

2.14883

EXPLORATION OF A FOUR CLAIM GROUP STRACHAN TWP., TIMMINS DISTRICT,
ONTARIO

for

JAMES G. BURNS

by

J. B. Boniwell
Exploration Geophysical Consultant
October 23, 1991

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MINING LANDS BRANCH





- i -

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| -2384    | Total Field Magnetic Contours  | 1:2,500     |
| -2385    | Stacked VLF Profiles, NAA      | 1:2,500     |
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| -2388    | Plan of Interpretation         | 1:2,500     |



#### INTRODUCTION

A recent Ontario Geological Survey release of low level airborne em. and magnetics for the North Swayze/Montcalm region west of Timmins yielded an individualistic, road accessible anomaly in em. falling within a broadly favouring geology. This event was staked for itself.

A ground follow-up programme of outcrop mapping, magnetics and VLF has been completed over a grid of lines centred on the anomaly position. Results of this work are presented herein.



#### DESCRIPTION OF PROPERTY

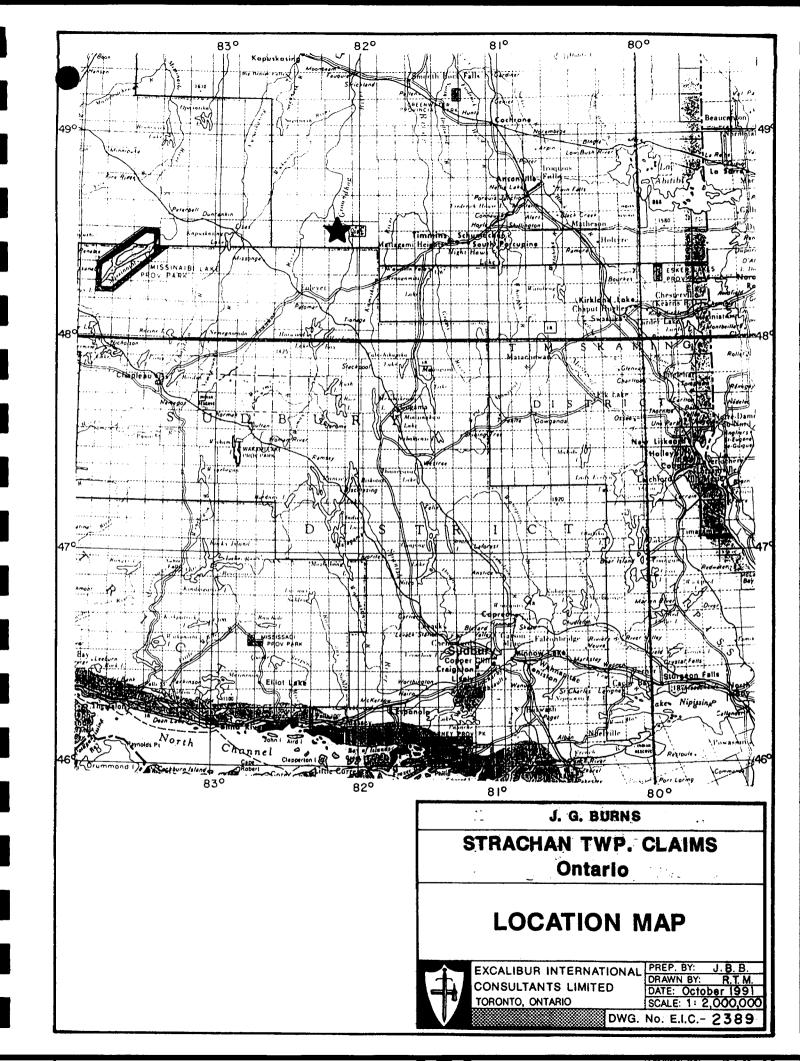
The property consists of 4 unpatented contiguous claims arranged in a square. These are identified as:

P 1158645 - 48 incl.

They locate in the west central portion of Strachan Township, Porcupine Mining Division, Ontario. The registered holder is James G. Burns of 190 Graye Cres., Timmins, Ontario, P4N 8K8.

Access is excellent; the claims straddle a back road which runs southwest from Groundhog River at a point where it bears E-W within the township. Here a road from Highway 101, 38 kms to the south follows the river. Highway 101 itself serves Timmins which lies approximately 65 kms to the northeast from the Groundhog River junction.





#### PREVIOUS WORK

There is no record of work having ever been carried out on the above-described ground.

In 1971, Dome Exploration flew a fair portion of Strachan Township as part of a wider survey; however there is no indication that follow-up investigations if any, were extended into the present property area, nor indeed that the present target anomaly was picked up. The flying itself was performed by Geoterrex of Ottawa using time-domain em. equipment and a Geometrics G-803 proton precession magnetometer. Flight lines were oriented N65°W at 1/8 mile intervals.



#### DETAILS OF SURVEY

For the planned surveying, a grid of lines 100 m apart has been prepared oriented 140, stations positioned on them every 20 m. A controlling base-line coinciding more or less with the approach road provided convenient access to the grid lines.

The magnetic survey was conducted with a proton precession magnetometer Geometrics model G816/826 with a sensitivity of 1 nT. Diurnal change was monitored by base station looping, a series of bases established along the BL for the purpose. Subsequent corrections yielded accuracies, it is estimated, of ±5 nT for the final posted values. Contouring of same has been undertaken at a primary contour interval of 100 nT increasing to 500 nT in the high end of the range (>59,000 nT).

The VLF traversing was effected with a Phoenix VLF-2 receiver tuned to the transmitter NAA (24.0 kHz) located at Cutler, Maine. This instrument measures the dip angle and the total horizontal field to sensitivities of 1° and 5% respectively. Observed values have been plotted directly in plan in a set of stacked profiles. The dip angles, as representing the in-phase component of the vertical field, have been (Fraser) filtered and the results contoured. As customary, only the positive values have



been taken into account. The primary contour interval used here is 10 units above the value +10. The zero contour is omitted; in its stead, the +5 contour is put in. This substitution minimizes background contributions to contour behaviour.



#### DISCUSSION OF RESULTS

A magnetic relief of up to 3,000 nT dominates the grid centre. There it patently defines a formational unit approximately 50 m wide which swings through a 45° arc from NE to E proceeding east. It remains open to the east, but evidently terminates against a gabbro at its southwest end.

This unit is taken to be a weak iron formation, and its noted strike behaviour is presumed to reflect a structural fortify distortion of the host environment. To interpretation, a couple of lesser magnetic horizons occur to either side which more or less conform to the central unit in By these, an axis of arch can be formulated, with strike terms. a slight west of north heading as shown (Dwg. No. EIC-2388). Complicating the picture however are several magnetic elements which manifestly bid to strike N-S across the area. Although not fully defined, each of these can be attributed to late-stage (Matachewan) dykes since such are known to be present in the These dykes are of diabase and characteristically are magnetic.

In contrast, the mafic volcanics and the gabbros which constitute bedrock geology as seen in outcrop are largely non-magnetic. The volcanics particularly are quiet; this infers they



are tholeiitic basalts in the main. The gabbros are more irregular in their magnetic expressions, hence more undpredictable, but as such are being typical. No great significance is seen to attach to their occurrence.

What provides focus to the area are the VLF results. With all rock outcrop confined to the grid's southwest quarter, mineral possibilities reside with what VLF can supply in other sectors, especially what it can furnish to establish and detail the target airborne em. (AEM) anomaly in the covered domain. As it turns out, a VLF anomaly system has been detected which follows, sometimes closely, the northern contact of the supposed iron formation unit. At two places along its 500 m strike length, response strengthens locally, and given the geographic positioning of the more westerly of the two, it would seem this particular peaking reflects the AEM source.

As recorded, the airborne response is of very fair quality (Channel 8, Geotem System); thus it is not out of order to favour a sulphide, or graphite, incidence at this stratigraphic location. If dips are to the southeast as both outcrop and magnetics provide, and the beds are not over-turned, then this VLF-projected mineral-ized horizon occurs at the basal contact of the magnetic unit. This holds interest. It is a likely setting for gold, perhaps base metals. In both instances, chances are improved



by the potential dilation to be associated with the axis of arch, or more specifically, with the flanks to same. Notably, the two VLF peakings on the conductive horizon occur on the two opposing flanks more or less as prescribed. This appears significant. However for base metals, an intrusive peridotite sill instead of an iron formation would seem to offer more promise in the way of grade mineralization.

There are other VLF anomaly axes in the area; some are sub-parallel following the formational grain. These are rather commonplace events reflecting the customary resistivity variations across any bedded sequence. One, in the grid north, does not quite fit; it is too linear. For it, an ENE fault is postulated.

Finally, there are those odd VLF indications showing tendencies to strike N-S. These are weak and not fully substantiated, but their existence in the area comes as no surprise given the noted dyking. Such features are perforce cross-structural in nature. They appear tenuous in the data largely because of their poor orientation with respect to the primary field direction.



#### CONCLUSIONS AND RECOMMENDATIONS

It is concluded that a weak iron formation has been defined across the grid area whose basal contact setting hosts a conductive horizon. These events lie under cover beyond outcrop exposure and designation.

Possibilities in gold are considered premier, and worth a test. The conductive component is deemed due to sulphides, or graphite, or a mixture of both in a mafic volcanic environment. A fault structure bearing ESE is projected to transect the immediate vicinity of that section on the horizon which particularly correlates with the AEM response. A local dilation due to arching of the bedded rocks is believed a potentiality here.

It is recommended therefore that this emergent situation be drilled. A suitable hole for the purpose would be:

DDH #B-1: Collar at 60S/600W

to be drilled grid N at  $-45^{\circ}$  for 120 m

Results from this testing naturally would dictate future action. Specifically, if interesting mineralization were found at this



site, then the second VLF centre at 150S/400N would immediately become a target for follow-up.

JBB:sb

October 23, 1991

J. B. Boniwell

Exploration Geophysical Consultant



#### APPENDIX

ASSESSMENT INFORMATION

Dates of survey : 21st Sept. - 1st Oct. '91

Prepared lines : 6.73 kms

Magnetic stations: 280 (5.56 kms)

VLF stations : 268 (5.20 kms)

Field operations: J. G. Burns, M. Kearney, Timmins, Ont.

Interpretation, J. B. Boniwell

reporting : Excalibur International Consultants Ltd.

Mississauga, Ontario.



#### Ministry of Northern Development and Mines

# Geophysical-Geological-Geochemical Technical Data Statement

| r 11C |
|-------|
|       |

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

| Type of Survey(s)   | Magnetic,  | VLF   |                        |   |
|---|--|---|------------------------|---|
| Township or Area  | Strachan T   | wp.   |                        |   |
| Claim Holder(s)   |  |   |                        | MINING CLAIMS TRAVERSED  List numerically |
|   |  | Cres., Timmins, Or  | nt.                    | ,   |
| Survey Company  |  | s   |                        | P 1158645                                 |
| Author of Report  |  |   |                        | (prefix) (number)<br>1158646              |
| -   |  | rio St., Mississ.   | Ont.L5G 3              | <b>G</b> 7                                |
| Covering Dates of Sur   | vey 21st Se  | ept 1st Oct. '9 (linecutting to office)   | 1                      | 1158647                                   |
|   |  | (linecutting to office)   |                        | 1158648                                   |
| Total Miles of Line Co  | III  | 115   |                        |   |
| SPECIAL PROVISION CREDITS REQUES  ENTER 40 days (incline cutting) for first survey.  ENTER 20 days for additional survey us same grid.  AIRBORNE CREDITS  Magnetometer  DATE: | TED cludes each ing (Special provision Electromagnet (enter days | Geophysical  Electromagnetic  Magnetometer  Radiometric  Other  Geological  Geochemical  redits do not apply to airbotic s per claim) | 20  Arme surveys)  Tic |   |
|   |  |   |                        |   |
| Res. Geol.  | Qualific   | ations  |                        |   |
| Previous Surveys  | Quaniic  | ations  |                        |   |
| File No. Type   | Date   | Claim Holder  |                        |   |
|   |  |   |                        |   |
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|   |  |   |                        |   |
|   |  | ·····   | •••••                  |   |
|   |  | •••••   |                        |   |
|   |  |   | ••••••                 | TOTAL CLAIMS                              |

OFFICE USE ONLY

## GEOPHYSICAL TECHNICAL DATA

## GROUND SURVEYS - If more than one survey, specify data for each type of survey

| Number of Station                                     | s 283 mag. 268 VLF                 |                                       | <del>-</del>        |                                       |
|---|------------------------------------|---------------------------------------|---------------------|---------------------------------------|
| Station interval                                      | 20 m mag.; 20 m VLF                | Line spacii                           | ng 100 r            | n                                     |
| Profile scale   |                                    |                                       |                     |                                       |
| Contour interval _                                    | 100 nT <1000 nT mag.,              | +5, $10 > 10$ unit                    | s VLF               |                                       |
|   |                                    |                                       |                     |                                       |
| Instrument  | Geometrics G816/826                |                                       |                     |                                       |
| Accuracy — Sca.  Diurnal correction  Base Station che | le constant <u>1 nT</u>            |                                       |                     |                                       |
| Diurnal correcti                                      | on method <u>base station loo</u>  | ping                                  |                     |                                       |
| Base Station che                                      | ck-in interval (hours) 2 hrs.      |                                       |                     |                                       |
| Base Station loc                                      | ation and value950W/BL,            | 58,500 nT                             |                     |                                       |
|   |                                    | ·····                                 |                     |                                       |
|   |                                    |                                       |                     |                                       |
| Instrument  | Phoenix VLF-2                      |                                       | ·<br>:              |                                       |
| Coil configuration Coil separation Accuracy Method:   | on N/A                             |                                       |                     |                                       |
| Coil separation.                                      | N/A                                |                                       |                     |                                       |
| Accuracy  | 1° dip angle, 5% tota              | l field                               |                     |                                       |
| Method:   | ☐ Fixed transmitter                | Shoot back                            | ☐ In line           | Parallel line                         |
| Frequency   | NAA (24.0 kHz)                     |                                       |                     |                                       |
| Frequency   |                                    | (specify V.L.F. station)              | -1 <i>6:-</i> 13 -4 | 43-                                   |
| Parameters meas                                       | sured <u>dip</u> angle of resultan | L Fleid, nortzont.                    | at field sfren      | 9111                                  |
| <b>v</b>  |                                    |                                       |                     |                                       |
|   |                                    |                                       |                     |                                       |
| ٦ .   |                                    |                                       |                     |                                       |
| Corrections mad                                       | le                                 |                                       |                     |                                       |
| 4   |                                    |                                       |                     |                                       |
| Base station valu                                     | ne and location                    |                                       |                     |                                       |
|   |                                    |                                       |                     |                                       |
| Elevation accura                                      | cy                                 |                                       |                     |                                       |
| _   |                                    |                                       |                     |                                       |
|   |                                    |                                       |                     | · · · · · · · · · · · · · · · · · · · |
| Method Ti   |                                    |                                       | equency Domain      |                                       |
|   | 1 time                             |                                       | •                   |                                       |
| − Of  | f time                             | •                                     | nge                 |                                       |
| _ De  | lay time                           | ·                                     |                     |                                       |
| – Int   | tegration time                     |                                       |                     |                                       |
| <b>⊻</b>  |                                    |                                       |                     |                                       |
| Electrode array                                       |                                    | <del></del>                           |                     |                                       |
| Electrode spacin                                      | g                                  |                                       |                     |                                       |
| Type of electrod                                      | e                                  | · · · · · · · · · · · · · · · · · · · |                     |                                       |

INDUCED POLARIZATION



2.14883

GEOLOGY OF A FOUR CLAIM GROUP
STRACHAN TOWNSHIP
PORCUPINE MINING DIVISION
ONTARIO

NTS 42 B/9

Claim Numbers
1158645 to 1158648 Inclusive

James G. Burns

December 16, 1991

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#### INTRODUCTION

Property, Location and Access

A group of four claims numbered P-1158645 to 1158648 inclusive and situated in the northwest quadrant of Strachan Township approximately 63 km west northwest of Timmins comprise the property. It straddles the Mallette Inc. all weather, area access road that joins Highway 101 65 km to the southeast at a distance of 13 km west of the Timmins city centre.

#### Previous Work

A check of the assessment records in Timmins revealed that no ground exploration work has been filed for the immediate area of the claim group. As well, no evidence of previous claim staking, gridding, etc. was noted during the course of the present programme.

Dome Exploration had, in 1971, contracted Geoterrex to fly an area that covered most of Strachan Township at 1/8th mile line intervals on lines oriented at N65°W (Wagg, 1971).

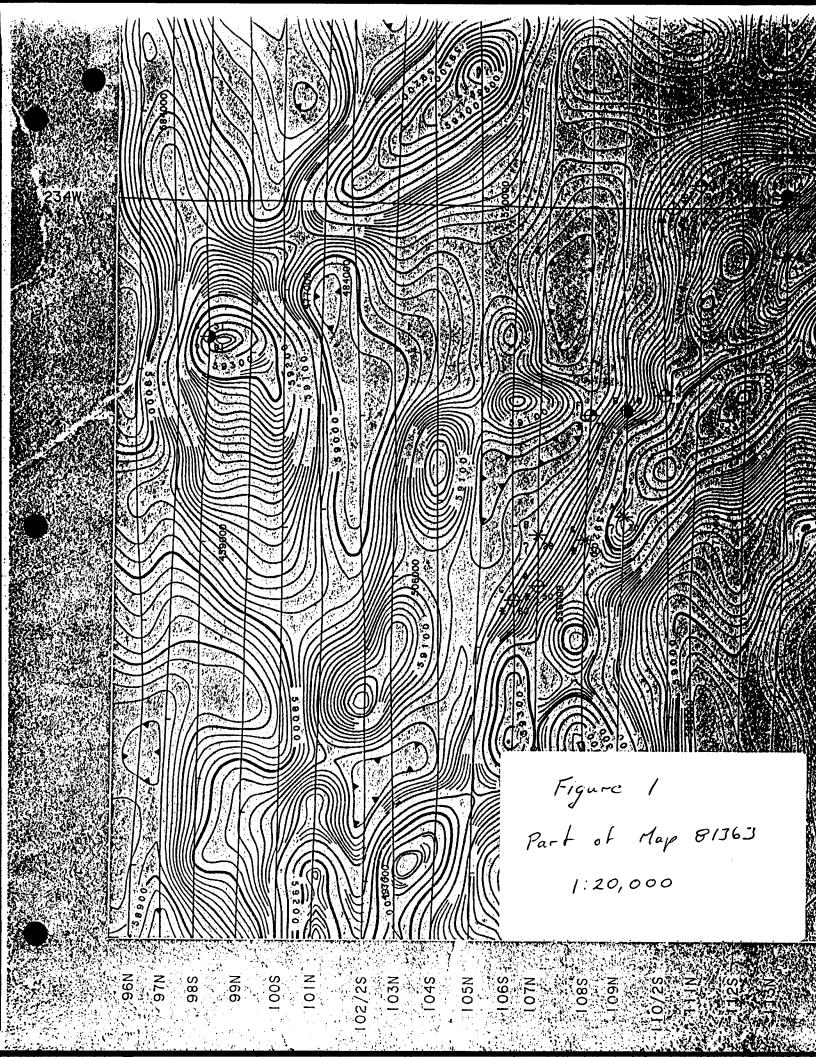
Equipment used were a time-domaine em unit and a Geometrics G-803 magnetometer. Only magnetic data were submitted for assessment for claims held. There is no mention of the em results, nor if any ground follow-up work was recommended or performed.

The most recent government data consist of Geological Report 78 and map 2182, scale 1:31,680 (Bennett, 1969), and the results of an airborne em and magnetometer survey for the North Swayze-Montcalm area conducted in 1989 and released in 1990 (OGS, 1990).

#### 1991 Programme

The four claims were staked in February 1991 to cover a single line, 8 channel Geotem em anomaly that was detected in the government survey (Figure 1). Ground magnetometer, VLF em & geological surveys were conducted in an effort to locate & define the airborne anomaly, and to gain some insight into the local geological setting.

A flagged grid was constructed over the claims. Cross



lines 100m apart with 20m stations were established from a base line oriented at 050°/230° along the access road right of way. Results of the geophysical surveys have been reported on by Boniwell.

GEOLOGY

Regional Geology

Bennett mapped Strachan Twp. for the Ontario Department of Mines in 1965. Granitic rocks dominate the bedrock geology. The eastern half of the township is underlain by granite / quartz diorite that is part of a large batholith that extends over several townships. To the west are two granite stocks, each 5 to 6 km in diameter. Sandwiched in between is a strip of mafic volcanics 1 to 5 km wide that generally trends NNE-SSW. Locally the trend is more east-west as a result of the intrusions and/or folds.

Outcrops of gabbro occur in the north central part of the township. These are part of a large mafic intrusive complex

that occupies approximately 1/3 of Montcalm Twp.

A swarm of NNW striking Matchewan diabase dykes cut all rock types in the area.

#### Property Geology

All rock exposures are located in the southwest portion of the claim group mainly on claim 1158647 (Figure 2). Basalt as both massive and pillowed flows and with minor amounts of interflow sediment is the dominant rock type. It has been intruded by gabbro and cut by granitic dykes.

The basalts are fine grained, dark green in colour & faintly foliated. They strike east-west & dip steeply south at 70° to 80°. Where seen the pillows are stretched, and no top determinations were possible. Interflow sediments are few, and poorly exposed. They appear to be mainly siltstones with beds 1/2 to 1 cm thick.

The gabbro is massive, fresh in appearance, and composed of 50% mafic minerals & 50% greenish saussuritized feldspars.

It is strongly magnetic. Disseminated pyrite is common in amounts up to 1/2%.

An approximate 2m thick granitic dyke striking 115 & cross cutting basalt was noted near the west claim boundary.

Assays

Six rock samples were taken for analysis. Two, ST-1 & 3, were of narrow quartz veins hosted by basalt. Each assayed less than the detection limit of 1 ppb Au.

Sample ST-5 of carbonatized basalt that contained minor amounts of sulphides assayed only 2 ppb Au. However, both the Cu & Zn content were anomalous at 180 & 300 ppm respectively.

The remaining three samples, ST-2, 4 & 6, were of gabbro. Each contained approximately 1/2% pyrite, and were assayed for both their total & sulphide Ni contents. All values were below the detection limit of 0.01% Ni.

Assay results are appended.

#### DISCUSSION & RECOMMENDATIONS

The airborne em anomaly was located, delineated & noted to lie on the north flank of a magnetic high. Unfortunately, the anomaly is overburden covered and very close to the road. Boniwell postulates the source of the anomaly to be sulphide mineralization +/- graphite at or near the base of a sulphide iron formation, and as such has the potential to be auriferous.

Alternatively, if the magnetic high is related to an ultramafic sill then the anomaly could represent base metal (Cu Ni) mineralization. Such a scenario is realistic since in Montcalm Township to the north a deposit of 4,500,000 tons grading 1.42% Ni & 0.66% Cu is associated with similar mafic rocks.

The drill hole as spotted by Boniwell should be drilled.

James Burns

#### REFERENCES

#### Bennett, G

1969 Geology of the Belford-Strachan Area, District of
Cochrane; Ontario Department of Mines, Geological Report
78 together with Geological Map 2182, scale 1:31,680 or
1"=1mile.

#### Boniwell, J.B.

1991 Exploration of a Four Claim Group, Strachan Twp., Timmins

District, Ontario; Excalibur International Consultants

Ltd., unpublished assessment report.

#### OGS

1990 Airborne Electromagnetic & Total Intensity Magnetic
Survey, North Swayze-Montcalm Area; Ontario Geological
Survey, Map 81363, scale 1:20,000.

#### Wagg, D.M.

1971 Report on a Magnetometer Survey of Part of Strachan
Township, Northeastern Ontario for Dome Exploration
(Canada) Limited; Geoterrex Limited, unpublished
assessment report.

APPENDIX I

Assay Results



# **Chemex Labs Ltd.**

Analytical Chemists \* Geochemists \* Registered Assayers 5175 Timberlea Blvd., Mississauga, Ontario, Canada L4W 2S3 PHONE: 416-624-2806 To: BURNS, JAMES

190 GRAYE CRESCENT TIMMINS, ON P4N 8K8



Comments: ATTN: JAMES BURNS

CERTIFICATE

A9123110

**BURNS, JAMES** 

Project: P.O. #:

Samples submitted to our lab in Rouyn, PQ. This report was printed on 21-OCT-91.

|            | SAM               | PLE PREPARATION  |
|------------|-------------------|--|
| CHEMEX     | NUMBER<br>SAMPLES | DESCRIPTION  |
| 208<br>294 | 3                 | Assay ring to approx 150 mesh<br>Crush and split (0-10 pounds) |

|            | ANALYTICAL PROCEDURES |  |                    |                    |                |  |  |  |
|------------|-----------------------|--|--------------------|--------------------|----------------|--|--|--|
| CHEMEX     | NUMBER<br>SAMPLES     | DESCRIPTION  | METHOD             | DETECTION<br>LIMIT | UPPER<br>LIMIT |  |  |  |
| 321<br>431 | 3                     | Ni %: HClO4-HNO3 digestion<br>Ni sulf %: Ni(T)-Ni(oxide)=Ni( | AAS<br>CALCULATION | 0.01<br>0.01       | 100.0<br>100.0 |  |  |  |
| <u>.</u>   |                       | •  |                    |                    |                |  |  |  |
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|            |                       |  |                    |                    |                |  |  |  |
|            |                       |  |                    | ·                  |                |  |  |  |



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers 5175 Timberlea Blvd., Mississauga, Ontario, Canada L4W 2S3 PHONE: 416-624-2806

To: BURNS, JAMES

190 GRAYE CRESCENT TIMMINS, ON P4N 8K8

Page Number :1 Total Pages :1 Certificate Date:21-OCT-91 Invoice No. P.O. Number :23110

Project : Comments: ATTN: JAMES BURNS

|                      |                               |                            |                            | CERTIFICATE OF ANALYSIS | A9123110 |
|----------------------|-------------------------------|----------------------------|----------------------------|-------------------------|----------|
| SAMPLE               | PREP<br>CODE                  | Ni<br>%                    | Ni sul                     |                         |          |
| ST-2<br>ST-4<br>ST-6 | 208 294<br>208 294<br>208 294 | < 0.01<br>< 0.01<br>< 0.01 | < 0.01<br>< 0.01<br>< 0.01 |                         |          |
|                      |                               |                            |                            |                         |          |
|                      |                               |                            |                            |                         |          |
|                      |                               |                            |                            |                         |          |
|                      |                               |                            |                            |                         |          |
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|                      |                               |                            |                            |                         |          |
|                      |                               |                            |                            |                         |          |
|                      |                               |                            |                            |                         |          |

CERTIFICATION:



# **Laboratoires Chemex Ltee.**

Essayeurs \* Geochimistes \* Chimistes Analytique 175 Boul, Industriel C.P. 284, Rouyn, Quebec, Canada J9X 5C3 PHONE: 819-797-1922 To: BURNS, JAMES

190 GRAYE CRESCENT TIMMINS, ON P4N 8K8

A9123109

Comments: ATTN: JAMES BURNS

**CERTIFICATE** 

A9123109

**BURNS, JAMES** 

Project: P.O. #:

Samples submitted to our lab in Rouyn, PQ. This report was printed on 18-OCT-91.

| SAMI              | PLE PREPARATION   |
|-------------------|---|
| NUMBER<br>SAMPLES | DESCRIPTION   |
| 3 3 1             | Geochem ring to approx 150 mesh<br>Crush and split (0-10 pounds)<br>NITRIC-AQUA REGIA DIGESTION |
|                   | NUMBER<br>SAMPLES   |

| ANALYTICAL PROCEDURES | ANAL | YT. | ICAL | <b>PRO</b> | CED | URES |
|-----------------------|------|-----|------|------------|-----|------|
|-----------------------|------|-----|------|------------|-----|------|

| CODE                          | NUMBER<br>SAMPLES |   | DESCRIPTION  | METHOD      | DETECTION<br>LIMIT | UPPER<br>LIMIT                            |
|-------------------------------|-------------------|---|--|-------------|--------------------|---|
| 993<br>13<br>6<br>2<br>4<br>5 | 911111            | As ppm: HNO3 Ag ppm: HNO3 Cu ppm: HNO3 Pb ppm: HNO3 | 30 g sample -aqua regia digest | <b>a</b> as | 1<br>0.2<br>1<br>1 | 10000<br>10000<br>100.0<br>10000<br>10000 |
|                               |                   |   |  |             |                    |   |
|                               |                   |   |  |             |                    |   |
|                               |                   |   |  |             |                    |   |
|                               |                   |   |  |             |                    |   |
|                               |                   |   |  |             |                    |   |
|                               |                   |   |  |             |                    |   |
|                               |                   |   | •  |             |                    |   |



## **Laboratoires Chemex Ltee.**

Essayeurs \* Geochimistes \* Chimistes Analytique 175 Boul, Industriel C.P. 284, Rouyn, Quebec, Canada J9X 5C3 PHONE: 819-797-1922

To: BURNS, JAMES

190 GRAYE CRESCENT TIMMINS, ON P4N 8K8

Page Number :1 Total Pages :1 Certificate Date: 18-OCT-91 Invoice No. P.O. Number

Project: Comments: ATTN: JAMES BURNS

|                      |                               |                 |           |          |             | CERTIFIC  | ATE OF A  | NALYSIS | A91 | 23109 |   |
|----------------------|-------------------------------|-----------------|-----------|----------|-------------|-----------|-----------|---------|-----|-------|---|
| Sample               | PREP<br>CODE                  | Au NAA<br>ppb   | bbw<br>ya | Ag ppm C | du<br>Openi | bbw<br>bp | ppm<br>Zn |         |     |       |   |
| ST-1<br>ST-3<br>ST-5 | 205 294<br>205 294<br>205 294 | < 1<br>< 1<br>2 | < 1       | 1.3      | 180         |           | 300       |         |     |       | · |
|                      |                               |                 |           |          |             |           |           |         |     |       |   |
|                      |                               |                 |           |          |             |           |           |         |     |       |   |
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|                      |                               |                 |           |          |             |           |           |         |     |       |   |
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|                      |                               |                 |           |          |             |           |           |         |     |       |   |
|                      |                               |                 |           |          |             |           |           |         |     |       |   |

CERTIFICATION:



900

Ministry of and Mines

Ministère du Northern Development Développement du Nord et des Mines

Geoscience Approvals Section Mining Lands Branch Willet Green Miller Centre 933 Ramsey Lake Road, 6th Floor Sudbury, Ontario P3E 6B5

Telephone: (705) 670-5853 Fax:

(705) 670-5863

Our File: 2.14883

Transaction #: W9360.00002

February 23, 1993

Mining Recorder Ministry of Northern Development and Mines 60 Wilson Avenue Timmins, Ontario P4N 2S7

Dear Mr. White:

RE: Approval of Assessment Work on mining claims P 1158645 et al. in Strachan Township.

The assessment work credits listed on the above mentioned report of work have been approved as of February 11, 1993. The work has been approved under sections 12 and 14 of the Mining Act Regulations.

If you have any questions regarding this matter, please contact Dale Messenger at (705) 670-5858.

Yours sincerely,

Mark Hall

(Acting) Senior Manager, Mining Lands Branch

Mines and Minerals Division

DEM/jl

Enclosures:

cc:\Assessment Files Office Toronto, Ontario

ONTARIO GEOLOGICAL SURVEY GIS - ASSESSMENT FILES

MAR 3 0 1993

RECEIVED

Resident Geologist Timmins, Ontario



0241 (03/91)

# Report of Work Conducted After Recording Claim

Transaction Number
W9360.0000A

Mining Act

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used for correspondence. Questions about this collection should be directed to the Provincial Manager, Mining Lands, Ministry of Northern Development and Mines, Fourth Floor, 159 Cedar Street, Sudbury, Ontario, P3E 6A5, telephone (705) 670-7264.

instructions: - Please type or print and submit in duplicate. 2.14883

- Refer to the Mining Act and Regulations for requirements of filling assessment work or consult the Mining Recorder.
- A separate copy of this form must be completed for each Work Group.
- Technical reports and maps must accompany this form in duplicate

|   | ch, showing the claim                           | , ,                        | -                         |   |                     |
|---|---|----------------------------|---------------------------|---|---------------------|
| Recorded Holder(s)  |   |                            |                           | Client No.  |                     |
| Janes A   | ערתן  |                            |                           | Talanhora No.   |                     |
| 190 Gray  | e Cr , Timm                                     | in , Out.                  | PyN 8K8                   | 701-2   | 68-4660             |
| Mining Division Porcup  | e Cr , Timm                                     | Township/Area 5 +          | rachan                    | M or G Plan No.   |                     |
| Detec   | ept. 21, 22, 24                                 |                            |                           | 16 /91  |                     |
| Nork Performed (Chec  | •   | , ,                        |                           |   |                     |
| Work Group  |   |                            | Туре                      |   |                     |
| Geotechnical Survey   | Geological,                                     | Geophy sic                 | el EM/M                   | H6  |                     |
| Physical Work,<br>Including Drilling  | Geological,                                     |                            | REC                       | SEIVED  |                     |
| Rehabilitation  |   |                            | JA                        | N 2 6 1993  |                     |
| Other Authorized Work   |   |                            |                           | LANDS BRANC   |                     |
| Assays  |   |                            | Wilding                   |   |                     |
| Assignment from Reserve   |   |                            |                           | •   |                     |
| Total Assessment Work   | Claimed on the Attac                            | hed Statement of C         | costs \$ 3                | 617-  |                     |
|   | erify expenditures clai                         | med in the stateme         | nt of costs within 30     | nent work submitted if<br>days of a request for<br>s of Author of Report) | verification.       |
| Nan   |   |                            |                           | ress  |                     |
| James Burn  | •   | as ab                      | (h.)                      |   |                     |
| J. B. Boniul  |   | T                          |                           | ssissonga, Oct.   | 156,67              |
|   | · · · · · · · · · · · · · · · · · · ·           |                            | <u> </u>                  |   |                     |
|   |   |                            | :                         | RECORD  | ED                  |
| attach a schedule if nec<br>Certification of Benefi   |   | Note No. 1 on reve         |                           | JAN 0 4   |                     |
| I certify that at the time the report were recorded in the ciby the current recorded holds. | urrent holder's name or held t                  |                            | Date                      | Recolded Holder or Agent ()   | Soneture)           |
| Certification of Work I   | Report  |                            |                           |   | •                   |
| I certify that I have a perso<br>its completion and annexed                                 | nal knowledge of the facts direport is true.    | set forth in this Work rep | port, having performed th | e work or witnessed same  | during and/or after |
| Name and Address of Person  | Certifying                                      | L.,                        |                           |   |                     |
| Jamo Burn   | 1 01  | a bent                     |                           |   |                     |
| Telepone No.<br>705-268-4660  | Jan 4   | /23                        | Certified By (Signature)  | Runn  | •                   |
| For Office Use Only   | 7   |                            | , (                       | PORCUPINE MINING D  | IVISION             |
| Total Value Cr. Recorded  | Date Recorded  JAN. 4/93  Deerned Approval Date | Mining Reco                | White                     | AN T 19   | ED                  |
| 43,037  | APL, 5/93 Date Notice for Amendments            |                            |                           | SID   |                     |

| (poe Note 2) | Units               | on this Chia            | Chain   | thá Cicim  | a Patero Doto  | 1 8  |
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| P-1158645    | . !                 | \$ 760 -                | 9 260 (j)   |  | 7601   | S India  |
| 0-1158646    | 1                   | \$ 759-                 | 755   | ·  | 7551   | - S  |
| 0-1158647.   | 1                   | 8 759-                  | 389-11  |  |  | inimize the edverse effects of such deletions, please indicate int (~) one of the following:   |
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|              |                     |                         | <u>-</u>  |  |  | orking Sa  |
|              |                     |                         | ·   |  |  | r to mini<br>se mark<br>d lase, v  |
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|              |                     |                         |   | •  | · ·  | ing in this report may be cut back. In ord<br>in to priorize the defetion of oredits. Plea<br>to be cut back sterting with the claim Sea   |
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| 4            | ᅪ.                  |                         | Total Value. 1. What Applied                          | Total Assigned<br>From                                   | Tabel Recervo  | .   5 ± -  |
| of Chang     |                     |                         |   |  | •  | •  |
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- 2. (12 Creates are to be out back equally over all chains contained in this 3. (1) Creates are to be out back as priorized on the attached appendix.
- In the event that you have not apecified your choice of priority, option one will be implemented.

Mode 1: Examples of beneficial Inferior are unrecorded transfers, option agreements, memorandum of agree to the infinite clothing.

Note & If work has been performed on patented or leaged land, please complete the followings or taken that the neorded holder had a bandicial interest in the patented Sprature or taken band as the tank has not been conformed as taken that as the tank has been conformed as taken that as the tank has been conformed to patented as the tank has been conformed to patented as the tank has been conformed to patented as the tank has been performed as the patented as the patented as the followings.

PAGÉ. 883 7620574

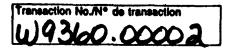


Ainlatry of Northern Development and Mines

e du poement du Nord et des mines

#### Statement of Costs for Assessment Credit

#### Etat des coûts aux fins du crédit d'évaluation



Mining Act/Loi sur les mines

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used to maintain a record and ongoing status of the mining claim(s). Questions about this collection should be directed to the Provincial Manager, Minings Lands, Ministry of Northern Development and Mines, 4th Floor, 159 Cedar Street, Sudbury, Ontario PSE 6A5, telephone (705) 670-7264.

Les renseignements personnels contenus dans la présente formule sont recueillis en vertu de la Loi sur les mines et serviront à tenir à jour un registre des concessions minières. Adresser toute quesiton sur la collece de ces renseignements au chef provincial des terrains miniers, ministère du Développement du Nord et des Mines, 159, rue Cedar, 4º étage, Sudbury (Ontario) P3E 6A5, téléphone (705) 670-7264.

#### 1. Direct Costs/Coûts directs

| Туре                          | Description                                     | Amount<br>Montant         | Totals<br>Total global |
|-------------------------------|---|---------------------------|------------------------|
| Wages<br>Salaires             | Labour<br>Main-d'oeuvre                         | 400 -                     |                        |
|                               | Field Supervision<br>Supervision sur le terrain | 800                       | 1200                   |
| Contractor's and Consultant's | Type Excalibrations Generally sical interp      | 1280-                     |                        |
| Droits de<br>l'entrepreneur   | Ausons  | 127-                      |                        |
| et de l'expert-<br>concell    | •   |                           | 1407                   |
| Supplies Used<br>Fournitures  | Туре  |                           |                        |
| utilisées                     | RECEN   | トロ                        |                        |
|                               | JAN 26  | 993                       | ;                      |
| Equipment<br>Rental           | TYPOMINING LANUS                                | BHANCH                    |                        |
| Location de<br>matériel       |   |                           |                        |
|                               |   |                           |                        |
|                               | Total Di  | rect Costs<br>its directs | 2607                   |

#### 2. Indirect Costs/Coûts Indirects

\*\* Note: When claiming Rehabilitation work indirect costs are not allowable as assessment work.
Pour le remboursement des travaux de réhabilitation, les coûts indirects ne sont pas admissibles en tant que travaux d'évaluation.

| Туре  | Description   | Amount<br>Montant                                   | Totals<br>Total global |
|---|---|---|------------------------|
| Transportation<br>Transport   | Type<br>milase  | 344   |                        |
|   | 900   | 68  |                        |
|   | Shipping  | 9-  |                        |
|   | Communications  | 9-  |                        |
|   |   |   | 430                    |
| Food and<br>Lodging<br>Nourriture et<br>hébergement                     |   |   |                        |
| Mobilization and<br>Demobilization<br>Mobilisation et<br>démobilisation |   |   |                        |
|   | Sub Total of Ind<br>Total partiel des coût              |   | 430                    |
|   | (not greater than 20% of Di<br>(n'excédant pas 20 % des |   |                        |
| Total Value of Asse<br>(Total of Direct and a<br>Indirect costs)        | Allowable d'évaluati<br>(Total des c                    | ale du crédit<br>on<br>cotts directs<br>admissibles | 3037                   |

Note: The recorded holder will be required to verify expenditures claimed in this statement of costs within 30 days of a request for verification. If verification is not made, the Minister may reject for assessment work all or part of the assessment work submitted.

Note : Le titulaire enregistré sera tenu de vérifier les dépenses demandées dans le présent état des coûts dans les 30 jours suivant une demande à cet effet. Si la vérification n'est pas effectuée, le ministre peut rejeter tout ou une partie des travaux d'évaluation présentés.

#### Filing Discounts

- 1. Work filed within two years of completion is claimed at 100% of the above Total Value of Assessment Credit.
- Work filed three, four or five years after completion is claimed at 50% of the above Total Value of Assessment Credit. See calculations below:

| Total Value of Assessment Credit | Total Assessment Claimed |
|----------------------------------|--------------------------|
| × 0.50 =                         |                          |

#### Remises pour dépôt

- 1. Les travaux déposés dans les deux ans sulvant leur achèvement sont remboursés à 100 % de la valeur totale susmentionnée du crédit d'évaluation.
- 2. Les travaux déposés trois, quatre ou cinq ans après leur achèvement sont remboursés à 50 % de la valeur totale du crédit d'évaluation susmentionné. Voir les calculs ci-dessous.

| Valeur totale du crédit d'évaluation | Evaluation totale demandée |
|--------------------------------------|----------------------------|
| × 0,50 =                             |                            |
| L                                    |                            |

#### Certification Verifying Statement of Costs

I hereby certify:

that the amounts shown are as accurate as possible and these costs were incurred while conducting assessment work on the lands shown on the accompanying Report of Work form.

Holder, Agent, Poeltion in Company) \_\_ I am authorized

to make this certification

#### Attestation de l'état des coûts

J'atteste par la présente :

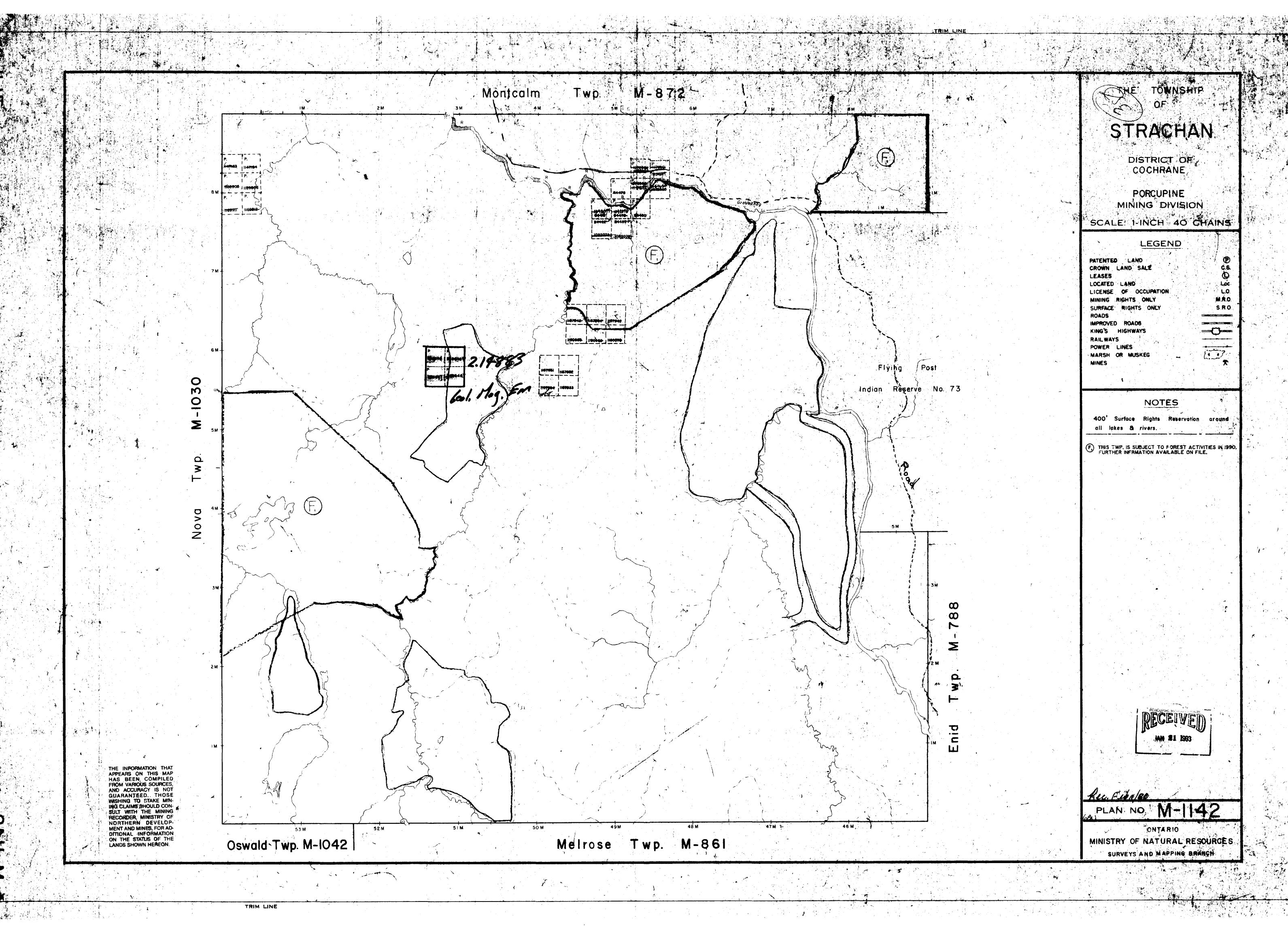
que les montants indiqués sont le plus exact possible et que ces dépenses ont été engagées pour effectuer les travaux d'évaluation sur les terrains indiqués dans la formule de rapport de travail ci-joint.

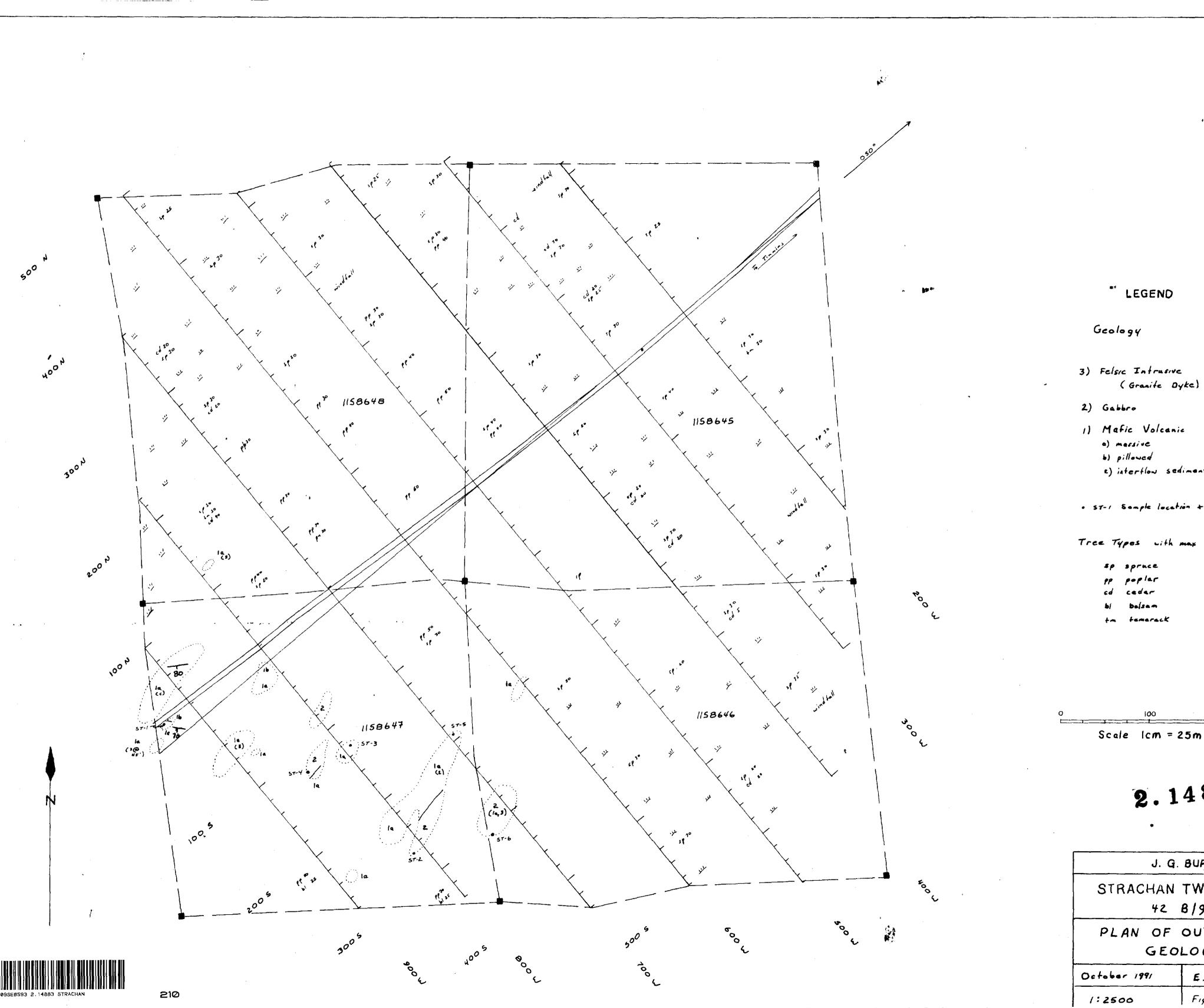
| Et | qu'à titre | de            | représentant. |              | doon la | je sui: | s autorisé |
|----|------------|---------------|---------------|--------------|---------|---------|------------|
|    | (titulaire | e enregistre. | représentant. | poete occupé | dens la | COMPRE  | nie)       |

à faire cette attestation.

|     | Signatura | -        | Date | 1    |
|-----|-----------|----------|------|------|
| - 1 |           | 1        |      | ./   |
|     |           | <i>(</i> | Van  | 4/93 |
|     | yann      | Kun      |      | ' /  |

Nota : Dans cette formule, lorsqu'il désigne des personnes, le masculin est utilisé au sens neutre.





" LEGEND

# Geology

- 3) Felsic Intrusive (Granife Dyke)
- 1) Mafic Volcanie
  - a) massive
  - b) pillowed
  - e) interflow sediments

· ST-1 Sample location + number

Tree Types with max diameter in cm.

2.14883

J. G. BURNS

STRACHAN TWP CLAIMS

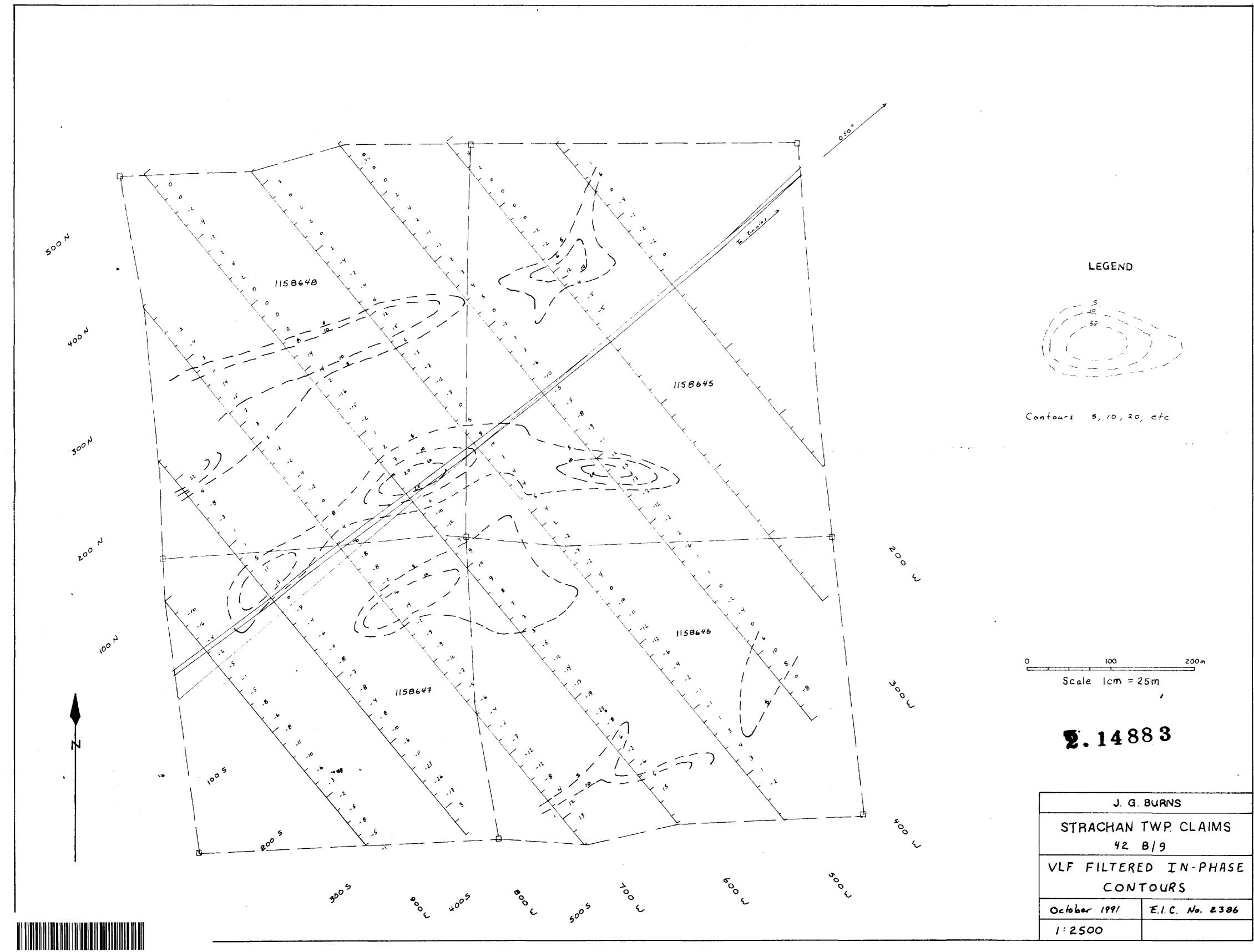
42 8/9

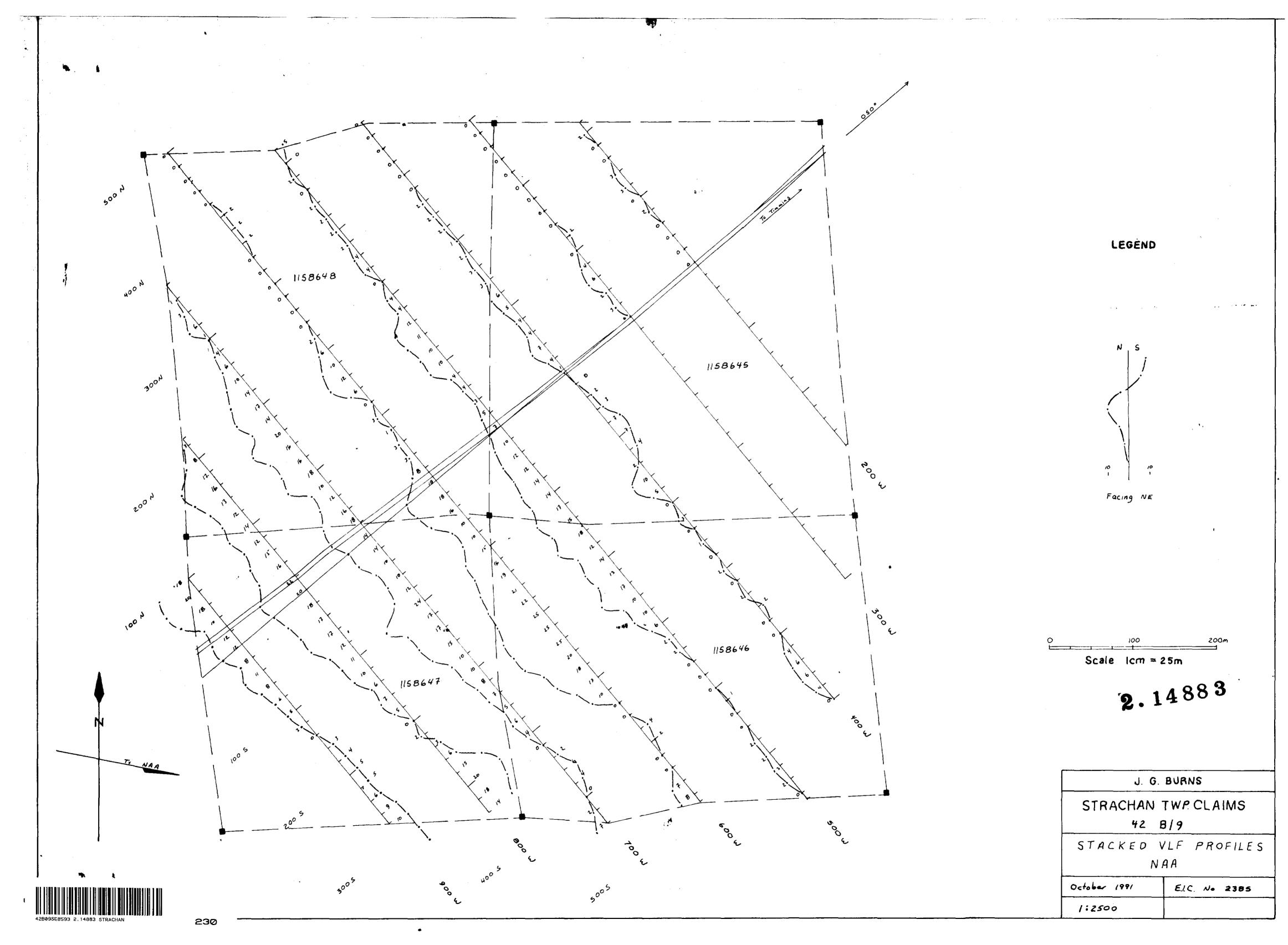
PLAN OF OUTCROP GEOLOGY

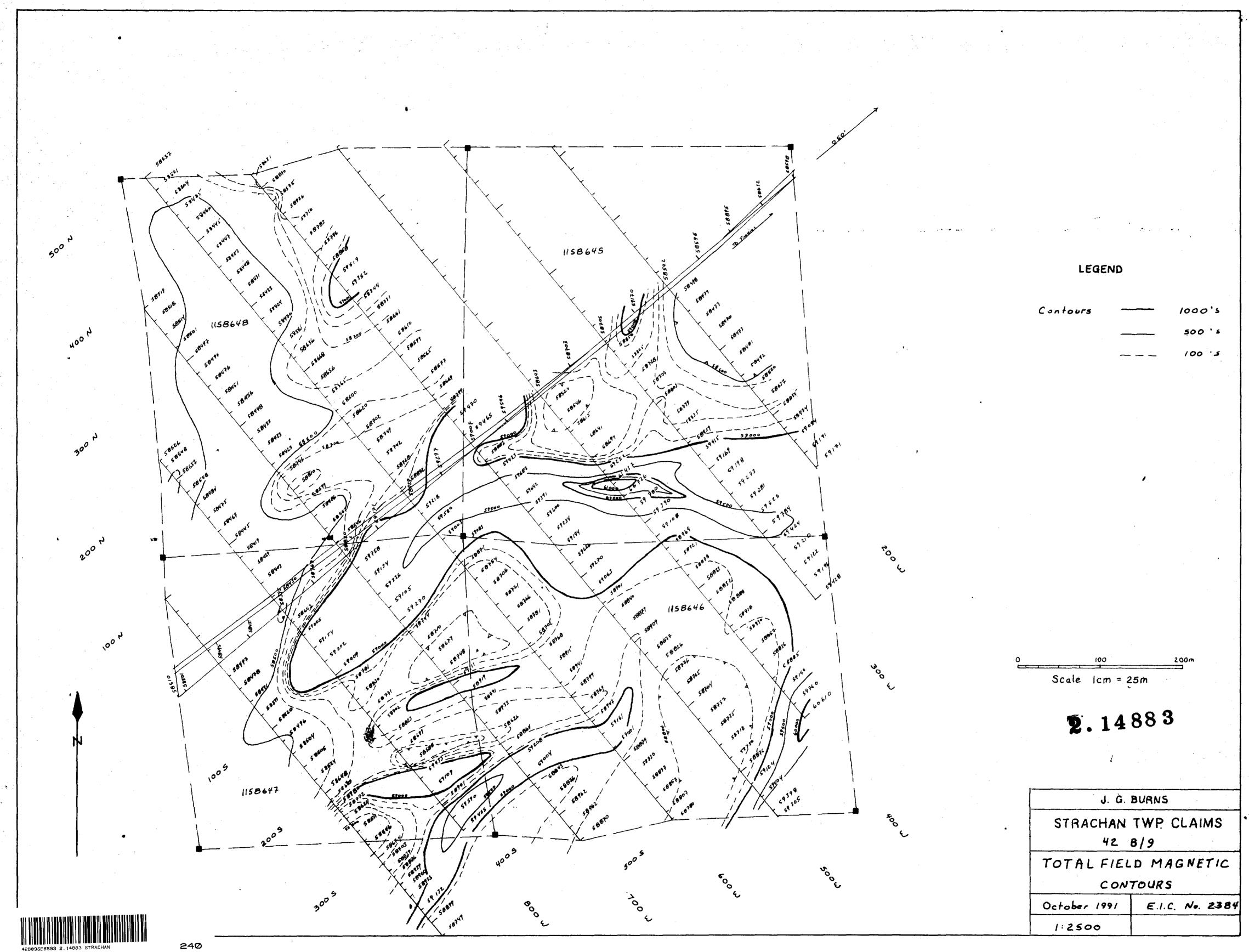
October 1991

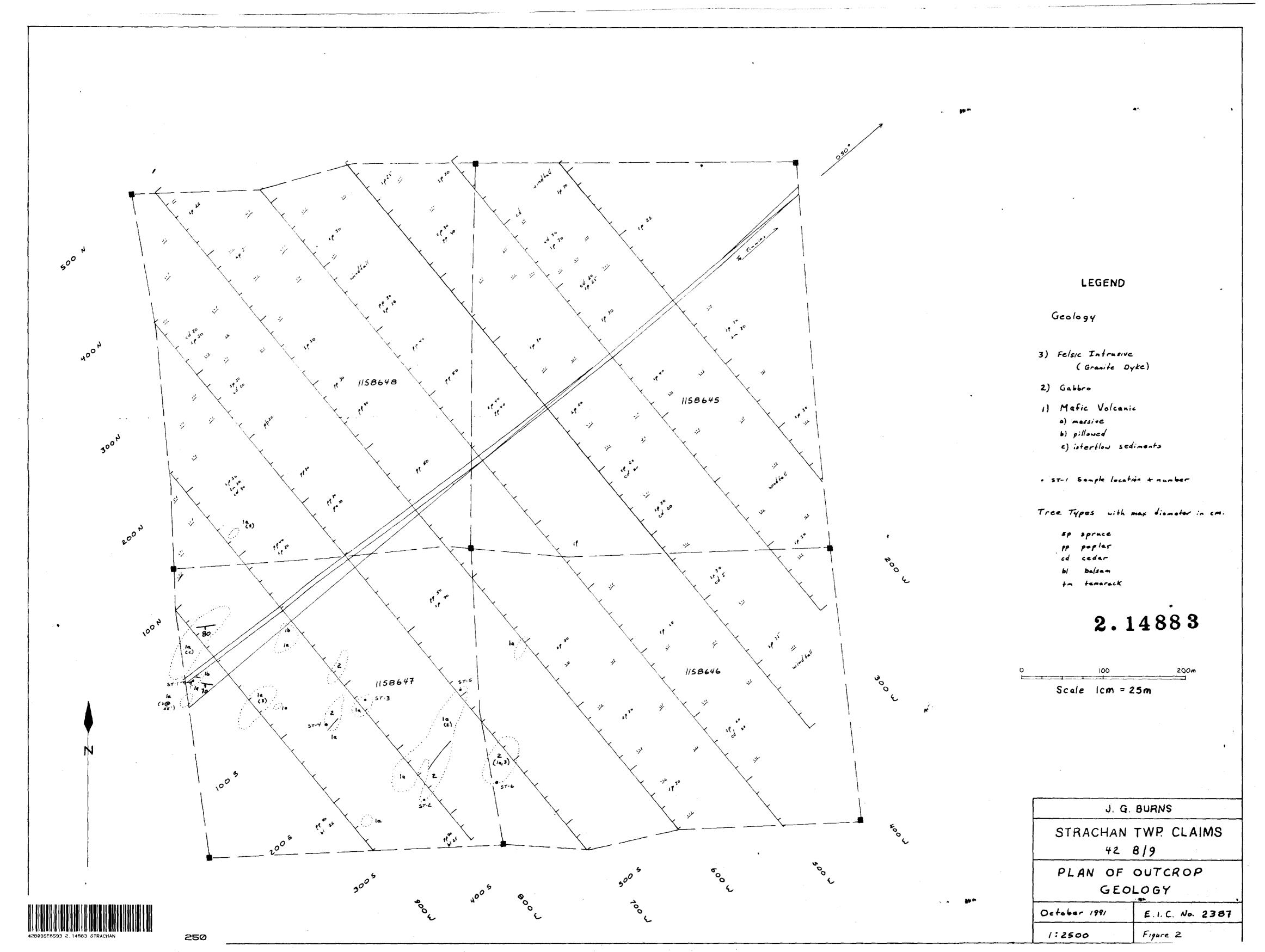
E.I.C. No. 2387

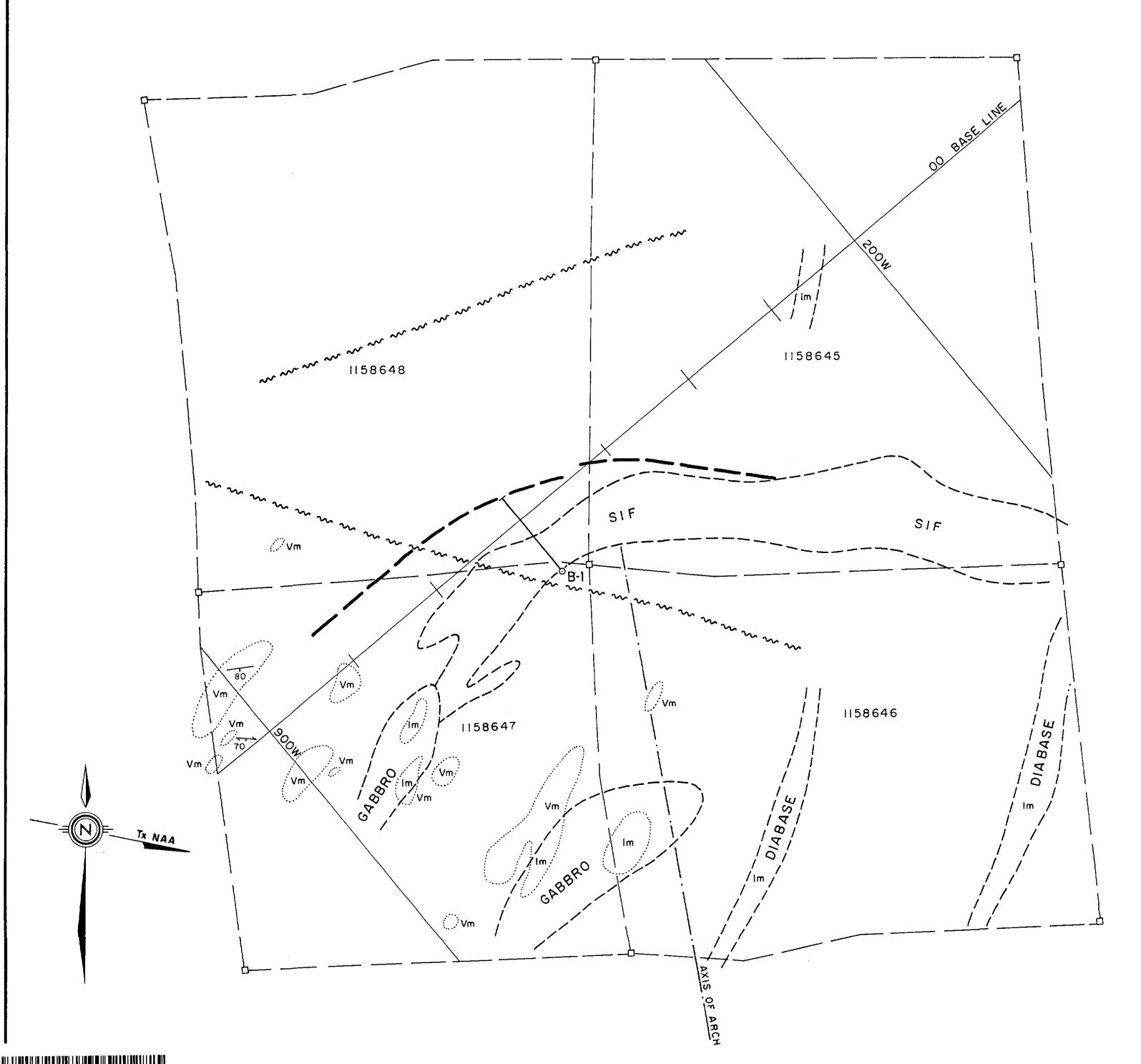
Figure 2











## LEGEND

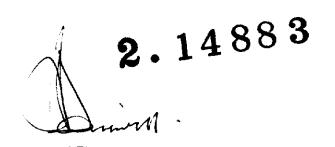
| Interpreted fault                    | ~~~~     |
|--------------------------------------|----------|
| Rock outcrop with identifying symbol | (Vm)     |
| Inferred geologic contact            | <b>/</b> |
| Potential mineralized horizon -      |          |
| Axis of arch                         |          |
| Proposed DDH 6                       | 1        |

### SYMBOLS USED

Vm - Volcanics, mafic

SIF - Iron formation system

lm - Intrusive, mafic



|          | Coolo | 1cm = 25m |       |
|----------|-------|-----------|-------|
| <u> </u> |       | 100       | 200 n |
| ^        |       | 100       | 200-  |

J. G. BURNS

STRACHAN TOWNSHIP CLAIMS Ontario

# PLAN OF INTERPRETATION



EXCALIBUR INTERNATIONAL PREP. BY: J. B. B.

CONSULTANTS LIMITED DATE: October 1991
TORONTO, ONTARIO SCALE: 1: 2500

DWG. No. E.I.C.- 2388