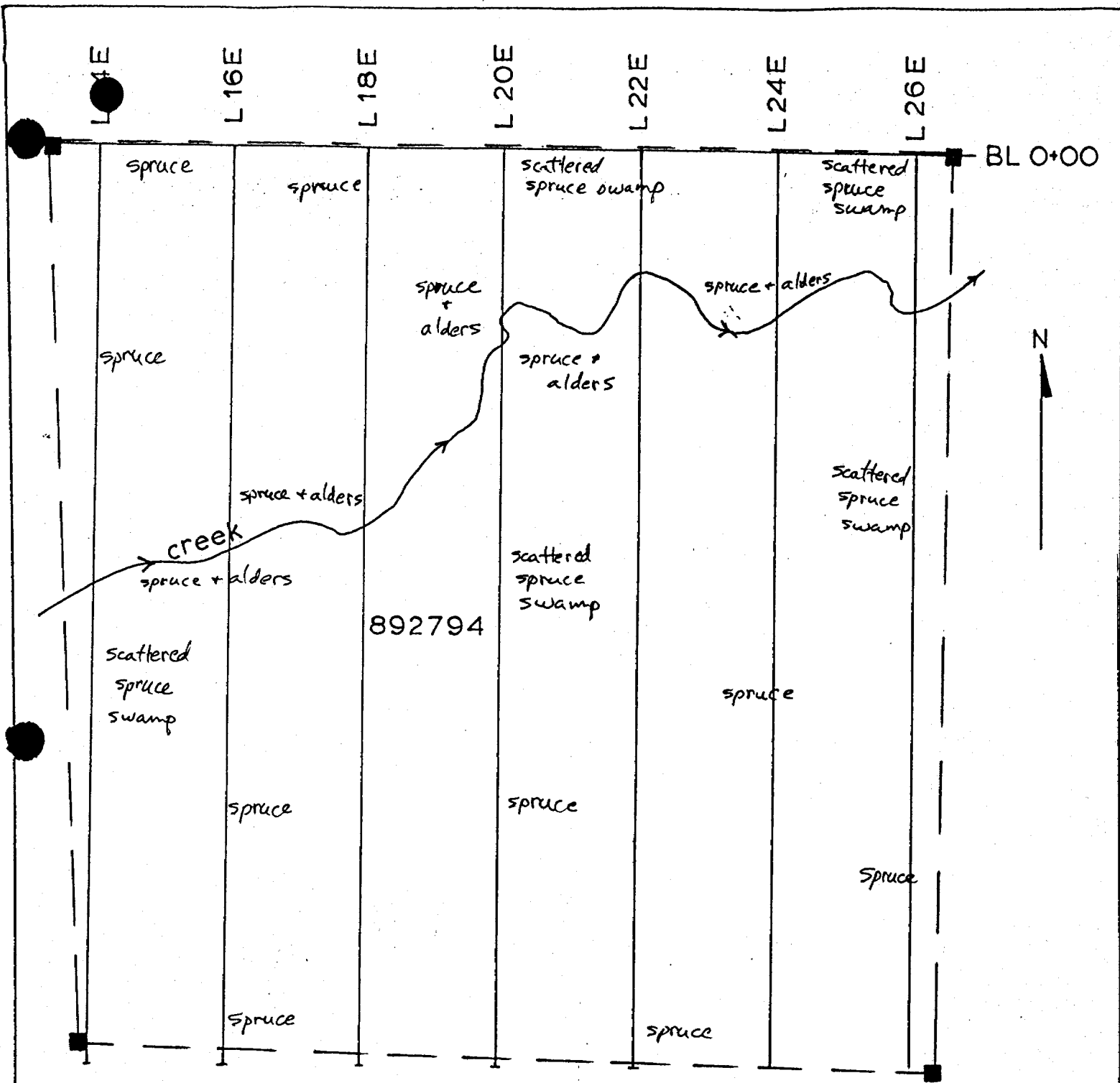
TABLE ONE
TULLY CLAIM GROUP

<u>Claim Number</u>	<u>Staking Dates</u>	<u>Expiry Dates</u>
102010-102016	Feb. 12, 1969	Dec. 1, 2004
102018-102020	Feb. 12, 1969	Dec. 1, 2004
255751	May 20, 1970	Dec. 1, 2004
299623-299626	Dec. 14, 1970	Dec. 1, 2004
299633-299638	Oct. 26, 1970	Dec. 1, 2004
299639-299640	Dec. 14, 1970	Dec. 1, 2004
892794	Dec. 16, 1986	Dec. 29, 1987
892795	Jan. 14, 1987	Jan. 24, 1988

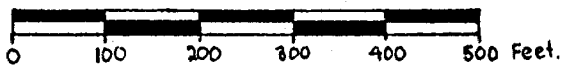
The geological work described in this report pertains to the two newly staked claims (892794 and 892795), which are listed at the end of Table 1. Claim 892794 covers the north-east quarter of the north half of Lot 6, Concession III, and claim 892795 covers the south-west quarter of the north half of Lot 7, Concession IV (Figure 2).

1.3 1987 Exploration Program

During the period between August 3rd and September 24th, 1987, Esso Minerals restored much of the western and south-central parts of the old HML grid within the Tully claim group. HML's old grid was, as much as possible, recut and chained, and extended into the new claims in order to provide correlation and continuity of the control between the previous and current geological, geophysical and diamond drilling work on the property. The old grid was in some places still well established, with easily followed blazed lines and the occasional in-place picket. However, much of it was completely lost in a thick tangle of alders and young spruce growth, particularly within areas where the older spruce had been harvested.



SCALE



ESSO MINERALS CANADA

FIGURE 3.
Geology of Claim 892795

Project TULLY NTS 42A/11

Lat. _____ Long. _____

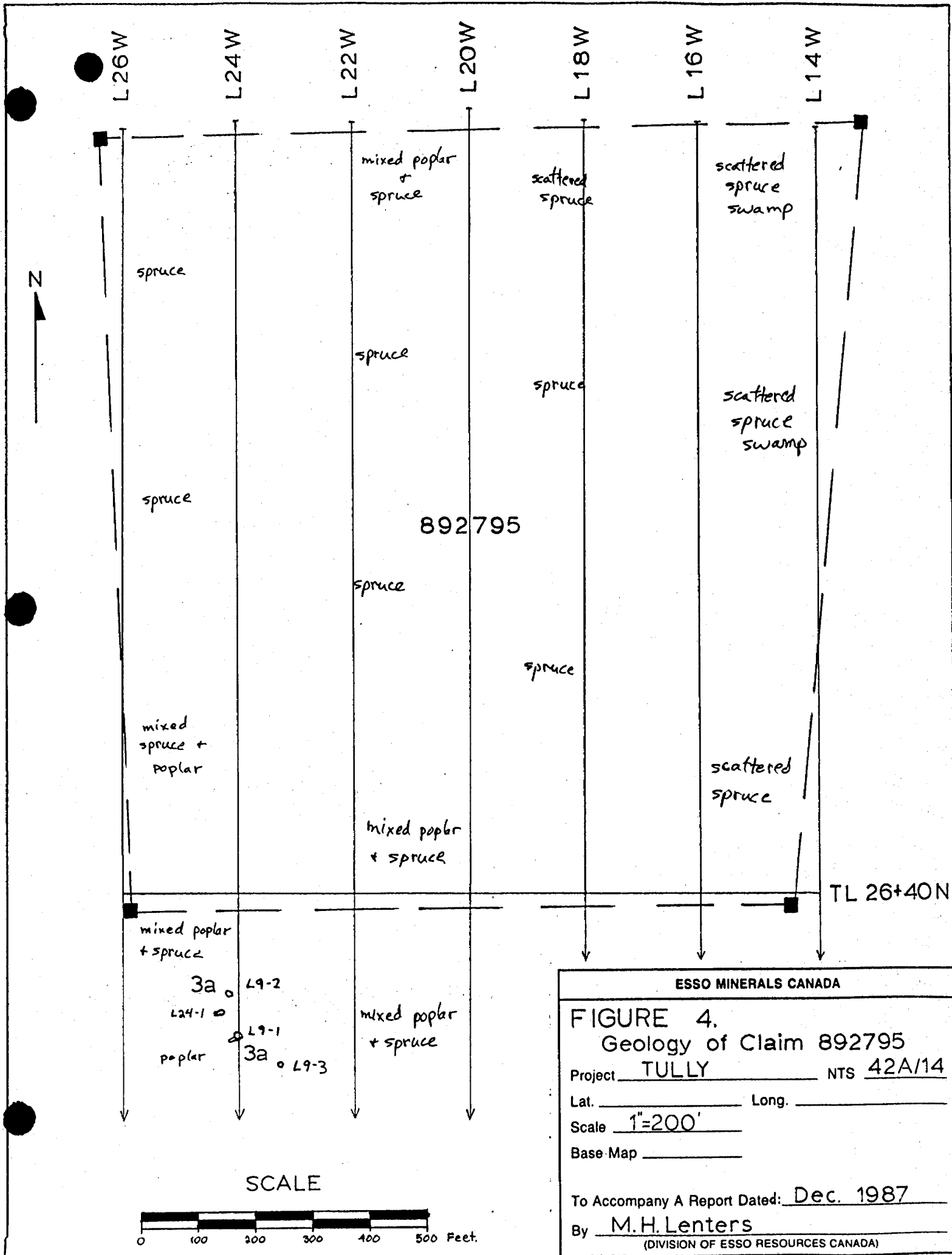
Scale 1" = 200'

Base Map _____

To Accompany A Report Dated: Dec. 1987

By M.H. Lenters

(DIVISION OF ESSO RESOURCES CANADA)



ESSO MINERALS CANADA

FIGURE 4.
Geology of Claim 892795

Project TULLY NTS 42A/14

Lat. _____ Long. _____

Scale 1"=200'

Base Map _____

To Accompany A Report Dated: Dec. 1987

By M.H. Lenters
 (DIVISION OF ESSO RESOURCES CANADA)

An east-west baseline, with pickets at 100 foot intervals, was cut along the surveyed boundary between Concessions III and IV. North-south cross-lines, also with pickets at 100 foot intervals, were cut at 200 foot intervals along the baseline. The grid lines over claims 892794 and 892795 are shown on Figures 3 and 4 respectively. A Genie (HLEM) geophysical survey, and 1:2400 scale geological mapping were conducted along the grid lines.

2. GEOLOGY

2.1 Regional Geology

The Tully claim group lies within the northwestern part of the Archean Abitibi Greenstone Belt. Ontario Geological Survey (OGS) Map 2205 (Pyke et al, 1973) shows Tully Township to be underlain by felsic volcanic rocks in the north, and volcanic, ultramafic and sedimentary rocks in the south.

A preliminary geology map (P.699 - Revised), of Tully Township at a scale of 1:31,680 has been prepared by the Ontario Geologic Survey (Hunt et al, 1980). The Township contains very little outcrop. Only two areas of exposure are noted on Map P699. One, about 3 km to the WSW of the claim group, and one adjacent to its southeast corner. Both of these exposures are identified as massive to foliated basaltic flows. Most of the geological information on Map P699 was obtained from diamond drilling and geophysical data filed as assessment work on the various claim groups within the township. The rocks underlying the northern part of the township, which includes those underlying the Tully claim group, are probably Stoughton-Roquemaure Group equivalents. They consist of ultramafic to basaltic-komatiitic lavas, Mg and Fe tholeiitic basalts, and some cherty, interflow calc-alkalic, dacite and rhyolite tuffs. Kidd Creek Rhyolites may also occur in the northern part of the township, just to the north of the Tully claim group. The southern part of the township is probably underlain by Tisdale Group mafic volcanic and ultramafic rocks and Porcupine Group sedimentary rocks, or possibly, similar lithologies of the Hunter Mine Group. Geological compilation by Shegelski (1985), indicates that there is a convergence of NW-SE and E-W structural stratigraphic trends in central Tully Township, in the vicinity of the Tully claim group, which may be due to an angular unconformity, folding about NW axis, or a major structural fault zone.

Overburden depths within the township generally range between 30 and 200 feet.

2.2 Property Geology

The geology of the Tully claim group was previously known only from 14 drill holes. These were drilled by Texas Gulf (3 holes) in 1964, United Comstate Lode Mines (3 holes) in 1965, and Hollinger Mines Limited (8 holes) between 1969 and 1973.

Several new areas of outcrop were discovered during the course of the current geological work conducted on the claim group. Although no outcrop is exposed over either claim unit 892794 or 892795, a group of small outcrop exposure was located 100 to 200 feet to the south of the latter. Figures 3 and 4 show the location of these outcrops, as well as the character of the vegetation cover over claims 892794 and 892795 respectively.

Areas denoted as covered by spruce are generally boggy and underlain by relatively thick clay overburden, and areas denoted as covered by some poplar generally occur over slight sandy ridges that tend to be underlain by thinner sections of overburden, and contain the outcrop exposures.

Outcrops L9-1, L9-2 and L24-1 are small (1 X 1, to 2 X 10 m) exposures of pillowed Mg tholeiites. They are tan to light earthy brown weathering, medium aqua-green coloured and contain numerous irregular, dark green, wispy chloritic surfaces. The rock is fine grained to aphanitic, hard and exhibits large (0.5 to 1.5 m), well formed but slightly flattened pillows striking 250 to 260 , and dipping approximately vertically. Tops appear to be to the north. The outcrops contain a minor amount of coarse, white quartz and carbonate in thin, irregular veinlets and pods. The outcrops also contain trace amounts of pyrite. A few small (cm size) chloritic patches locally contain 1 to 2 percent, 1 to 2 mm, fracture controlled cubic pyrite crystals. A grab sample (3968) of the pyritic material returned a 3 ppb gold analysis value.

Outcrop L9-3 is a small (1 X 1 m), flat exposure that is white weathering, and slightly greenish, medium grey on freshly broken surfaces. It is hard, massive and has a very homogeneous, very fine grained, sandy texture. The rock is slightly calcitic and generally contains 0.5% very finely disseminated pyrite. It is probably an interflow sediment occurring within the pillowed mafic volcanic flow sequence.

The outcrop exposures shown on Figure 4 form part of a thick mafic to ultramafic volcanic flow sequence (Unit 3A on the accompanying legend) that underlies part of the north half of the Tully claim group; to the north of a major ENE-WSW fault zone. To the south of the fault zone are thick sequences of argillaceous sediments, and coarse, felsic to mafic volcanic fragmentals.

LEGEND - TULLY PROJECT

0 OVERBURDEN

5 QUARTZ VEIN

FAULT ZONE

4d Fault Breccia - Mafic Volcanic

4c Fault Breccia - Argillite

4b Fault Breccia - Volcanic Fragmental

4a Fault Zone - Clay Gouge

VOLCANICS

3c Intrusive Porphyry

3b Komatiitic Flow?/Ultramafic

3a Tholeiitic Mafic Volcanic Flow

SEDIMENTS

2b Argillaceous Siltstone

2a Graphitic Argillite

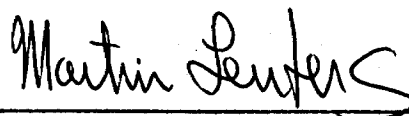
COARSE VOLCANIC FRAGMENTALS

1b Mafic Volcanic Flow Breccia & Agglomerate

1a Volcaniclastic/Pyroclastic

3. DISCUSSION AND CONCLUSION

The Tully claim group lies within a large very flat area that is covered by a relatively thick mantle of overburden, and spruce bog. Only two areas of outcrop have previously been reported in Tully Township. The current surface geology work over the Tully claim group, which previously contained no reported outcrop exposure, has located several new outcrop exposures. Although, no outcrop occurs directly within claims 892794 and 892795, several small outcrops of well pillowed Mg tholeiite flows occur along the southern boundary of claim 892795. These outcrops and diamond drilling within the adjacent area indicate that claim 892795 is underlain by a mafic volcanic flow sequence (Unit 3A on Legend). Although no outcrop exposure occurs over claim 892794, diamond drilling indicates that the claim is underlain by coarse felsic to mafic volcanic fragmentals (Unit 1 on Legend).



Martin H. Lenters

Senior Project Geologist
Esso Minerals Canada
(Timmins Office)

4. REFERENCES

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Memorandum; File: 42A/14 - Tully Twp., 3p.
- Wilson, L., 1987c,
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Genie (HLEM) Survey; Unpub. Esso Minerals Canada
Memorandum; File: 42A/14 - Tully Twp., 2p.

APPENDIX 1

LIST OF PERSONNEL

Martin Lenters
Geologist

Andre Verville
Geologist

Dave Wendell
Line Cutter

Derick Manchuck
Line Cutter

STATEMENT OF QUALIFICATION

I, Martin H. Lenters, of 387 Patricia Blvd., Timmins, Ontario, do hereby certify and declare that:

1. I am a graduate of the University of Toronto (1976) with a B.Sc. (Honours) in Geology, and that I have taken three years Graduate Studies at the University of Toronto.
2. Since 1976, I have worked as a geologist in Newfoundland, Nova Scotia, New Brunswick, Ontario, Saskatchewan, Alberta, British Columbia, and the Yukon and Northwest Territories.
3. I have been employed by Esso Resources Canada Ltd., in their Minerals Exploration Department since April, 1979.
4. I am currently registered as a Professional Geologist with the Association of Professional Engineers, Geologists and Geophysicists of Alberta (No. 36084).
5. The information included in this report is based on literature research, field mapping, geological prospecting and geological sampling.
6. I hold no direct, or indirect, interest in the property reported herein, nor do I expect to receive any.

Martin Lenters

Martin H. Lenters

January 14, 1988

Date

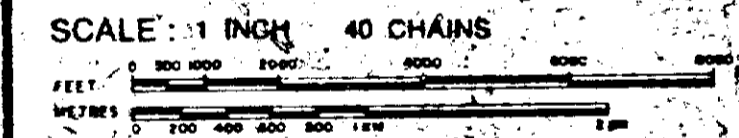
DUFF Tp. M.466

LEGEND

- HIGHWAY AND ROUTE No.
- OTHER ROADS
- TRAILS
- SURVEYED LINES:
 - TOWNSHIPS, BASE LINES, ETC.
 - LOTS, MINING CLAIMS, PARCELS, ETC.
- UNSURVEYED LINES:
 - LOT LINES /
 - PARCEL BOUNDARY
 - MINING CLAIMS ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES:
 - NON-PERENNIAL STREAM
 - FLOODING OR FLOODING RIGHTS
- SUBDIVISION
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES

DISPOSITION OF CROWN LANDS

- | TYPE OF DOCUMENT | SYMBOL |
|--------------------------------|--------|
| PATENT SURFACE & MINING RIGHTS | |
| SURFACE RIGHTS ONLY | |
| MINING RIGHTS ONLY | |
| LEASE SURFACE & MINING RIGHTS | |
| SURFACE RIGHTS ONLY | |
| MINING RIGHTS ONLY | |
| LICENCE OF OCCUPATION | |
| CROWN LAND SALE | |
| ORDER-IN-COUNCIL | |
| RESERVATION | |
| CANCELLED | |
| SAND & GRAVEL | |
| Leased Mining Claims | |



ACRES: 40
HECTARES: 16

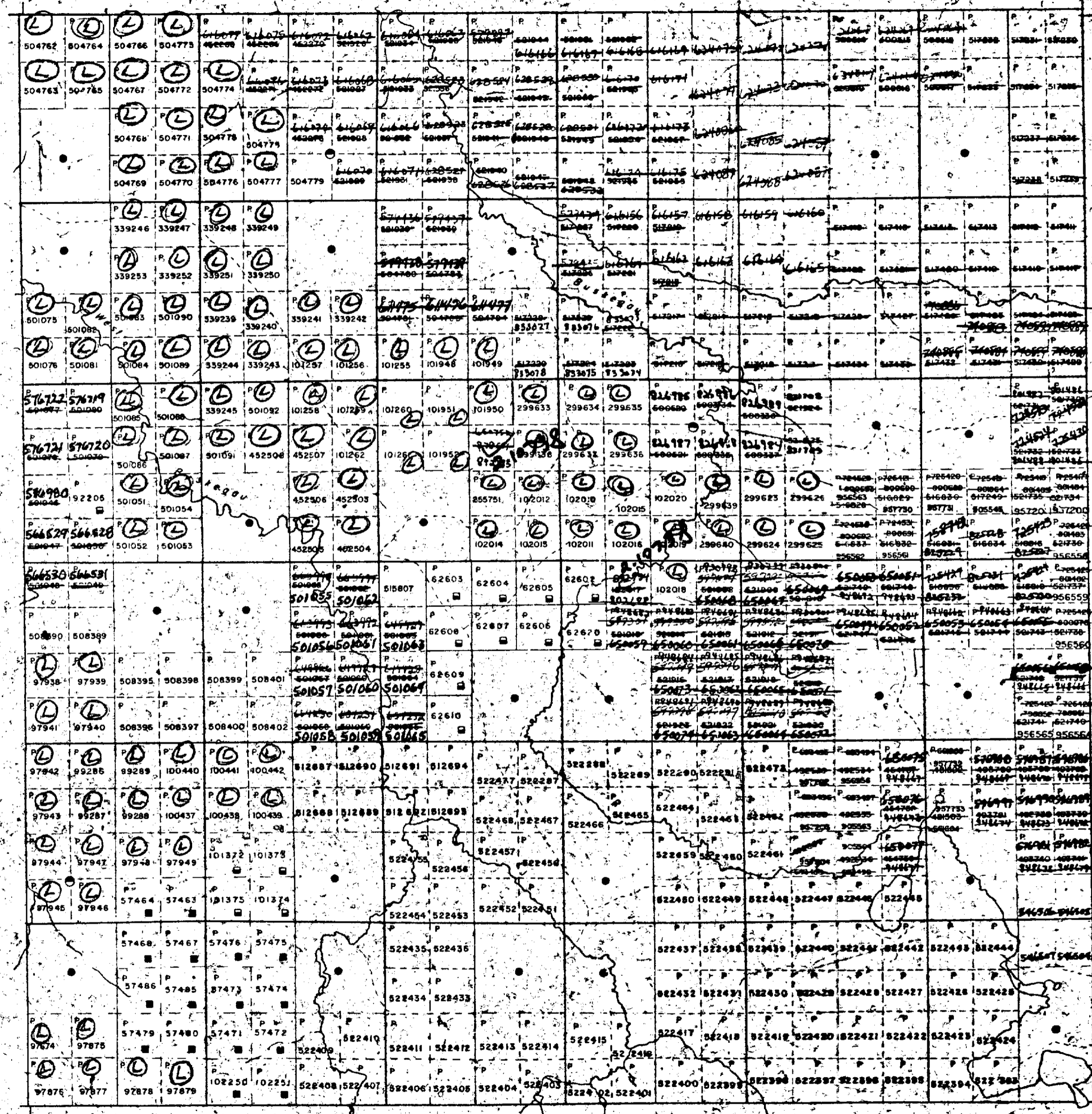
Received Oct 1/79

TOWNSHIP
TULLY
DISTRICT
COCHRANE
MINING DIVISION
PORCUPINE

Ministry of Natural Resources
Ontario Surveys and Mapping Branch
Date: Nov. 1978 Plan No. M 607
Wishney Block
Queen's Park, Toronto

PROSSER Tp. M.571

LITTLE Tp. M.535



WAN Tp. M.285

