

41010NW0097 2.4306 HALCROW

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SULPETRO MINERALS LTD.

GEOLOGICAL MAPPING

HALCROW TOWNSHIP CLAIMS

PROJECT 3381.1

CLAIMS: P - 56575 1 - 565754

P - 565775 - 565779

Porcupine Mining Division

Ontario.

By: A.W. Beecham  
Nov. 1981

N.T.S. 41-0-15  
Halcrow Twp.

**RECEIVED**

NOV 2 01981

**MINING LANDS SECTION**

GEOLOGICAL MAPPING  
HALCROW TOWNSHIP CLAIMS

S U M M A R Y

Nine claims staked in north-central Halcrow Township covering a showing known as the Lyall-Beidelman occurrence were covered by a 100-metre spaced grid of picket lines. The claims have been mapped at a scale of 1:2000. Outcrop is very sparse. Gold values were verified in the showing. One value of 4.4 g/T was returned from a quartz arsenopyrite vein and geochemically anomalous levels of gold, from 100 to 400 ppb, occur in the surrounding zone of disseminated pyrite. The mineralization is hosted by a pink to red feldspar porphyry intrusive into highly deformed, Archean conglomerates and volcanics.

Due to the lack of outcrop, traditional prospecting would not have been a very effective exploration tool and there is a very good chance that the mineralization is more extensive than exposed. A program of ground geophysics, V.L.F. E-M, and magnetics and organic soil geochemistry for Au and As is recommended.

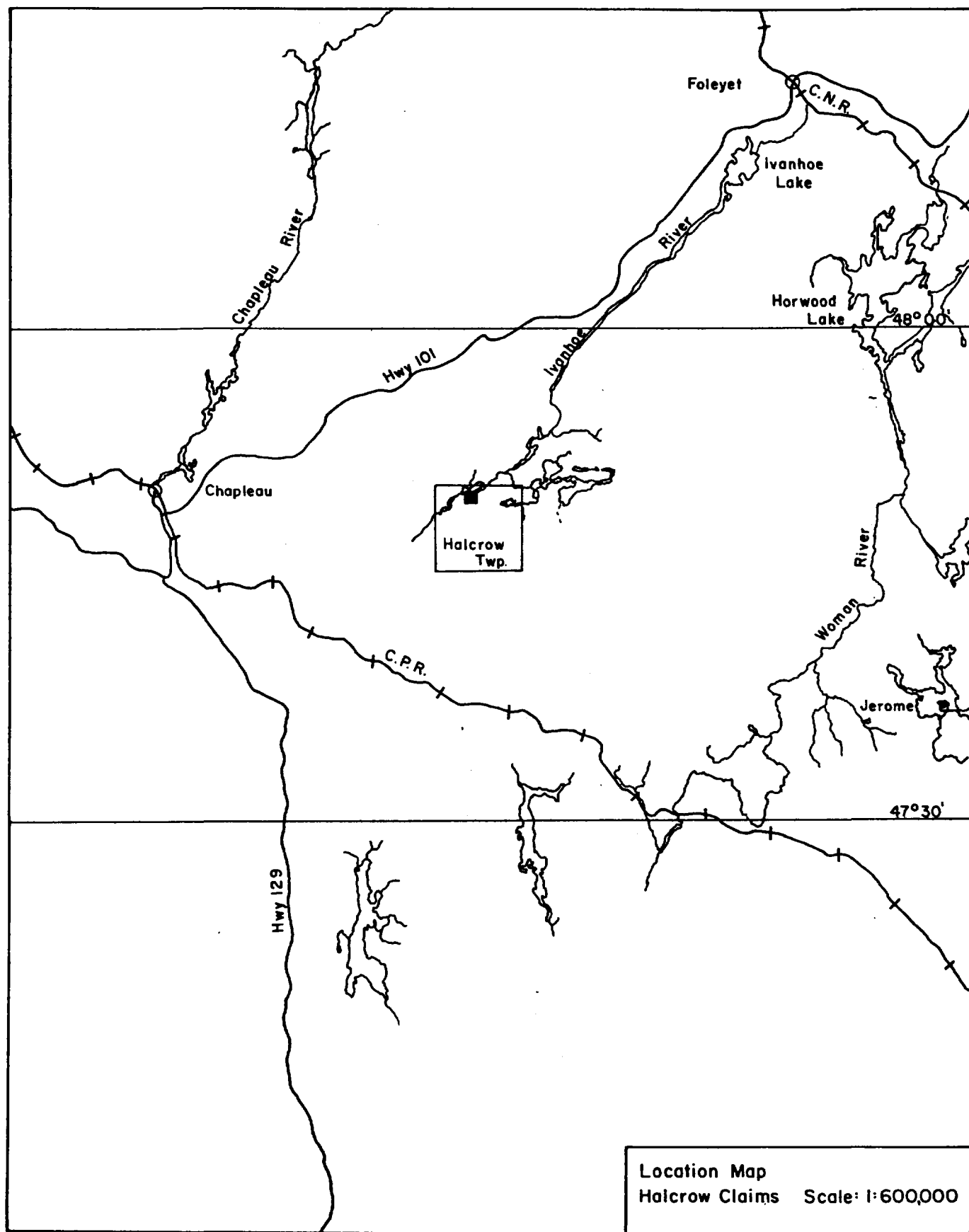
INTRODUCTION

During a study of available data on the mineral potential of Swayze Volcanic belt in March and April 1980, a documented gold occurrence, known as the Lyall-Beidelman showing was noted.

The showing is located almost at the extreme western end of the Swayze Volcanic belt. Gold values are associated with quartz and arsenopyrite in an E-W fracture zone with disseminated pyrite within red feldspar ("syenite") porphyry. It was reported that gold could be freely panned from the gossans. The feldspar porphyry intrudes Swayze Series conglomerate and various Archean Volcanics.

It was apparent that no very intensive exploration had been done, and that the property had not been subjected to a thorough programme of modern geophysics and geochemistry. Nine claims were staked in May 1980, to cover the showing. However, due to a shortage of trained personnel during the 1980 field season, no work was done until the line-cutting and mapping of the summer of 1981.

Because of the lack of outcrop, mapping was completed quickly and no camp was established on the site. Crews were flown in from a camp in Newton Township, or from Foleyet. All of the lines were traversed and considering the relatively open bush, it is thought that most of the outcrops have been located.



LOCATION AND ACCESS

The claims are located in the Sudbury District some 35 Km. due east of the Town of Chapleau, and 14 Km. southeast of Highway 101. They lie about 18 Km. north of the Village of Kormak on the main transcontinental Canadian Pacific Railway.

Logging roads from Kormak however, reach only about as far north as Sawbill Lake about 13 Km. south of the claims. The claims can also be reached by boat on the Ivanhoe River which touches the northwest corner of the property. However, the most convenient access is by float-equipped aircraft from Chapleau or Foleyet.

PROPERTY DESCRIPTION

The group consists of nine, forty acre (16 hectare) claims as follows:

<u>CLAIM NUMBER</u>	<u>RECORDING DATE</u>
P-565751	21 May, 1980
P-565752	"
P-565753	"
P-565754	"
P-565775	"
P-565776	"
P-565777	"
P-565778	"
P-565779	"

No work was done in 1980, and the claims are presently held under extension until 30 November, 1981.

#### TOPOGRAPHY AND SUPERFICIAL DEPOSITS

The area has mostly low relief with very disorganized drainage and no particular grain to the topography. Low, hummocky ridges with up to 15 m. of relief separate the lakes and drainages. Most of the relief appears to be due to thick till deposits (moraine). This area coincides approximately with the western projection of the Chapleau I ice front as shown by Thurston et al.

Except in areas underlain by conglomerate the bedrock is only exposed over 1 or 2 % of the area.

Most of the area is covered by open forest of mature poplar.

#### PREVIOUS WORK

The showing on claim 56,5779 located 40 to 100 m N.E. of a small lake is presumed to be what are referred to as the Lyall-Beidelman Occurrence. The claims were staked for I.C. Beidelman and Associates of Montreal. Trenching was done about 1934. According to W. Hammerstrom of Haileybury, Ontario, (personal communications), gold was first found in the vicinity of the showing by panning mineralized float. The mineralization does not appear to have outcropped.

The only other work reported are six short drill holes totalling 400 ft. drilled by Dalhousie Oil Co. Ltd. ( of Becker-Banting group) in 1966. The claims were known as the Bastarache-Gerard property. No values were reported. L. Hobbs who supervised the drilling (personal communications) confirmed that gold could be panned from the showings but they obtained no significant assays either from drill core or the trenches.

No drill casings were located in the field; they were presumably pulled and the positions shown on Fig. 2 are merely located with respect to the trenches from a sketch by Dalhousie. There is a possibility of considerable inaccuracy.

#### GENERAL GEOLOGY

The Halcrow group is situated at the western limit of the Swayze Archean Volcanic belt just east of its truncation by the Kapuskasing Structural Zone. Formations trend more or less east-west. The volcanic and sedimentary rocks are strongly deformed. The claims lie on the northern limb of a regional syncline (synclinatorium) the east-west axis of which passes through Halcrow, Denyes, Swayze, Dore, Heenan and Dale Townships.

The bedrock is composed of conglomerates of the Swayze Series, (probably equivalent to the Ridout Series on the South Side of the anticline). Mafic and felsic volcanics which are intruded by a 600 m wide band of more or less conformable red felspar porphyry (syenite porphyry).

A large body of granite rocks invades on the west with tongues of "granite" protruding from the west into the country rocks.

Rickaby (1935) grouped the sedimentary and felsic volcanic rocks together as Temiskaming and mapped the felsic porphyries as intrusives. Donovan (1964), while separating normal sediments from felsic volcanics, grouped the felsic porphyries with the felsic volcanics. Rickaby's grouping is of advantage from an exploration point, because it is (apparently) with the felsic porphyries (intrusives) that the gold mineralization is spatially associated e.g. the Lyall Beidelman showing, at the old Kenty Mine, and the Rundle farther to the east.

#### ROCK TYPE DESCRIPTIONS

Rock names are based solely on field observations and no thin sections nor major element analyses were made.

MAFIC VOLCANICS: These rocks are located only in the north-east and extreme south-west parts. The latter described as chlorite schist are assumed to be sheared mafic volcanics.

FELSIC VOLCANICS: The felsics are divided into fine tuff and sericite quartz feldspar schist also assumed to be a tuff. The latter appears to be a highly deformed crystal - lithic (lapilli) tuff.



METASEDIMENTS: Polymictic orthoconglomerates are well exposed along the eastern half of the baseline. Clasts of granitic rocks, and vein quartz were noted. The conglomerates are strongly deformed with a crenulated, schistose matrix and very elongated clasts. They consist of alternating 3 to 10 mm thick light to dark grey-brown beds.

FELSIC INTRUSIVES: Feldspar porphyries outcrop very sparsely over about one half the area. They seem to form a more or less concordant 500 to 600m wide E.S.E. trending band through the middle of the claims. This band seems to spread out westward, cross-cutting sediments and volcanics on the northwestern part. No contact relationship were observed. However, the porphyries are massive and structureless, and are hence thought to be intrusive. (Donovan has mapped these as volcanics). They are composed of an estimated 15% to more than 50% feldspar phenocrysts in a fine-grained felsic matrix. Sparse quartz phenocrysts occur here and there. The mafic content is low. A little biotite was observed. Most of the porphyries weather red, but are pink or grey on the fresh surface. Whole rock analyses of similar rocks in Newton Township indicate that pink and grey varieties have similar compositions except that the pink varieties have higher levels of CaO and L.O.I. Some specular hematite has been found west of the showings and it is likely that the red colour on the fresh surface is due to fine hematite. The brick red weathering colour is probably due to hematite from iron-bearing carbonates.

The granitic rocks which 'invade' from the west are very poorly exposed. Where observed these are pink and quartz-rich with a low mafic content.

ALTERED ROCKS: Highly altered, hematized and probably feldspathized rocks are seen here and there. They are thought to be altered feldspar porphyries, but some altered volcanics could be included. With increasing alteration the feldspar phenocrysts are obliterated.

DIABASE: A small diabase dyke cutting conglomerate is exposed on L.10E about 1+00 S.

#### ALTERATION

As described above hematite staining is wide spread in the feldspar porphyry and probably some feldspathization has taken place. The relatively dark red weathered surface of much of the porphyry compared to the fresh surface suggests some Fe-bearing carbonates are present. The red alteration is not only associated with the disseminated sulphides of the showing, but affects most of the exposed porphyry.

Small biotite flakes are common in highly reddened porphyry. This could be an alteration product.

MINERAL OCCURRENCES

A number of trenches, up to about 3 m deep have exposed bedrock and have been blasted into bedrock over an area about 70m east-west by 50m north-south. A fine dissemination of pyrite from a trace to 3% occurs here and there in all exposures of bedrock and broken rock in and around the trenches.

The trenches are partly filled with debris and water, and the east-west fracture zones described by Rickaby are at present not very conspicuous, nor are there any appreciable amounts of gossan exposed.

Arsenopyrite can be easily found in the rubble of the middle three trenches of the south group. It is in quartz veins and in light grey bleached (presumably silicified) wallrock. Four grab samples of the better sulphide concentrations analysed by combined fire assay and atomic absorption contain anomalous gold levels - from 100 to 400 ppb. See Fig. 2.

One grab sample of arsenopyrite-bearing quartz vein and bleached wallrock assayed 4.35 g/tonne (4353 ppb) gold.

The showings are on a southerly slope and were originally mantled by 1-2m of till. There are no other exposures on strike to the west, and to the east the next exposures on strike are more than 200m away. Hence the mineralization could be much more extensive than exposed.


RECOMMENDATIONS

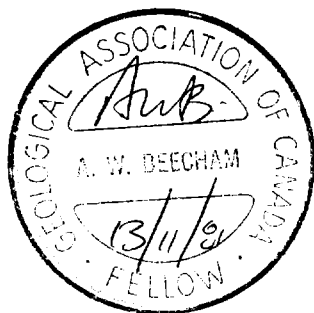
The disseminated sulphides with which the gold values are associated would respond well to induced polarization techniques. However, V.L.F. and magnetics may also detect it and it is recommended that these two surveys be run first before undertaking I.P.

An organic soil geochemical survey is recommended for Au and As. Both elements can be determined by neutron activation. As a first pass, samples should be collected on a 25 m N-S by 50 m E-W grid over an area 200 north to 200 m south of the showings and extending on formational trend from L2E to L12E. Due to the generally thick till, the target is an anomaly related to a till streak rather than an insitu ore.

Areas of swamp should not be sampled.

Respectfully submitted

  
A.W. Beecham  
Senior Geologist  
Sulpetro Minerals Ltd.



REFERENCES

- Donovan J.F.                      Geology of Halcrow-Ridout Lakes Area  
(1968)                              Geol. Rep. 63, Ontario Dept. Mines.
- Rickaby H.C.                      Geology of Swayze Gold Area in  
(1934)                              43rd. Annual Rep. Ont. Dept. Mines.  
Vol. XLIII, PT. III
- Thurston P.C.  
et al                              Geology of the Chapleau Area  
(1977)                              District of Algoma, Sudbury and Cochrane;  
Geoscience Rep. 157. Min. Nat.,  
Ont. Div. Mines



1982 11 15

2.4306

Mining Recorder  
Ministry of Natural Resources  
60 Wilson Avenue  
Timmins, Ontario  
P4N 2B7

Dear Sir:

RE: Geological Survey on Mining Claims P 565751 et al  
in the Township of Halcrow.

---

The Geological Survey assessment work credits as listed with my Notice of Intent dated September 17, 1982 have been approved as of the above date.

Please inform the recorded holder of these mining claims and so indicate on your records.

Yours very truly

E.F. Anderson  
Director  
Land Management Branch

Whitney Block, Room 6450  
Queen's Park  
Toronto, Ontario  
M7A 1W3  
Phone: 416/965-1380

A. Barr:sc

cc: Sulpetro Minerals Limited  
Haileybury, Ontario

cc: Resident Geologist  
Timmins, Ontario



Ministry of  
Natural  
Resources

Ontario

OCT 5, 1982

Your file:

. 1982 09 17

Our file: 2.4306

Mining Recorder  
Ministry of Natural Resources  
60 Wilson Avenue  
Timmins, Ontario  
P4N 2S7

Dear Sir:

Enclosed are two copies of a Notice of Intent with statements listing a reduced rate of assessment work credits to be allowed for a technical survey. Please forward one copy to the recorded holder of the claims and retain the other. In approximately fifteen days from the above date, a final letter of approval of these credits will be sent to you. On receipt of the approval letter, you may then change the work entries on the claim record sheets.

Yours very truly,

**For further information, if  
required, please contact  
Mr. F.W. Matthews at 416/965-6918.**

E.F. Anderson  
Director  
Lands Administration Branch  
Whitney Block, Room 6450  
Queen's Park  
Toronto, Ontario  
M7A 1W3  
Phone: 416/965-1316

**A. Barr:sc**

**cc: Sulpetro Minerals Limited  
Haileybury, Ontario**

**cc: A.W. Beacham  
Haileybury, Ontario**

**cc: Mr. G.H. Ferguson**



Ministry of  
Natural  
Resources

Notice of Intent  
for Technical Reports

**1982 09 17**

**2.4306**

An examination of your survey report indicates that the requirements of The Ontario Mining Act have not been fully met to warrant maximum assessment work credits. This notice is merely a warning that you will not be allowed the number of assessment work days credits that you expected and also that in approximately 15 days from the above date, the mining recorder will be authorized to change the entries on his record sheets to agree with the enclosed statement. Please note that until such time as the recorder actually changes the entry on the record sheet, the status of the claim remains unchanged.

If you are of the opinion that these changes by the mining recorder will jeopardize your claims, you may during the next fifteen days apply to the Mining and Lands Commissioner for an extension of time. Abstracts should be sent with your application.

If the reduced rate of credits does not jeopardize the status of the claims then you need not seek relief from the Mining and Lands Commissioner and this Notice of Intent may be disregarded.

If your survey was submitted and assessed under the "Special Provision-Performance and Coverage" method and you are of the opinion that a re-appraisal under the "Man-days" method would result in the approval of a greater number of days credit per claim, you may, within the said fifteen day period, submit assessment work breakdowns listing the employees names, addresses and the dates and hours they worked. The new work breakdowns should be submitted direct to the Lands Administration Branch, Toronto. The report will be re-assessed and a new statement of credits based on actual days worked will be issued.



Recorded Holder <b>SULPETRO MINERALS LIMITED</b>
Township or Area <b>HALCROW TOWNSHIP</b>

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
<b>Geophysical</b> Electromagnetic _____ days Magnetometer _____ days Radiometric _____ days Induced polarization _____ days Section 86 (18) _____ days Geological <b>40</b> days Geochemical _____ days  Man days <input type="checkbox"/> Airborne <input type="checkbox"/> Special provision <input type="checkbox"/> Ground <input type="checkbox"/>  <input type="checkbox"/> Credits have been reduced because of partial coverage of claims. <input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.	<b>P 565751 to 59 inclusive</b> <b>565775-76</b> <b>565778-79</b>

**Special credits under section 86 (15a) for the following mining claims**

<p><b>20 days</b></p> <p><b>P 565777</b></p>
--

**No credits have been allowed for the following mining claims**

<input type="checkbox"/> not sufficiently covered by the survey	<input type="checkbox"/> Insufficient technical data filed
---	--



Ontario

P 565751

Ministry of Natural Resources

Notification of recording of assessment work credits

Lands Administration Branch Mining Lands Section Ministry of Natural Resources Room 1617, Whitney Block Queen's Park, Toronto M7A 1W3

2.4306

RECEIVED

NOV 26 1981

MINING LANDS SECTION

Date of recording of work: November 16, 1981.

Recorded holder: Sulpetro Minerals Ltd.

Address: P.O. Box: 1207, Haileybury, Ontario

Township or Area: HALCROW TOWNSHIP

Table with 2 columns: Type of survey and number of Assessment days credit per claim, Mining claims. Rows include Geophysical (Electromagnetic, Magnetometer, Radiometric, Induced polarization, Section 72/19), Geological (40), and Geochemical. Includes checkboxes for Man days, Airborne, Special provision, and Ground.

Notice to recorded holder:

[X] Survey reports and maps in duplicate be submitted to the Lands Administration Branch, Toronto within 60 days from the date of recording of this work.

[ ] Reports and maps are being forwarded to the Lands Administration Branch with this letter.

Signature of Mining recorder

c.c. Suite 301-2161 Yonge St., Toronto, Ontario



Ministry of  
Natural  
Resources

AUG. 16, 1982.

○

Your file:

.1982 07 26

Our file: 2.4306

**Mining Recorder  
Ministry of Natural Resources  
60 Wilson Avenue  
Timmins, Ontario  
P4N 2S7**

**Dear Sir:**

Enclosed are two copies of a Notice of Intent with statements listing a reduced rate of assessment work credits to be allowed for a technical survey. Please forward one copy to the recorded holder of the claims and retain the other. In approximately fifteen days from the above date, a final letter of approval of these credits will be sent to you. On receipt of the approval letter, you may then change the work entries on the claim record sheets.

Yours very truly,

**For further information,  
if required, please contact  
Mr. F.W. Matthews at  
416/965-6918.**

E.F. Anderson  
Director  
Lands Administration Branch  
Whitney Block, Room 6450  
Queen's Park  
Toronto, Ontario  
M7A 1W3  
Phone: 416/965-1316

**A. Barr/sc**

**c.c. Sulpetro Minerals Limited  
Haileybury, Ontario.**

**c.c. A.W. Beechan  
Haileybury, Ontario**

**c.c. G.H. Ferguson  
Mining & Lands Commissioner  
Toronto, Ontario**



Ministry of  
Natural  
Resources

Notice of Intent  
for Technical Reports

**1982 07 26**

**2.4306**

An examination of your survey report indicates that the requirements of The Ontario Mining Act have not been fully met to warrant maximum assessment work credits. This notice is merely a warning that you will not be allowed the number of assessment work days credits that you expected and also that in approximately 15 days from the above date, the mining recorder will be authorized to change the entries on his record sheets to agree with the enclosed statement. Please note that until such time as the recorder actually changes the entry on the record sheet, the status of the claim remains unchanged.

If you are of the opinion that these changes by the mining recorder will jeopardize your claims, you may during the next fifteen days apply to the Mining and Lands Commissioner for an extension of time. Abstracts should be sent with your application.

If the reduced rate of credits does not jeopardize the status of the claims then you need not seek relief from the Mining and Lands Commissioner and this Notice of Intent may be disregarded.

If your survey was submitted and assessed under the "Special Provision-Performance and Coverage" method and you are of the opinion that a re-appraisal under the "Man-days" method would result in the approval of a greater number of days credit per claim, you may, within the said fifteen day period, submit assessment work breakdowns listing the employees names, addresses and the dates and hours they worked. The new work breakdowns should be submitted direct to the Lands Management Branch, Toronto. The report will be re-assessed and a new statement of credits based on actual days worked will be issued.



Recorded Holder	<b>SULPETRO_MINERALS LIMITED</b>
Township or Area	<b>HALCROW TOWNSHIP</b>

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
<b>Geophysical</b> Electromagnetic _____ days Magnetometer _____ days Radiometric _____ days Induced polarization _____ days Section 86 (18) _____ days Geological <u>40</u> days Geochemical _____ days Man days <input type="checkbox"/> Airborne <input type="checkbox"/> Special provision <input type="checkbox"/> Ground <input type="checkbox"/> <input type="checkbox"/> Credits have been reduced because of partial coverage of claims. <input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.	<p>P 565751-52            565754            565775-76            565778</p> <p><i>P. 565751-52, 565754, 565775-76, 565778-79</i></p> <p><i>Revised Aug 17/82 Jm</i></p>

**Special credits under section 86 (15a) for the following mining claims**

<b>20 DAYS</b>	<b>30 DAYS</b>
P 565777	<del>P 565753 565779</del>

**No credits have been allowed for the following mining claims**

not sufficiently covered by the survey       Insufficient technical data filed



# Application for Extension of time

Ontario

Name of applicant

Address

Telephone

Claim numbers

Total Claims

Reasons why work not done

Length of time desired

Approximate date when work will commence

Type and extent of work contemplated (indicate total number of days work to be performed)

Have metal tags been affixed to claim corner posts?

Date of Application

Signature of Applicant



Mining Lands Comments

L.D


To: Geophysics

Comments


<input type="checkbox"/> Approved	<input type="checkbox"/> Wish to see again with corrections	Date	Signature
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To: Geology - Expenditures

*Mr Kustia*

Comments


<input checked="" type="checkbox"/> Approved	<input type="checkbox"/> Wish to see again with corrections	Date <i>Mar 4 / 82</i>	Signature <i>Kustia</i>
--	---	------------------------	-------------------------

To: Geochemistry

Comments


<input type="checkbox"/> Approved	<input type="checkbox"/> Wish to see again with corrections	Date	Signature
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November 27, 1981

2.4306

Office of the Mining Recorder  
Ministry of Natural Resources  
60 Wilson Avenue  
Timmins, Ontario  
P4N 2S7

Dear Sir:

We have received reports and maps for a Geological Survey submitted under Special Provisions (credit for Performance and Coverage) on Mining Claims P.565751 et al, in the Township of Halcrow.

This material will be examined and assessed and a statement of assessment work credits will be issued.

Yours very truly,

E.F. Anderson  
Director  
Land Management Branch

Whitney Block, Room 6450  
Queen's Park  
Toronto, Ontario  
M7A 1W3  
Phone: 416/965-1380

J. Skura/bk

cc: Sulpatro Minerals Limited  
Haileybury, Ontario





**SULPETRO MINERALS LIMITED**

Suite 301, 2161 Yonge Street  
Toronto, Ontario M4S 3A6  
Telephone: (416) 482-5422 Telex 06-23794

P.O. Box 1207  
Haileybury, Ontario,  
16 November 1981.

Mr. E.F. Anderson  
Mining Land Section,  
Ministry of Natural Resources,  
6450 Whitney Block,  
Queen's Park  
TORONTO, Ontario

Dear Sir:

Enclosed please find two copies of a report describing geological mapping on 9 claims, P-565751 et al in Halcrow Township, Porcupine Mining Division. A report of the work (yellow form) has been sent to the mining recorder in Timmins.

Sincerely,



A.W. Beecham  
Senior Geologist

Copy: H.L. King

**RECEIVED**

**NOV 20 1981**

**MINING LANDS SECTION**

DECLARATION

This is to state that I, Arthur W. Beecham hold a Bachelor of Science degree (1962) from the Dept. of Geology, Carleton University, Ottawa and a Master of Science degree in Geology (1969) from the School of Graduate Studies, Queen's University Kingston, Ontario. I am a Fellow of the Geological Association of Canada.

Since 1963 I have practised my profession continuously or been engaged in graduate studies.

I am presently employed as Senior Geologist by Sulpetro Minerals Ltd.

I personally supervised or carried out the work outlined in this report.

12/Nov/1981  
Date

Arthur W. Beecham  
A.W. Beecham





ONTARIO

THE MINING ACT REPORT OF WORK

A separate form is required for each type of work to be recorded.

To the Recorder of PORCUPINE Mining Division

SULPETRO MINERALS LTD. name of Recorded Holder T-501 Miner's Licence

P.O. Box 1207, Haileybury, Ont. or Suite 301-2161 Yonge St., Toronto Post Office Address

do hereby report the performance of 360 days of Geological Survey type of work

not before reported to be applied on the following contiguous claims

Table with 6 columns: Claim No., Days, Claim No., Days, Claim No., Days. Rows include claim numbers -565751 to -565776, all with 40 days.

All the work was performed on Mining Claim (s) Work distributed equally over 9 claims (In the case of geological and/or geophysical survey (s) where more than 18 claims are involved attach a schedule)

READ CAREFULLY: THE FOLLOWING INFORMATION IS REQUIRED BY THE MINING RECORDER.

- For Manual Work, Stripping or Opening up of Mines, Sinking Shafts or Other Actual Mining Operations - Names and addresses of the men who performed the work and the dates and hours of their employment.
For Diamond and other Core Drilling - Footage, No. and angle of holes and diameter of core. Name and address of owner or operator of drill. Dates when drilling was done. Signed core log and sketch in duplicate.
For Compressed Air or Other Power Driven or Mechanical Equipment
Type of drill or equipment. Names and addresses of men engaged in operating equipment and the dates and hours of their employment.
For Power Stripping - Type of equipment. Name and address of owner or operator. Amount expended. Dates on which work was done. Proof of actual cost must be submitted within 30 days of recording.
With each of the above types of work sketches are required to show the location and extent of the work in relation to the nearest claim post. In the case of diamond or other core drilling the sketch must be submitted in duplicate.
For Geological and Geophysical Survey - The names and addresses of men employed as well as dates. Type of instrument used in the case of geophysical survey. Reports and maps in duplicate must be filed with the Minister within 60 days of recording.
For Land Survey - the name and address of Ontario Land surveyor.

The Required Information is as Follows: (Attach a list if this space is insufficient)

GEOLOGICAL MAPPING
HALCROW TOWNSHIP CLAIMS Proj. 3381,I
A.W. BEECHAM. Nov. 1981

Date 13 November 1981

Signature of Recorded Holder or Agent
A.W. Beecham

The Mining Act Certificate Verifying Report of Work

A.W. Beecham
P.O. Box 867, Haileybury, Ontario. (Post Office Address)

hereby certify:

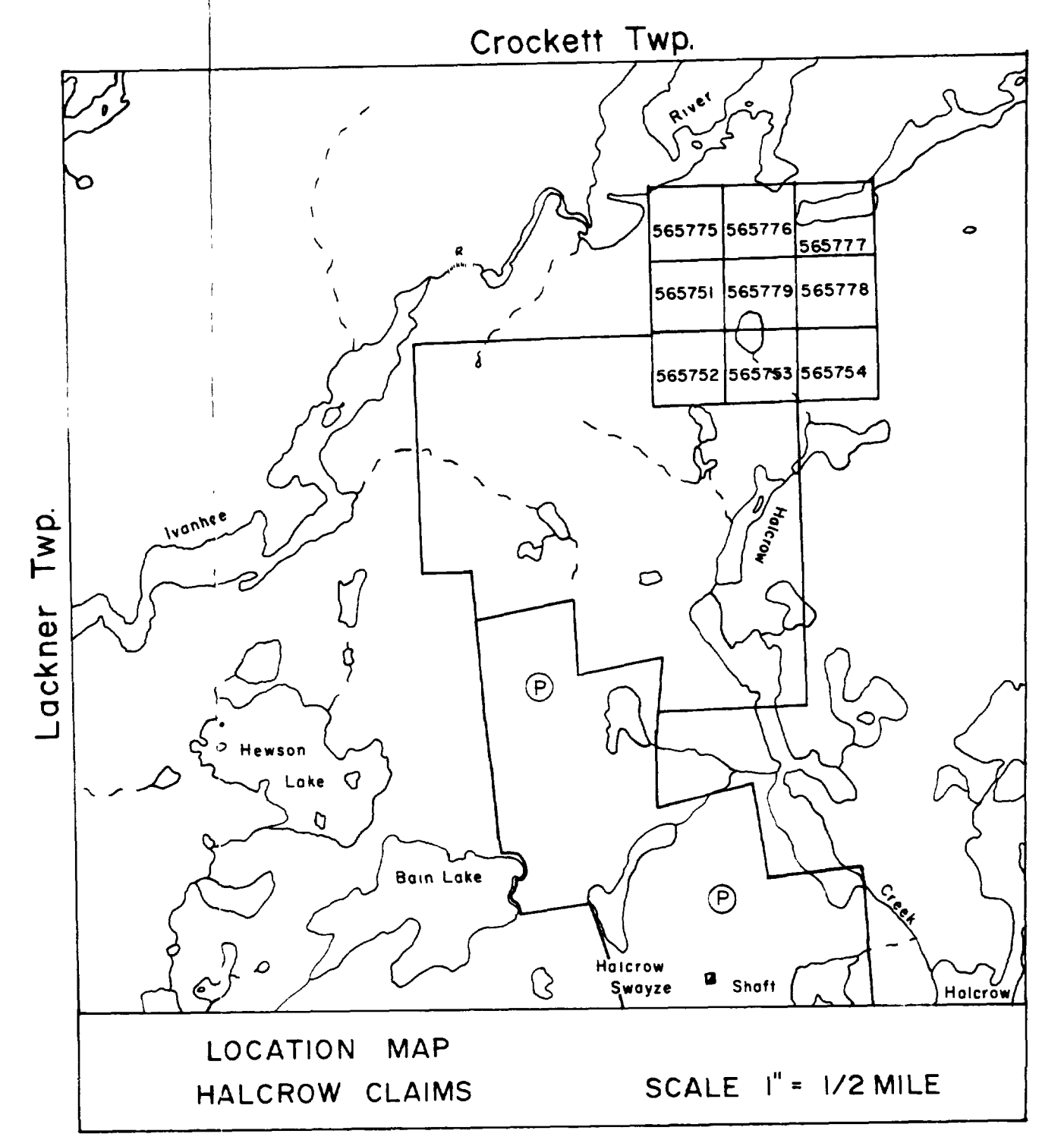
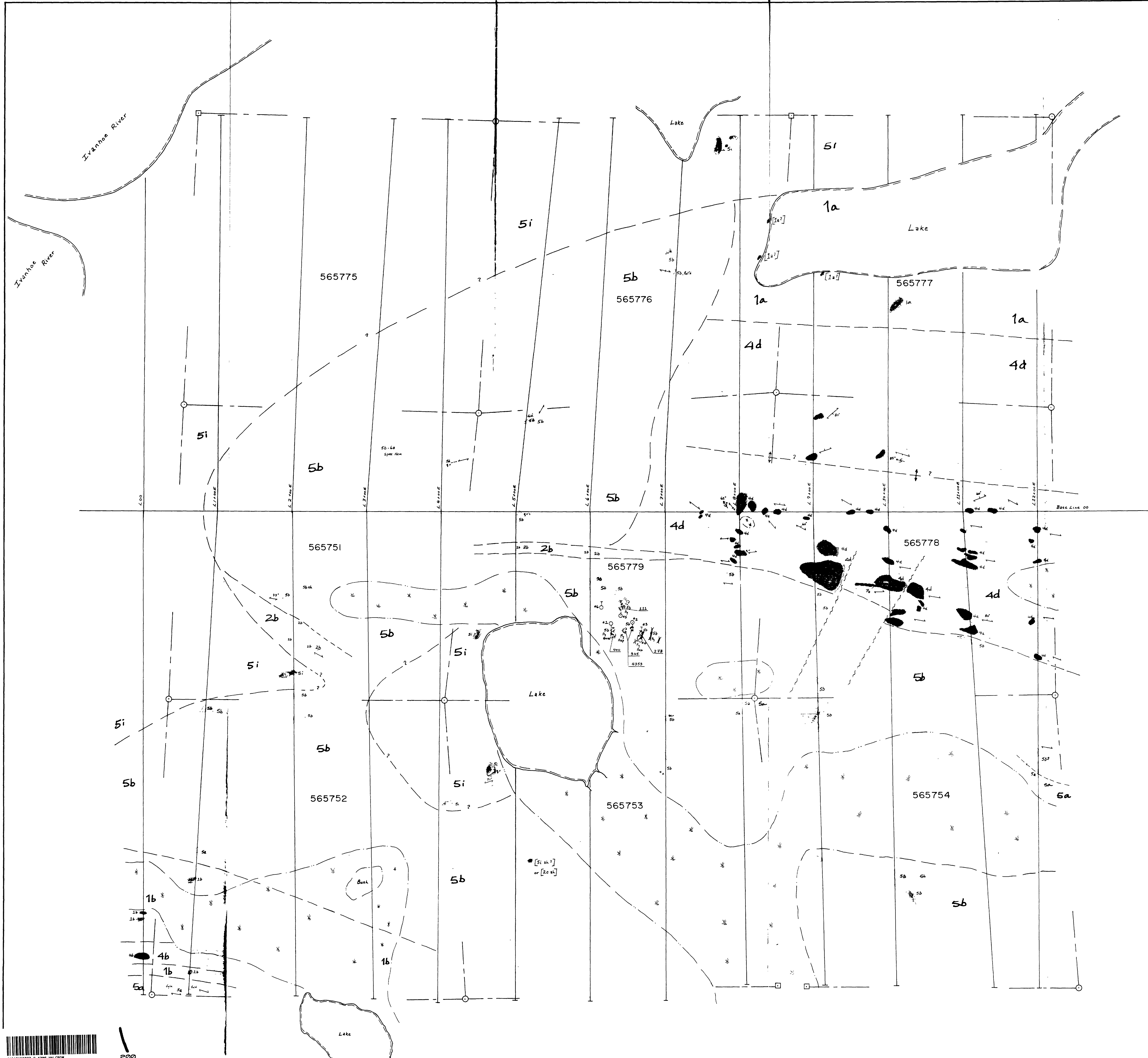
- 1. That I have a personal and intimate knowledge of the facts set forth in the report of work annexed here-to, having performed the work or witnessed same during and/or after its completion.
2. That the annexed report is true.

Dated 13 Nov. 1981

Signature
A.W. Beecham

Senior Geologist, Sulpetro Minerals Ltd.

THE PENALTY FOR MAKING A FALSE STATEMENT IN THIS REPORT AND/OR CERTIFICATE IS \$500. OR SIX MONTHS IMPRISONMENT OR BOTH

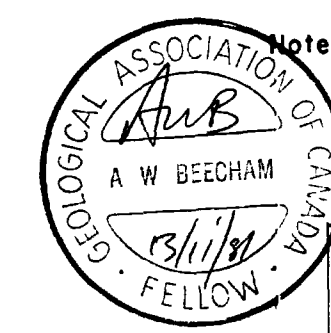


**LEGEND**

- |   |   |
|---|---|
| <b>MAFIC VOLCANICS</b>                                | <b>FELSIC INTRUSIVES</b>                    |
| 1(a) fine grained, massive                            | 5(a) grey feldspar porphyry                 |
| 1(b) chlorite schist - sheared mafic volcanic         | 5(b) pink, red feldspar (± quartz) porphyry |
|   | 5(i) granite, gneissic granite              |
| <b>FELSIC VOLCANICS</b>                               | <b>ALTERED ROCKS</b>                        |
| 2(b) fine tuff  | 6(a) pink - red feldspar (± carbonate) rock |
| 2(c) sheared tuff - sericite quartz - feldspar schist |   |
| <b>METASEDIMENTS</b>                                  | <b>POST TECTONIC INTRUSIVES</b>             |
| 4(b) greywacke  | 7(a) diabase dykes                          |
| 4(d) polymictic conglomerate                          |   |

**SYMBOLS & ABBREVIATIONS**

- |                                      |  |
|--------------------------------------|--|
| x outcrops                           | □ claim post located                     |
| ~ schistosity                        | ○ claim post not located (approx. loc'n) |
| + anticlinal axis                    | ~ specular hematite                      |
| ~ minor fold, showing plunge of axis | P <sub>2</sub> pyrite                    |
| ~ fault                              | As arsenopyrite                          |
| ○ pit, trench                        | grob sample - Au in ppb                  |
| ~ swamp                              | ○ diamond drill hole (approx. loc'n)     |



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TORONTO CANADA

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ONTARIO

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