



42B13NW8067 2.4407 HAWKINS

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REPORT ON
GEOLOGICAL SURVEY
OBA GOLD PROPERTY
PROJECT 3356

COVERING CLAIM NO.

473491-473500 (inclusive)

514501-514510 (inclusive)

514575-514593 (inclusive)

RECEIVED

DEC 15 1981

MINING LANDS SECTION

Hawkins and Walls Townships

OBA AREA,

DISTRICT OF ALGOMA

PORCUPINE MINING DIVISION

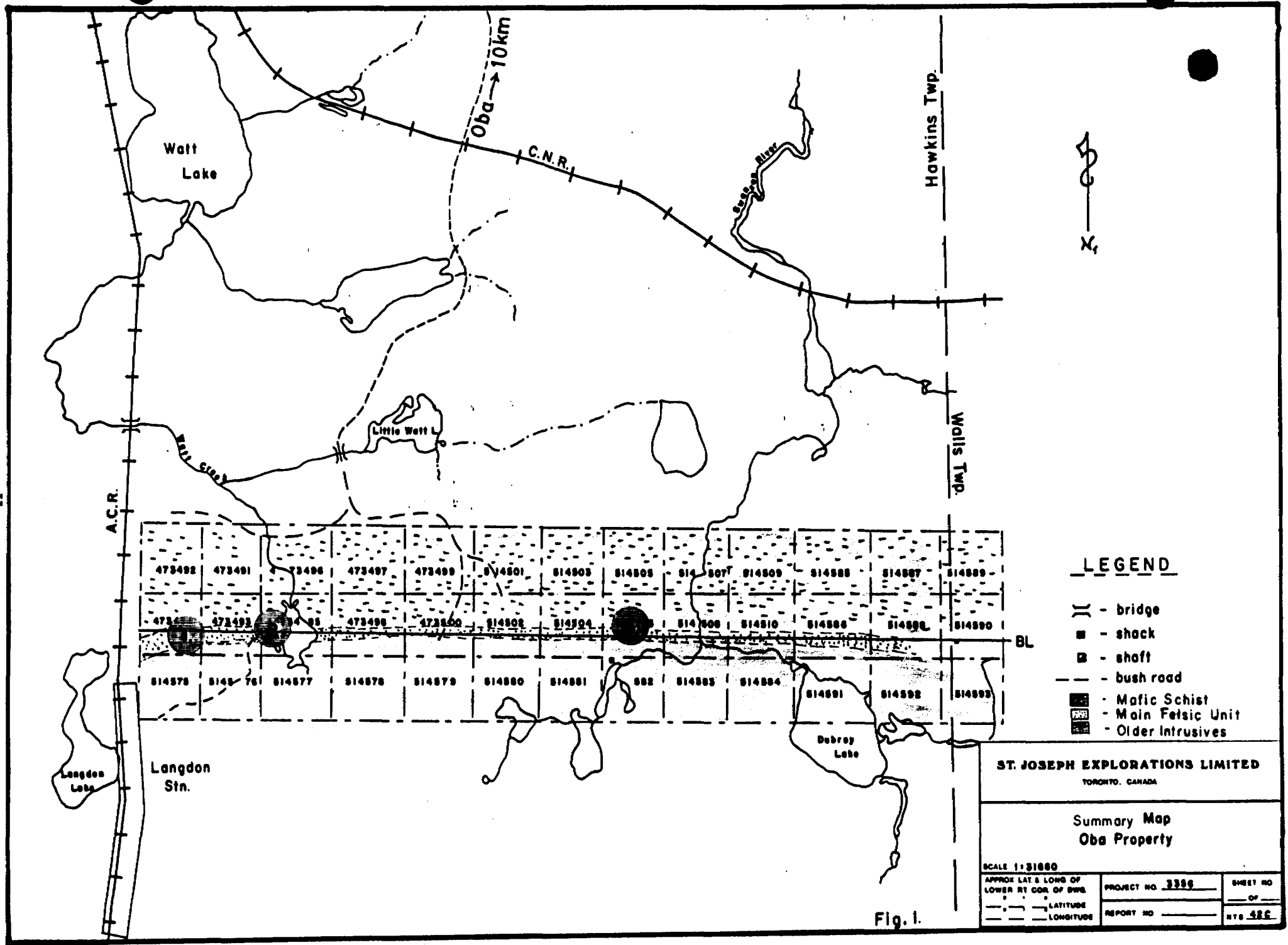
ONTARIO.

N.T.S. 42 C

Cobalt, Ontario
November, 1981

Konny Lai
Sulpetro Minerals Ltd.


SULPETRO MINERALS LIMITED



LEGEND

- () - bridge
- - shack
- - shaft
- - - - bush road
- (stippled) - Mafic Schist
- (dotted) - Main Felsic Unit
- (cross-hatched) - Older Intrusives

ST. JOSEPH EXPLORATIONS LIMITED
TORONTO, CANADA

**Summary Map
Oba Property**

SCALE 1:21600		
APPROX LAT & LONG OF LOWER RT COR OF DWS	PROJECT NO. 3399	SHEET NO. _____ OF _____
— — — — — LATITUDE	REPORT NO. _____	NTS 42E
— — — — — LONGITUDE		

Fig. 1.

Future exploration efforts should concentrate in an area 150 m (\pm 25 m) north and some 50 m (\pm 25 m) south of the main felsic unit contact with the mafic schist unit.

There are some very interesting results reported from the diamond drilling performed by the Shenango Mines Ltd. , they are listed in the following table :

TABLE No. 1 Shenango Mines Significant Drilling Results (ref. #5)

Location	Descriptions		
<u>Shenango Mine Shaft No. 1 Area</u>			
" Northern Section "	Drill-indicated tonnage of 41,600 tons of 0.14oz/ton Width : 5 ft Length : 400ft Depth : 250 ft		
" Southern Section "	<u>Hole No.</u>	<u>Assay (oz/t)</u>	<u>Core Length</u>
	1	0.14	30ft
From	2	0.18	20ft
West to	3	0.22	15ft
East	4	0.17	8ft

The above represent medium-low grade material with good widths that should definitely be investigated and verified .

INTRODUCTION

The main objective of the OBA GOLD PROJECT was to examine in detail the important occurrences on the former Shenango Mines and Taylor's Prospect. Modern prospecting methods such as Soil Geochemical Survey and Geophysics were employed to further investigate the possibility of new gold mineralization in other parts of the property.

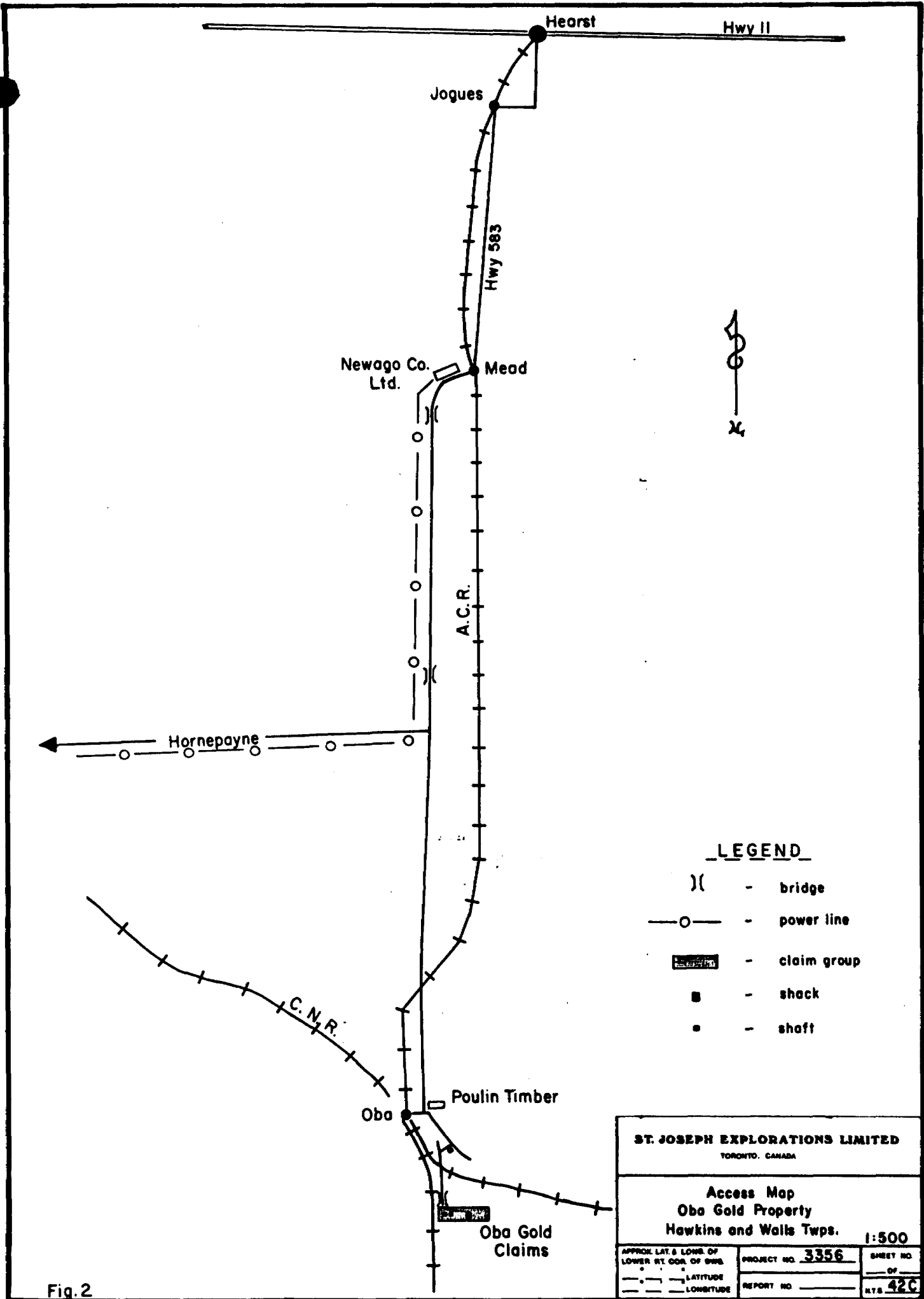
As evident from the abundance of trenching and stripping in the vicinity of the showings, the immediate surrounding areas had been prospected intensely in the late twenties, thirties and early forties.

Work commenced in January, 1979 with line cutting which was followed by a program consisting of V.L.F.-EM and ground magnetics survey in Spring and geological mapping in the Fall of the same year. Further geophysical surveys including H.L.E.M. were conducted on the entire grid in February and March of 1980. In August, 1980 an organic soil geochemical survey and further detailed geological mapping were carried out.

1.) LOCATION AND ACCESS

Oba is located approximately 110 km south of the Town of Hearst, at the junction of the Canadian National and Algoma Central Railways. Access to Oba is provided by 37 km of paved highway No. 583 south from Hearst which is followed by 72 Km of gravel road. (See Fig. No. 2).

The property lies about 11 km south of the Town of



LEGEND

-)(- bridge
- - power line
- ▭ - claim group
- - shack
- - shaft

ST. JOSEPH EXPLORATIONS LIMITED TORONTO, CANADA		
Access Map Oba Gold Property Hawkins and Walls Twp. 1:500		
APPROX. LAT. & LONG. OF LOWER RT. COR. OF SHEET ——— LATITUDE ——— LONGITUDE	PROJECT NO. 3356 REPORT NO. _____	SHEET NO. _____ OF _____ N.T.S. 42C

Fig. 2

Oba accessible via a logging road maintained by the Poulin's Lumber Company. (See Fig. 3).

The main portion of the grid is located within Hawkins Township with a small section of the easternmost three claims being in Walls Township.

2.) PROPERTY DESCRIPTIONS

The Oba Property is owned by Sulpetro Minerals Ltd. (Formerly St. Joseph Explorations Ltd.). Claims were purchased from G.H. Babcock of Massey, Ontario who retains an interest as a net profit royalty.

It consists of thirty-nine (39), approximately forty (40) acre-claims in Hawkins and Walls Townships.

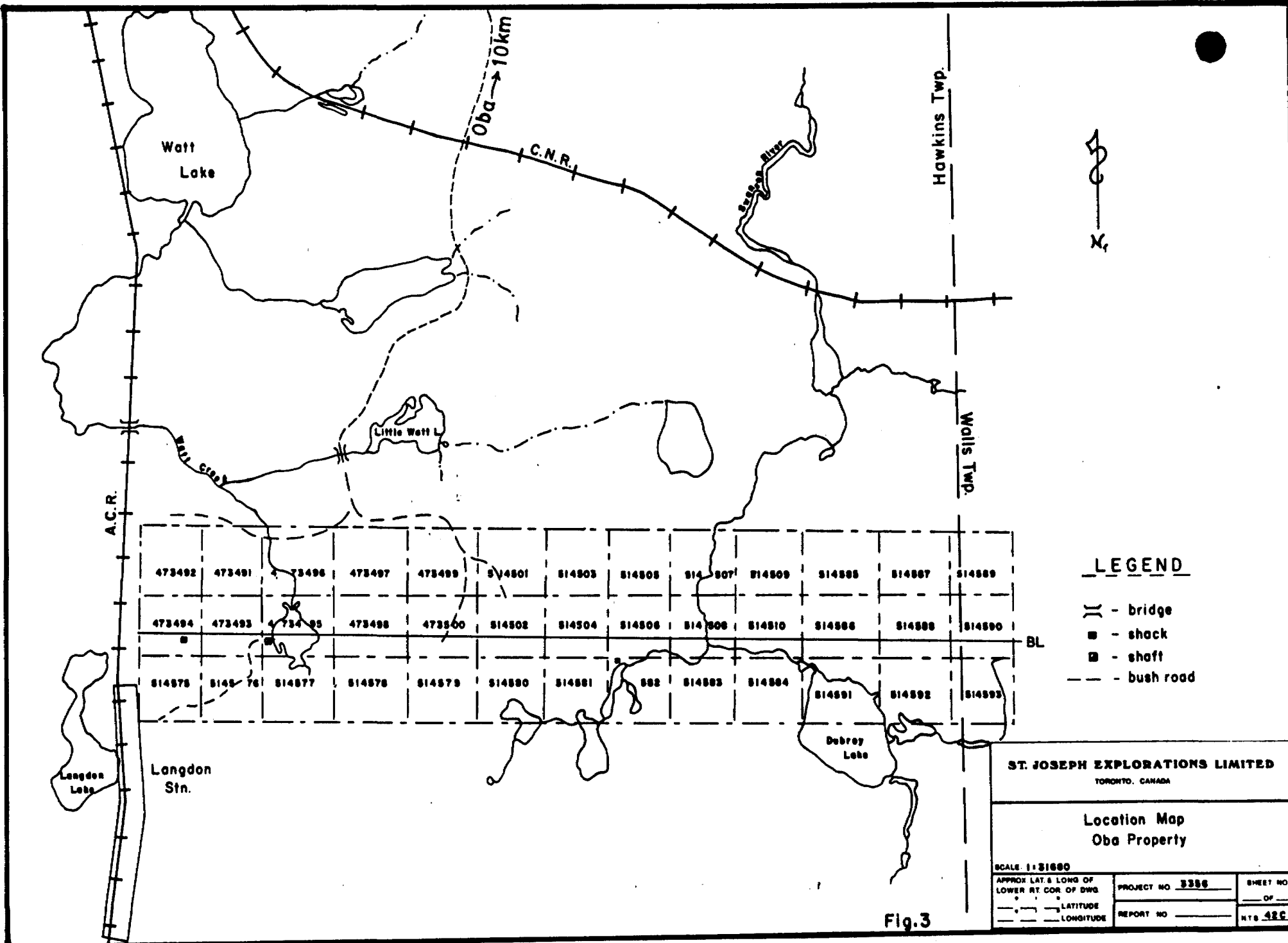
The claims are numbered: (See Fig. 3).

473491 to 413500 (inclusive)

514501 to 514510 (inclusive)

514575 to 514593 (inclusive)

and are staked in a rectangular block of 13 claims (E - W) by 3 claims (N - S) for a total area of about 631 hectares.



LEGEND

- (=) - bridge
- - shack
- - shaft
- - - bush road

ST. JOSEPH EXPLORATIONS LIMITED
TORONTO, CANADA

Location Map
Oba Property

SCALE 1:25000

APPROX. LAT. & LONG. OF LOWER RT. COR. OF DWG.

° ' " LATITUDE
° ' " LONGITUDE

PROJECT NO. **3388**

SHEET NO. _____ OF _____

REPORT NO. _____

NTS **42C**

Fig.3

3.) TOPOGRAPHY AND SURFICIAL DEPOSITS

The highest relief in the property is about 60 m at 2 of the 3 hills located in the centre of the claim group. The southern section of the grid is dominated by low ground and cedar swamps apparently associated with the recessively weathered felsic bodies.

Generally speaking a thin mantle of glacial till and moss cover most of the property. Outcrop exposures are mainly found on one of the three hills on the property.

On the average, the soil profile is not very well developed. As a result the organic A horizon is suitable for geochemical survey only in the high ground area on one of the three hills.

II. PREVIOUS WORK

Previous exploration and development in the 1920's, 30's, and 40's were concentrated on the three (3) main showings located as follows in Table 2:

TABLE NO. 2
LOCATIONS OF MAJOR PROSPECT

CLAIM NO.	LOCATIONS	REMARKS
514506	L 27+65E 0+57N	Taylor's Prospect
473493	L 4+30E; 1+38N	Small open pit + Adit operation
473495	L 3+ 80E; 0+25S	Shaft No. 1 Shenango Mines Ltd.
473484	L 1+20W; 0+25S	Shaft No. 2 Shenango Mines Ltd.

Please see the following Tables for a summary of
 (Table No. 3a and No. 3b.), the work history on this property.
 For more detailed description, please see reference
 No. 1, 4, 5.

TABLE NO. 3 Summary of Work History

3 a) Taylor's Prospect

DATE	WORK PERFORMED	SIGNIFICANT RESULTS	WORK CARRIED OUT BY	REFERENCE
1923	Prospecting	First Gold Discovery	G. Taylor	(1)
1925	Claim SSM 4310 was staked (Presently 514506)		G. Taylor	(1)
1925-1929	Stripping, Trenching, test pit, Rock Sampling	Uncovered 3 Q. Veins where Gold can be panned		(1)
1929-1935	DITTO	Uncovered a total of 7 q.v. 'A' vein assay ran 30.5 g/t over 0.3 m. 'E' Vein return 5.1 g/t from 4' test pit		(2)
1935	Prospecting and extensive diamond drilling program	Assays reportedly ran 23.31 g/t across 6.1 m.	Hollinger Gold Mines Ltd.	(3)
1960's	Diamond drilling: Winkie Drill	N.B. Questionable source. Could be one of Hollinger's old D.D. Holes.	INCO	4 b
1972-1974	Reconnaissance dipole-dipole IP.ground Magnetometer Survey. 907' Diamond Drilling on claim 514503 & 514505 in 3 holes.	Minor finely diss Py Po + Tv. Cp	Magi Gold Mines Ltd.	4a,b,c.
1979	Ground magnetometer VLF-EM. HLEM. Geological Mapping 1=2000 & 1=1000 scale. Rock Sampling	Outline several anomalies.	St. Joseph Explorations Ltd.	6a,b,c.

3b) SHENANGO MINES LTD.

<u>DATE</u>	<u>WORK PERFORMED</u>	<u>SIGNIFICANT RESULTS</u>	<u>WORK CARRIED OUT BY</u>	<u>REFERENCE</u>
1935, May	4 Claims in Hawkins Twp. were staked: Surface Sampling + 25 ft. shaft was sunk.	Vein # 1 at surface returned 11.3 g/t over 0.91 m. 27.8 g/t over 2.44 m. at bottom of shaft.	Shenango Mining Co. Ltd. (incorporated in March 1935)	1, 5
1936, April	50 tons amalgamation on mill was completed. Small scale opencut mining began.	1572 tons ore was treated		
1937,	90 ft. adit from the bottom of open-cut, + 40 ft. cross-cut. Shaft No. 1 was sunk to 52 ft. 2,500 ft..surface diamond drilling.	Total of 828 tons ore milled in 1937		
1938, October	1,500 ft. trenching . 1,400 ft. surface diamond drilling. Staked an additional 5 claims to the west.	Northern Section-drill indicated: Tonnage: 41,600 tons of 0.14 oz/t. Width of 5 ft. calculated to depth 250 ft. with a strike length of 400 ft.		
1939 (Approx.)	Shaft No. 2. A 2-compartment Shaft was sunk to 135 ft. with 6 ft. of cross-cut and 20 ft. of drifting.	Southern Section - 2 parallel structures		

<u>HOLE</u>	<u>ASSAY Oz/T</u>	<u>Core Length (Ft.)</u>
1	0.14	30 ft.
2	0.18	20 ft.
3	0.22	15 ft.
4	0.17	8 ft.

SHENANGO MINES LTD.
OFFICIAL PRODUCTION FIGURE

YEAR	TONS MILLED	Au (Oz)	Ag (oz)
1936	1572	9.755	30
1937	828	20.547	2
1945	Clean-up Operations	35.877	5
TOTAL		66.179	37

III. REGIONAL GEOLOGY

The Oba property is located in the Kabinakagami Lake Belt which is a narrow east-west trending of the so-called "Schist Complex" by J.E. Maynard in 1929. The "Schist Complex" is mainly composed of complexly folded series of Archean sediments and volcanic flows (see Fig. 4).

Older batholithic intrusives are found to the north and south of the "Schist Complex". They consisted of 'well banded, granulated, quartz, biotite and hornblende gneiss'. (Maynard, 1929).

Numerous diabase dikes cut across all the early formations. They measure up to 200 feet.

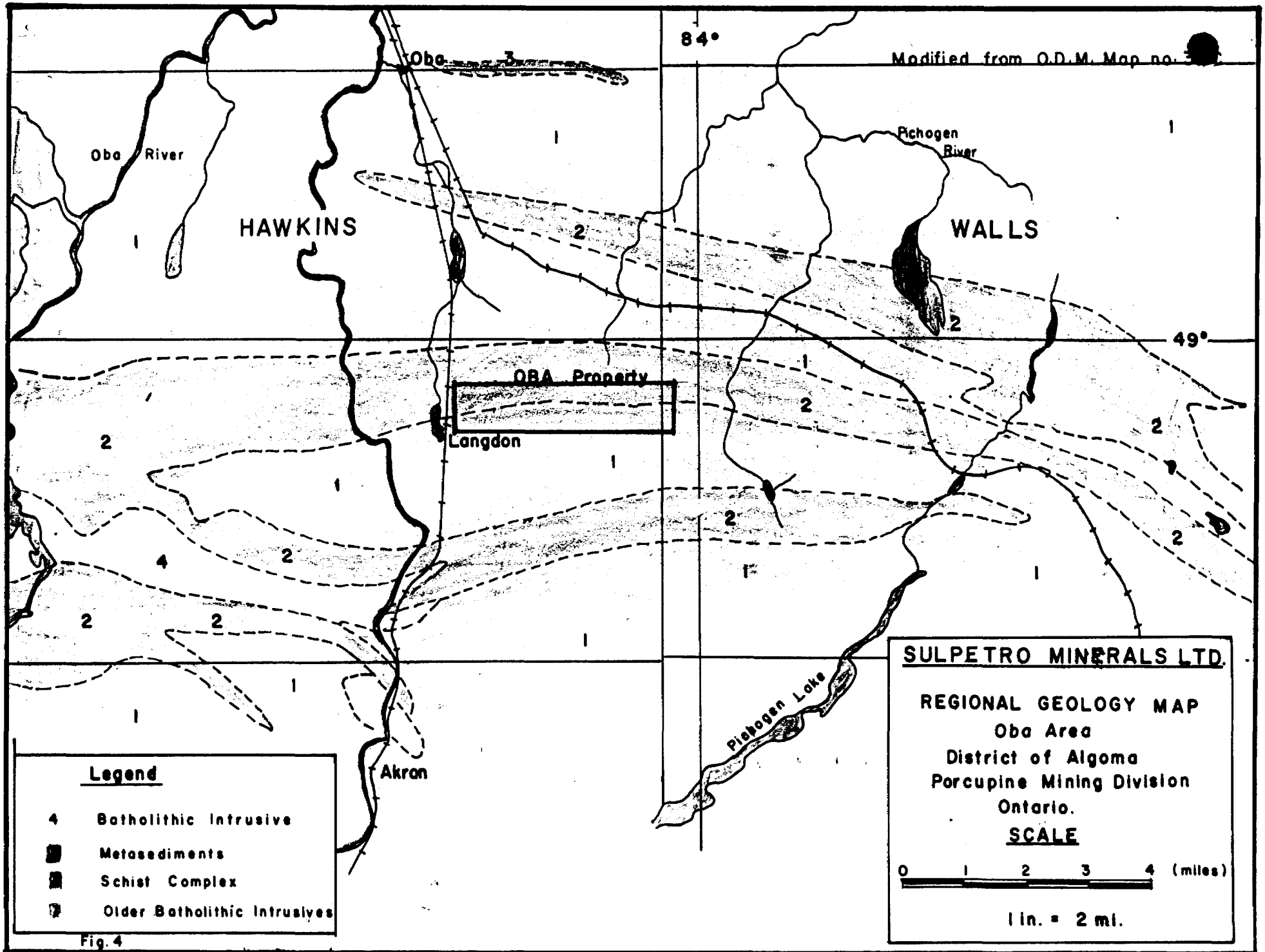


Fig. 4

IV. DETAILED EXPLORATION ACTIVITIES

1) SUMMARY

Summary of exploration activities performed by Sulpetro Minerals Ltd. (formerly St. Joseph Explorations Ltd.) are outlined in the Table below:

TABLE NO. 4

Summary of Sulpetro Minerals Ltd. exploration activities at Oba, Property.

DATE		ACTIVITIES	REMARKS
From	To		
5 Jan.1979	31 Jan.1979	Line Cutting	90.4 line-km picket line covered the Eastern 36 claims.
24 Feb.1979 10 May,1979	17 Mar.1979 15 May,1979	Geophysical Surveys VLF-EM Survey ground Magnetometer Survey H L E M Survey	Surveys covered 36 claims
29 Sept.1979	13 Oct.1979	Geological Mapping Rock Sampling	1=2000 Scale covered 27 claims 1=1000 Scale Mapping at Taylor's Showing.
Jan.1980	Jan.1980	Line-cutting	5.2 Km on the 3 western most claims.
29 Feb.1980	8 Mar.1980	Geophysical Surveys VLF-EM Survey Ground Magnetometer Survey HLEM Survey	Surveys covered the 3 western claims
9 Aug.1980	24 Aug.1980	Geological Mapping Geological Survey Organic 'A' soil Sampling. Rock Sampling	1=2000 Scale covered 12 claims 1=500 Scale mapping at the Shenango Mine Shaft No. 2
22 Oct.1980	26 Oct.1980	Geophysical Survey. I.P. Survey	13 three-level dipole-dipole setup to outline sulfide mineralization West of Shenango Mine Shaft No. 1 and 3 standard 5-level set up to test the VLF anomalies south of Taylor showing

REFERENCE: V L F AND Magnetometer Surveys Oba Area Property,
1979 J.L. Wright.

Oba Geology, Interim report 1979 R.V. Zalniereunas

H L E M, V L F - E M and Magnetometer Surveys

Oba Area Property	1980	K. Robertson
Oba I.P. Survey	1980	J.L. Wright

2.) DETAILED GEOLOGY AND MINERAL OCCURRENCES

i.) DESCRIPTION OF WORK

Mapping in 1 to 2,000 scale was carried out using the 100 meter spaced grid lines with pickets at every 25 meters as control.

The entire grid of 39 claims was mapped in two consecutive field seasons in 1979, and 1980. In 1979, A.W. Beecham, G.R. Oppenheimer, R.V. Zalnierius mapped a block of 27 claims covering Shenango Mine Shaft No. 1 and the Taylor's showing. Taylor's showing was also mapped in 1=1,000 scale.

In 1980, K. Lai mapped the remaining 12 claims. The Shenango Mine Shaft No. 2 was mapped in 1=500 scale.

Channel samples and grab samples were also collected for assaying.

ii) ROCK DESCRIPTIONS

Please refer to reference No. 1, 4, 5 for more detailed descriptions.

1). Mafic Metavolcanics and Sediments

The belt of mafic metavolcanics and sediments is estimated at about 1.5 Km in width in the Oba property. It is difficult to distinguish these two rock types as they have been highly altered and metamorphosed to amphibolites. They exhibit a very well developed foliation or schistosity.

The predominant rock type in this belt of 'Schist Complex' is a dark green to black coloured, medium grained highly foliated chloritized hornblende-biotite mafic metavolcanics.

Interstratified bands of foliated coarse grained gabbro (possibly coarse grained portion of mafic flows) occur very commonly.

The most striking characteristic of this belt is the presence of numerous felsic bands. They have been mapped as aplite dykes, sericite schists and quartzite in the past. While some do have cross-cutting structures and a sugary texture that may be classified as aplite, a lot are thought to be thin (less than 2m) interbedded rhyolite tuff similar in origin to the thicker rhyolite band near the baseline.

Some reworking of these sediments may have taken place, as some sedimentary structures observed in the field suggest.

Mapping in 1920's had noted the occasional occurrence of small fragments that resembled volcanic tuff in the dark-coloured mica schists.

2). Felsic Volcanogenic Sediments

Apart from those mentioned earlier, there exists at least two thicker sequences of rhyolite tuff. They are light grey to buff coloured, medium grained rocks with a subhedral granular textures. They consist mainly of quartz, feldspar, biotite, and sericite units. They are highly stratiform units, and delicate laminations were observed.

They contain up to 2% disseminated sulfide. Those found near Shenango Shaft No. 2 have a gneissic texture and minor disseminated pyrite, chalcopyrite, hematite associated with the main auriferous horizon. Thin interbedded chloritic argillite and other arenaceous sediments are also found in this unit.

It is important to note that sulfide and the associated auriferous mineralization is mainly concentrated close to the northern edge of the main felsic unit.

The carbonate content increases gradually from the north toward this horizon and seems to decrease very rapidly away from the horizon toward the south. The thin rhyolite tuff band with the adjacent mafic unit become more abundantly southward toward the top of this main felsic unit near the baseline. And it is interesting to note that the sulfide and its associated gold mineralization found in these units are also close to the northern edge of the main felsic unit. The sedimentary structures observed further to the north (scour marks) and a turbidite structure observed in the main felsic units suggest the top facing direction is to the north. These observations suggest that sulfide and the associated gold mineralization are possibly related to exhalative horizons. The thinner rhyolite tuff bands to the north represent a less frequent episodic or subsiding felsic volcanic event.

3). Granites

Granitic intrusives are found in the southern half of the property. Those outcrops actually observed are mainly composed of medium to coarse grained quartz monzonite.

Since they are more susceptible to weathering, as a result they probably underlie much of the low ground south of 2+00 S.

4). Mafic Intrusives

Diabase dykes are the youngest rock observed as they cross-cut all formations. They are dark grey-brown, medium to coarse grained rocks with a characteristic orange tinged weathering rind. They contain euhedral to subhedral, medium grained crystals of magnetite and minor interstitial pyrite. Ref. 6 (b) (Zalnieriunas 1979).

iii) STRUCTURAL GEOLOGY

The general average strike of the formations is about east-west 086° , with an average steep dip to the north at 86° N.

The Schistosity is usually parallel to the foundational strikes. Numerous, minor east-west striking faults and shear zones probably exist in the northern mafic belt. This is reflected by the varying degree of foliation and schistosity and alteration. Magi Gold Mines in 1973 also outlined a northeast trending shear zone while doing I.P. survey. This shear zone is found in a low-lying area and crosses the base line between lines 30E and 34E. Other low-lying areas in the northern part of the property may reflect similar types of shear zones'. (Zalnieriunas, 1979). Reference 6(b).

iv) ECONOMIC GEOLOGY

There are three (3) main areas of economic interest on this property. They are first, Shenango Mine Shaft No.1, and small opencut and adit operations, second, Shenango Shaft No. 2 area, and third, Taylor's showing. See Table No. 5. Table of significant assays and Table No. 3 for previous findings.

a) Shenango Mine Shaft No.1 area

According to old records the 'Northern Section' (referring to the opencut operation) has a drill-indicated ore tonnage of 41,600 tons of 0.14 Oz./T. There were doubts as to whether this grade of material was ever outlined. However a grab sample collected from the muck pile near the opencut, in 1980, returned a value of 0.155 Oz./T.

The top 30m to 50m of the main felsic unit seemed to be the most important area as most of the assay values from this horizon returned anomalous values. They can reach as high as 52.11g/t (1.52 Oz./T) near the Shenango Shaft No.2.

Old records show that good potential still exists for delineating large tonnage low grade ore in the 'southern section' (Shenango Shaft No. 1 area).

In 1937 and 1938, four (4) drill holes cut this horizon and returned fairly consistent medium-low grade material with good widths.

	<u>HOLE</u>	<u>ASSAY (Oz./T)</u>	<u>Core length (Ft.)</u>
From	1	0.14	30 ft.
West to	2	0.18	20 ft.
East	3	0.22	15 ft.
	4	0.17	8 ft.

(N.B. Locations of diamond drill holes are not certain).

b) Shaft No. 2 Area (See Map No. 4)

Samples collected here returned promising assay results from two separate muck piles.

<u>LOCATIONS</u>	<u>ASSAY (g/tonne)</u>
Muck pile 15m S.E. Shaft No.2	7.54
Ditto	6.69
Muck pile between Shaft. No.2 and the Northern edge of the opencut.	52.11

Sulfides and associated gold values occur in a distinctive gneissic horizon which has been traced for a 160 m strike length in claim 473494. The sulfide mineralization consists of up to 2% disseminated Py and minor Cp. Minor hematite is also found at the edge of the auriferous zone within these 'exhalative' horizons. Each individual zone (including those found elsewhere on the property) appears to have a strike length of 150 m to 250m.

c) Taylor's Showings

(See Map No.3)

"On the Taylor Prospect, the most interesting values found to date occur within the central tuff band (main felsic tuff unit), in a narrow zone located at about 0+54N between lines 27E and 28E. This zone is associated with a narrow (2 cm) gossan and quartz vein (1-10 cm wide) which is mineralized with pyrite, pyrrhotite \pm chalcopyrite \pm sphalerite \pm galena". (Reference 6 (b)

Zalnieriunas (1979)

Three veins 'A', 'E', and 'F' are the more promising ones among the seven(7) major veins that occur at the Taylor Prospect. Vein 'F' has been sampled carefully.

Two assay results of 20.91 g/t (0.61 oz./t) and 19.89 g/t (0.58 oz./t) were obtained from the q.v. 'F' Vein (up to 10 cm) at the Taylor showing (L27 + 65E 0+56.5N).

TABLE NO.5 Table of Significant Assays

SAMPLE NUMBER	CO-ORDINATES	GRADE (gm/tonne)	SAMPLE LENGTH (m)	REMARKS
a) SHAFT NO.1 AREA				
4688	3+72E 0+65N	1.20	2.5	Silicified f.g. rhyolite 2-4%Py
6722	L4+34E 1+38N	5.31	grab	Q.V.in thin Rhyolite tuff band, open cut muck pile
6791	L3+88E 0+62.5N	1.20	1.0	Q.V. milky white, top of main felsic unit
6792	L3+72E 0+65.5N	1.89	1.0	Q.V. in well mineralized felsic tuff
b) SHAFT NO.2 AREA				
6729	L2+40W 0+40S	3.09	grab	Mineralized gneissac horizon
6782	Shaft No.2	52.11	grab	Muck pile just East of Shaft No.2
6783	in opencut	3.26	0.5	Q.V. in mineralized gneissac horizon
8072	G. Babcock's Sample	7.54	grab	Muck pile South of opencut
9832	Shaft No.2	6.69	grab	Muck pile South of opencut
c) TAYLOR'S PROSPECT				
4789	L23+89E;123N	2.91	grab	10cm Q.V. in tuff and biot.sch
4789	L23+84E;123N	1.37	grab	10cm Q.V. in tuff and biot.Sch
4840	L27+44E;0+56.8N	1.03	1.5	Q.F.biot.sch.fg.tuff,Py,Cp.
4841	L27+44E;0+56N	1.71	0.2	Gossan,Q.V.min.wallrx.Py,Co.
4846	L27+74E;0+53N	1.03	2.0	Q.F.biot.sch.felsic tuff,Py,Cp Hm
4850	L27+65E;0+56N	5.83	1.4	Min.Q.V.in felsic tuff.Py,Cp, Sph.
4852	L27+92E;0+60N	2.58	3.0	Py,Cp in felsic tuff.
6720	L27+65E;0+56N	19.89	grab	10 cm. Q.V. same as # 4850
6751	L27+65E;0+57N	20.91	grab	Check sample,same as #4850.
6752	L27+92E;0+67.3N	1.54	1.5	Q. stringers,Py
6757	L27+92E;0+61.3N	1.10	1.4	2cm.Q.V., minor Sulfide
5770	L28+50E;0+57.3N	1.20	1.5	4 cm. Q.V.

V. DISCUSSION AND RECOMMENDATIONS

Realistically speaking, Oba property has a fairly good potential to develop large tonnage, medium-low grade orebodies.

Through detailed geological mapping and geophysical surveys, targets for further exploration are defined. Geophysical surveys aid tremendously in the mapping process.

Future exploration efforts should concentrate in an area 150 (\pm 25) m north and some 50 m (\pm 25 m) south of the main felsic unit contact with the mafic schist unit.

Shenango Mine Shaft No. 1 Area Requires:

- 1). More research to locate old drill logs. (more than 3,800 ft. diamond drilling).
- 2). Locations of all the old casings.
- 3). Interpret the locations of the so-called 'Northern Section' and 'Southern Section'.
- 4). The drill indicated tonnage of the 'North Section' suggests the major bulk of the 41,600 tons of low grade (0.14 oz./t) ore is still in place and should be tested by diamond drilling to locate the possible extension to the east and west and below 250 ft. depth.
- 5). The width of the 'Southern Section' mineralized horizon (See Table 3 (b) is very attractive. The zone is reported to average 0.17 oz/t over an average width of 18 ft. along a strike length of 400 ft. (Ref.5) (not true width)

It should be investigated by two short holes in order to confirm this report.

Shenango Mine Shaft No. 2 Area

- 1). Further power stripping and trenching, followed by 1:500 Scale detailed mapping and channel sampling is strongly recommended.
- 2). This should be followed by a small scale diamond drilling program of three (3) 150 m holes drill at a spacing interval of 30m aiming at cutting the entire gneissic 'exhalative' mineralized horizon at 114 m (375 ft.) below surface. The program should also include provision for at least one extra hole pending the results of stripping and sampling. In spotting drill holes, consideration should be given to the results of the detailed IP survey which has outlined a few very interesting anomalies in an area between Shaft No. 1 and No. 2

Taylor's Prospect

- 1). Try to locate Hollinger's diamond drill log record
- 2). Examine 'A' Vein and 'E' Vein more closely, and map the area in detail if necessary.

Other Potential Targets

Potential Target No.1

This is located between L9E and L15E, 0+50 S to 150 N.

This area (P.T. No. 1) has not been intensely prospected as the Shenango Mines and the Taylor's Prospect.

A float of felsic tuff with quartz veins collected at near the baseline at 10 + 55 E, assayed 1.54 g/t. This is certainly anomalous.

A geochemical anomaly also exists at L 11 E/50 N.

This area has a favorable geological setting similar to other surrounding showings. This includes the same horizons as the Shenango Mine Shaft No. 2, Shaft No. 1, and opencut to the west and Taylor's prospect and Neswabin prospect to the east.

This area can be further explored by power stripping and channel sampling.

The area is easily accessible by tractor as it has been opened by recent logging operations.

Potential Target No. 2

There is a H.L.E.M anomaly located near North Tie Line at L20 E to L22 E. which should be further investigated by an I.P. Survey or diamond drilling. However, this anomaly is reported to have been investigated by previous drilling, (Ref. 6 (c).) carried out by Magi Gold Mine Ltd. ,But there is a definite uncertainty as to the exact drilling locations.

Respectfully submitted,



Konny Lai
Geologist.

SULPETRO MINERALS LIMITED

VI. REFERENCES

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1938 Vol. 47, Part 1, Pg. 10, 205
1939 Vol. 48, Part 1, Pg. 197
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(2). Hawkins Mining Syndicate Ltd.

- a) Company Report on Taylor's Prospect. 1935, Askwith, W
- b) Company Prospectus 1936

(3). Ottawa Journal (1935) 4th. March

(4) Mag: Gold Mines Ltd.,

- a) Consulting Engineer's Report - 1972 Walker, W.
- b) Report on I.P. Survey - 1973, Cavén, R.J.
- c) Report on Magnetometer Survey, 1974 Jagodits, F.L.

(5) Northern Miner Files May 1935, to December 1950.

(6). Sulpetro Minerals Ltd.

- a) VLF and Magnetometer Survey Report, 1979, Wright, J.
- b) Interim Oba Geology Report, 1979, Zalnieriunas, R.V.
- c) HLEM, VLF, and Magnetometer Survey Report, 1980,
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- d) Oba I P. Survey Report 1980 Wright, J.L.

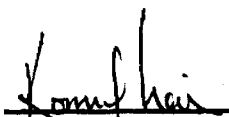
VII. APPENDICES

A.) DECLARATION

This is to state that I , Konny Lai, hold a Bachelor of Science Degree , Honours in Geological Sciences (1980) from McGill University in Montreal,, Quebec . And that I have no personal or financial interest in the property covered by this report.

I am currently employ by Sulpetro Minerals Ltd.

I personally carried out the second half of the work (1980) outlined in this report.


Konny Lai 20, Nov., 1981
Konny Lai
Geologist,
Sulpetro Minerals Ltd.
Cobalt, Ont.



Ministry

GEOPHYSICAL - C
TECHNICAL



42B13NW8067 2.4407 HAWKINS

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.

900

RECEIVED
DEC 15 1981

MINING LANDS SECTION

Type of Survey(s) Geological
Township or Area Hawkins and Walls Townships
Claim Holder(s) Sulpetro Minerals Ltd.
Survey Company Sulpetro Minerals Ltd.
Author of Report Konny Lai
Address of Author P.O. Box 1047, haileybury, Ontario
Covering Dates of Survey Sept., 1979 to Nov. 1981.
(linecutting to office)
Total Miles of Line Cut _____

MINING CLAIMS TRAVERSED
List numerically

.....Please see attached list.....
(prefix) (number)

Table with 2 columns: (prefix), (number). Contains a list of mining claims to be traversed.

If space insufficient, attach list

SPECIAL PROVISIONS CREDITS REQUESTED table with columns: Geophysical, DAYS per claim. Includes entries for Electromagnetic, Magnetometer, Radiometric, Other, Geological (20), and Geochemical.

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)

DATE: 20, Nov., 1981 SIGNATURE: [Signature]
Author of Report or Agent

Res. Geol. _____ Qualifications This file

Previous Surveys

Table with 4 columns: File No., Type, Date, Claim Holder. Contains a handwritten 'H.D.' in the Claim Holder column.

TOTAL CLAIMS 39

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations _____ Number of Readings _____

Station interval _____ Line spacing _____

Profile scale _____

Contour interval _____

MAGNETIC

Instrument _____

Accuracy - Scale constant _____

Diurnal correction method _____

Base Station check-in interval (hours) _____

Base Station location and value _____

ELECTROMAGNETIC

Instrument _____

Coil configuration _____

Coil separation _____

Accuracy _____

Method: Fixed transmitter Shoot back In line Parallel line

Frequency _____
(specify V.L.F. station)

Parameters measured _____

GRAVITY

Instrument _____

Scale constant _____

Corrections made _____

Base station value and location _____

Elevation accuracy _____

INDUCED POLARIZATION
RESISTIVITY

Instrument _____

Method Time Domain Frequency Domain

Parameters - On time _____ Frequency _____

- Off time _____ Range _____

- Delay time _____

- Integration time _____

Power _____

Electrode array _____

Electrode spacing _____

Type of electrode _____

MINING CLAIMS TRAVERSED

Claims No.

Claims No.

P-473491

P-514575

P-473492

P-514576

P-473493

P-514577

P-473494

P-514578

P-473495

P-514579

P-473496

P-514580

P-473497

P-514581

P-473498

P-514582

P-473499

P-514583

P-473500

P-514584

P-514501

P-514585

P-514502

P-514586

P-514503

P-514587

P-514504

P-514588

P-514505

P-514589

P-514506

P-514590

P-514507

P-514591

P-514508

P-514592

P-514509

P-514593

P-514510

TOTAL OF 39 CLAIMS

SULPETRO MINERALS LTD.

PROJECT No. 3356

20th, November, 1981.


Konny Lai

Page 29.

HAWKINS

DISTRICT OF
ALGOMA

PORCUPINE
MINING DIVISION

SCALE: 1-INCH = 40 CHAINS

LEGEND

- PATENTED LAND Ⓟ
- CROWN LAND SALE C.S.
- LEASES Ⓛ
- LOCATED LAND Loc.
- LICENSE OF OCCUPATION L.O.
- MINING RIGHTS ONLY M.R.O.
- SURFACE RIGHTS ONLY S.R.O.
- ROADS —
- IMPROVED ROADS —
- KING'S HIGHWAYS —
- RAILWAYS —
- POWER LINES —
- MARSH OR MUSKEG —
- MINES Ⓜ
- CANCELLED C.

NOTES

400' surface rights reservation around all lakes and rivers.

Areas withdrawn from staking under Section 43 of the Mining Act. (S.P.O. - 1970)

File	Date	Disposition
Ⓟ 164586 vol. 2	4/10/72	S.R.O.

GRAVEL

DATE OF ISSUE
SEP 10 1982
Ministry of Natural Resources
TORONTO

24407

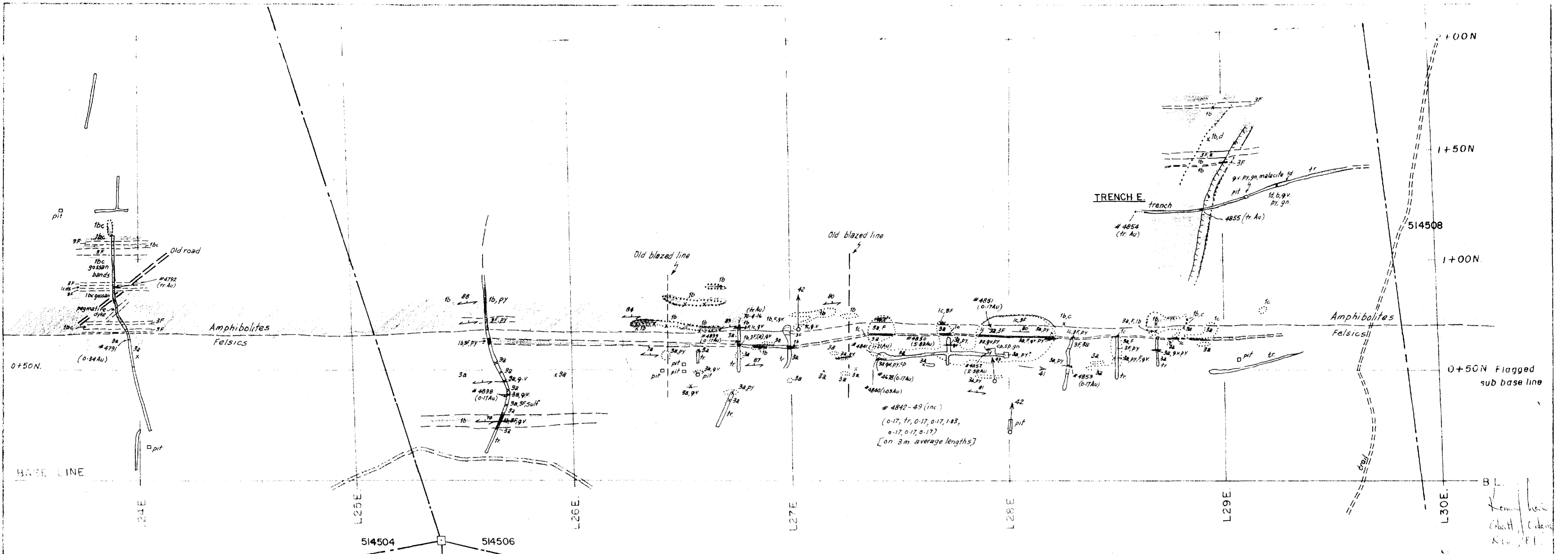
PLAN NO. **M-1271**

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

DERRY TWP. M-1243

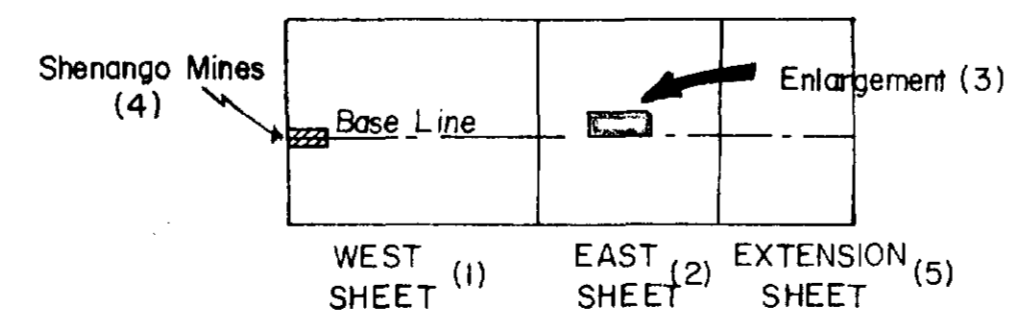
WALLS TWP. M-1366





Kempbell
Cobbitt, C. E.
New, E.T.

INDEX

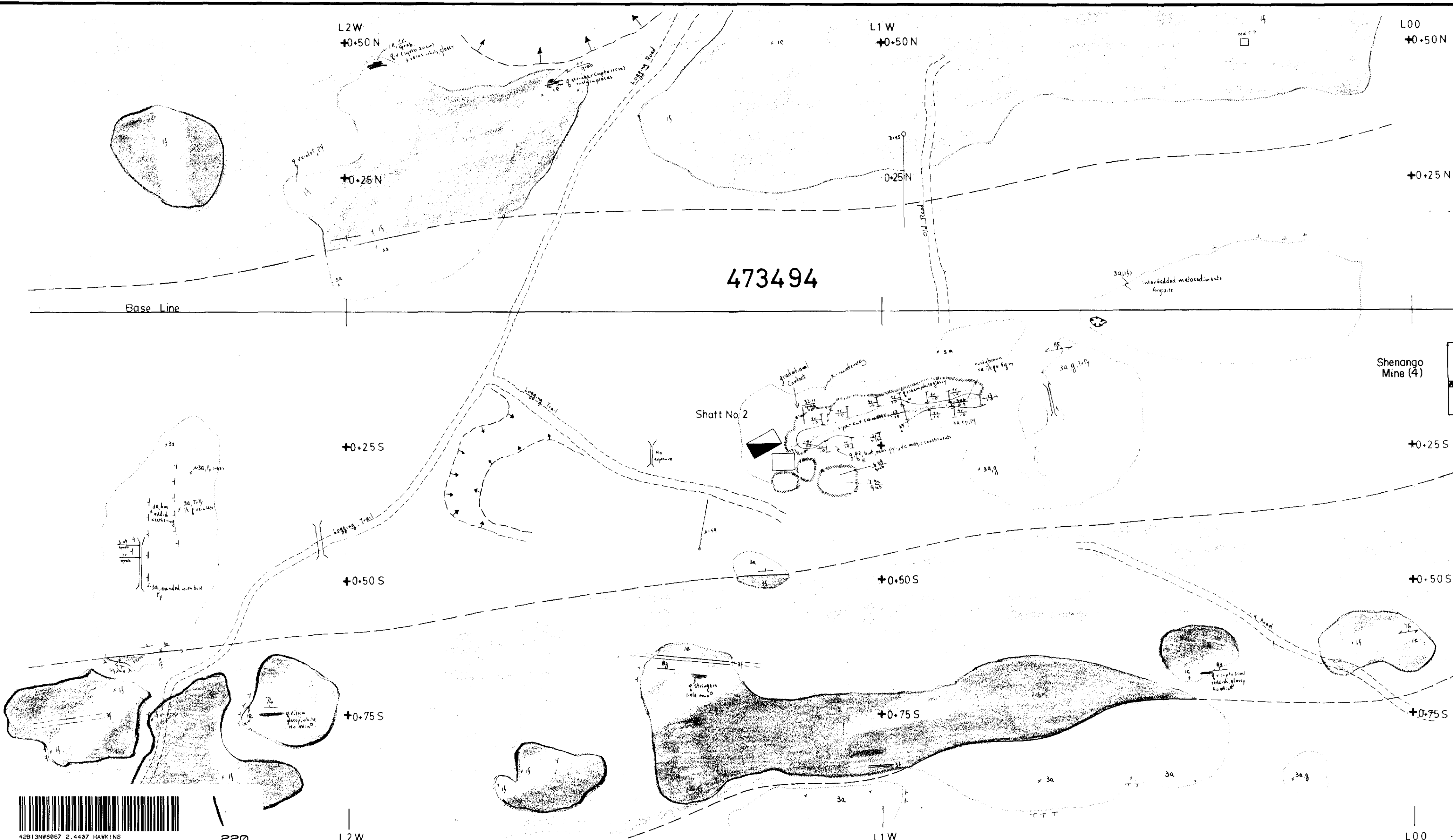


Geology by R.V. Zalnierunas
Date Oct. 1979

FOR LEGEND SEE WEST SHEET

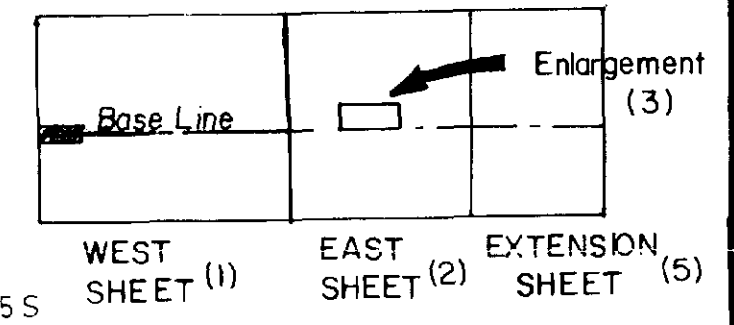
ST. JOSEPH EXPLORATIONS LIMITED		
LONDON, CANADA		
ORA AREA, Northern Ontario (Taylor Prospect)		
GEOLOGY		
SCALE 1:1000	PROJECT NO. 3356	SHEET NO. 3 OF 5
APPROXIMATE LOCATION OF LOWER WELLSHEAD LEVEL	REPORT NO.	NIS 42F/1





473494

INDEX



Shenango Mine (4)

For legend see West Sheet

Kouyehai
Dec '81.
Cobalt, Ont.

Geology by K Lai

Oba Area, Hawkins Twp., Ont.
Shenango Mines, Shaft No 2
1:500 Geology Aug '80
3356
45
42C

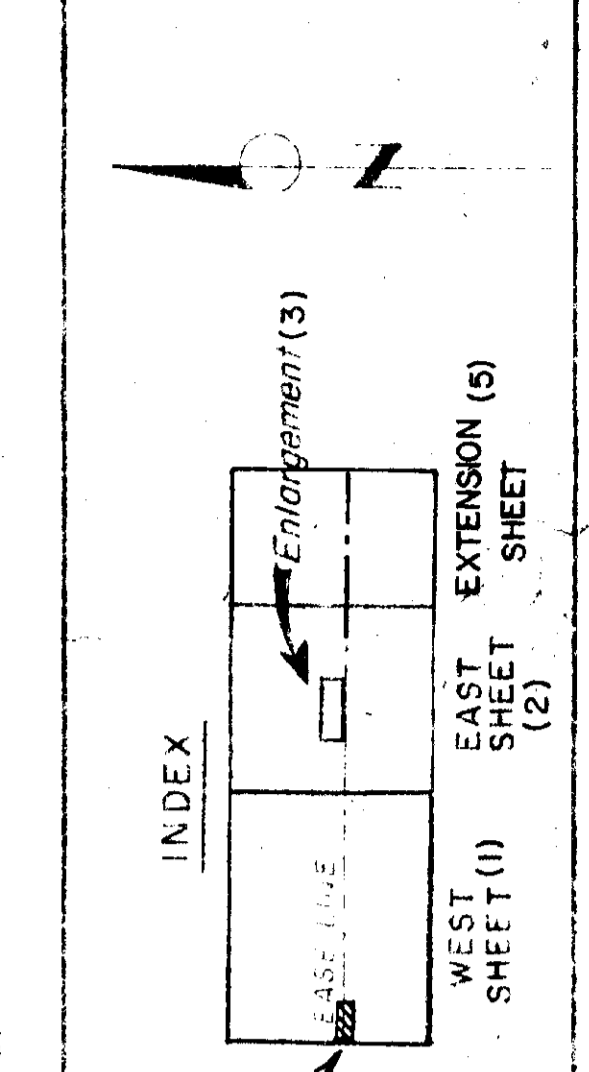


220

L2W

L1W

L00



Surveyed by: R. V. Zolotarev, S. K. Cappelmann, A. W. Brechin
 Date: Sept - Oct 1979
 August 1980 - Surveys - K. L.

py - Pyrite
 po - Pyrochlore
 cp - Chalcopyrite
 gn - Galena
 sp - Sphalerite
 Au - Gold
 Hem - Hematite

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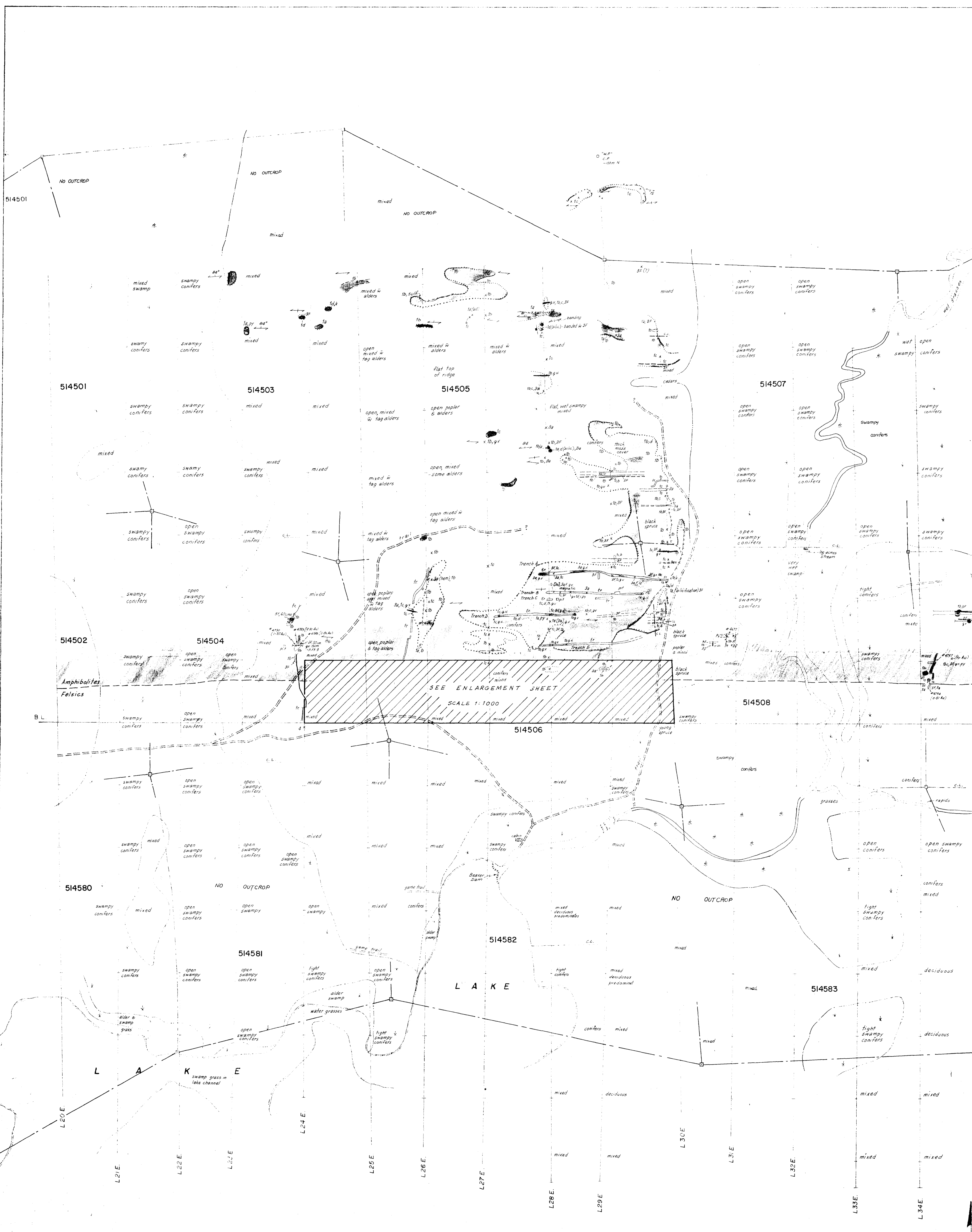
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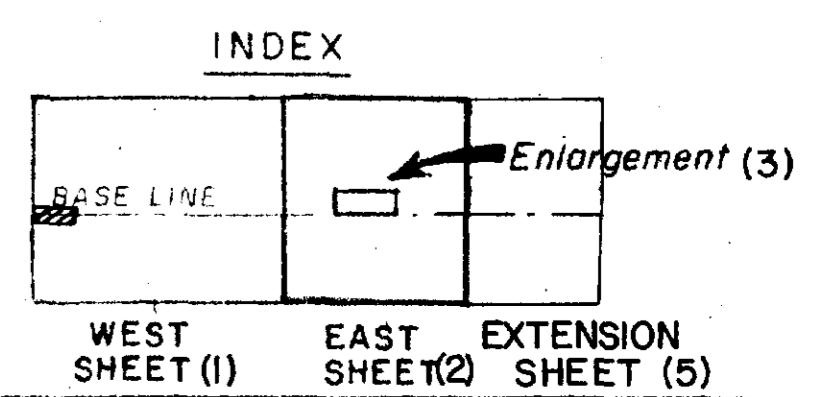
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 cp - Chalcopyrite
 gn - Galena
 sp - Sphalerite
 Au - Gold
 Hem - Hematite

- LEGEND**
- 1. Mafic Metavolcanics and Sediments
 - 1a - chlorite (greenstones)
 - 1b - amphibole - biotite
 - 1c - layered / banded amphibolite
 - 1d - altered
 - 1e - ss. / silt. / arg. (shale)
 - 1f - massive, fg. amphibole
 - 2. Felsics
 - 2a - rhyolite / tuff
 - 2b - sheared felsic rocks (includes splits, rhyolite, porph.)
 - 3. Diabase
 - 3a - Carbonized
 - 3b - Silicified
 - 3c - Gneissic
 - 3d - Intercalated
 - 4. Granitic
 - 4a - Tonalite
 - 4b - Gneissic
 - 4c - Diabase
 - 5. Quartz-vein
 - 6. Pit
 - 7. Shaft
 - 8. Trace gold (assayed)
 - 9. Claim post (located, unlocated)
 - 10. Geological contact
- Lineation
 Schistosity parallel to bedding
 Schistosity, vertical to dip
 Bedding
 Glacial strike
 Claim lines
 Joints
 Scarp
 Fault
 Roads
 Trench
 Open-pit
 Swamp
 Logged area
 Logging road
 No drainage
 Geographical contact



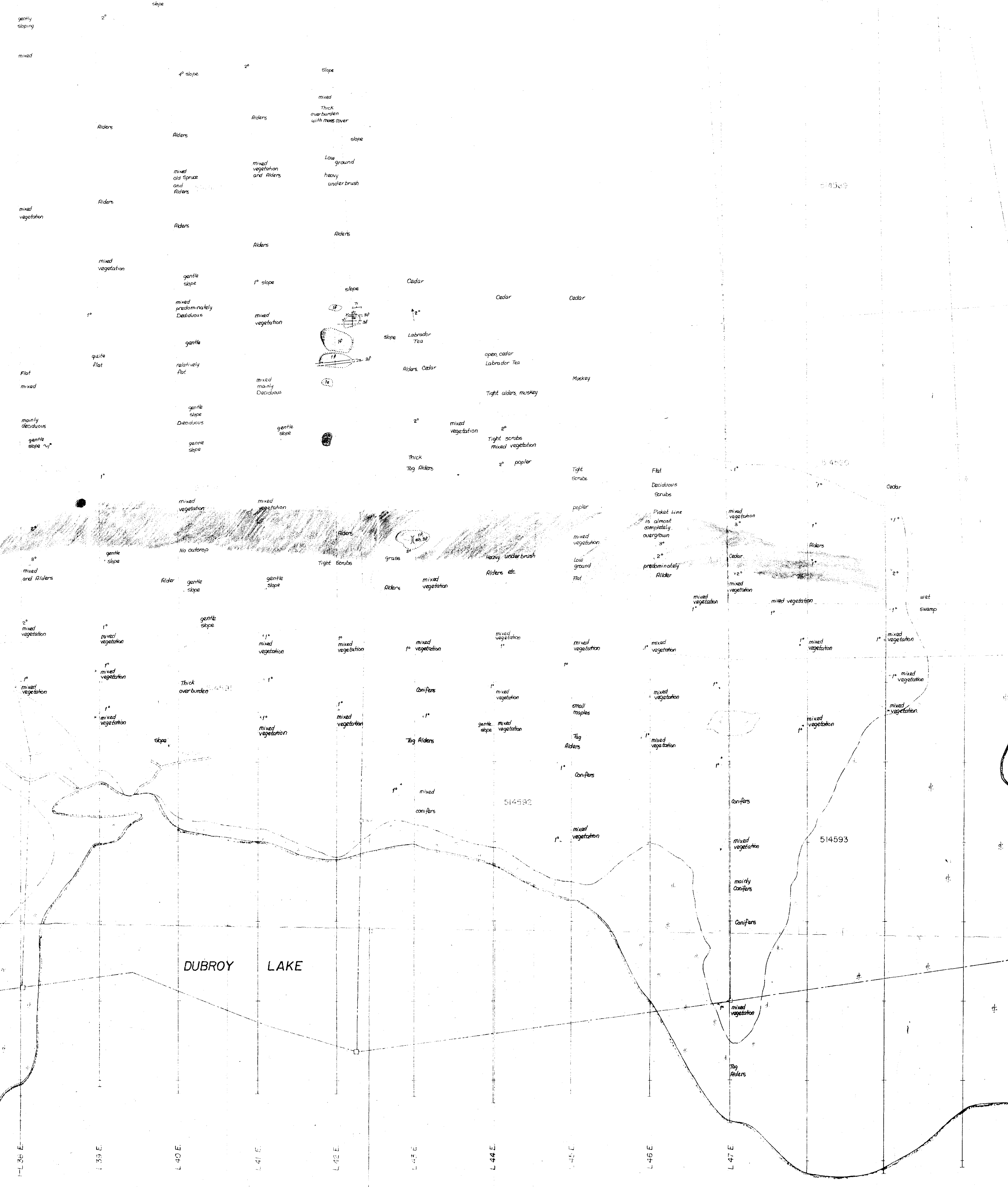
FOR LEGEND SEE WEST SHEET



Shenango Mines (4)



Labrador Tea
and Cedar
Boulders
very common
Boulders
4-4



LAKE

DUBROY LAKE

514585

514592

514593

L-37 E

L-38 E

L-39 E

L-40 E

L-41 E

L-42 E

L-43 E

L-44 E

L-45 E

L-46 E

L-47 E

L-48 E

L-49 E

L-50 E

L-51 E

L-52 E

L-53 E

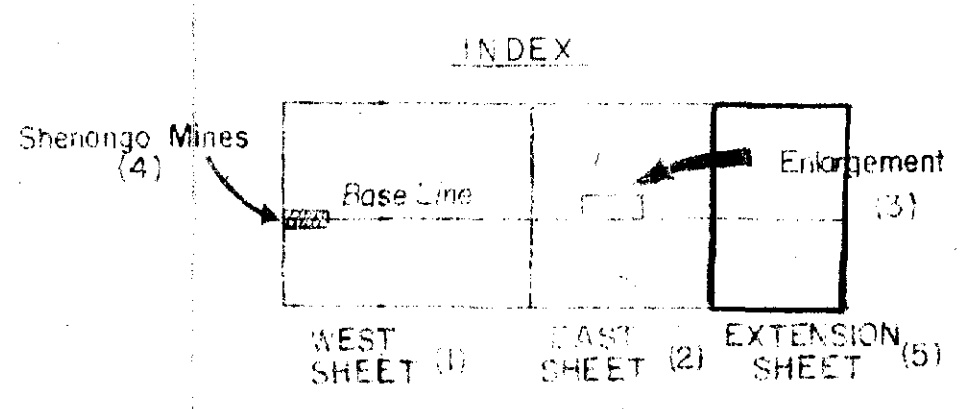
Dec 1981
C. Ballantyne

ST. JOSEPH EXPLORATIONS LIMITED
TORONTO, CANADA

OBA AREA, Northern Ontario
(East Sheet Extension)
GEOLOGY

SCALE 1:2000
PROJECT NO. 3356
SHEET NO. 5 OF 5
REPORT NO. NTS 42/FJ

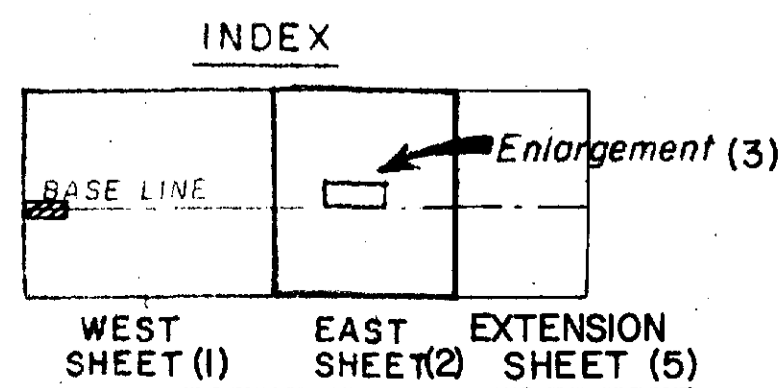
For legend see West Sheet
GEOLOGY BY K. Lai
August 1980





FOR LEGEND SEE WEST SHEET

Sherango Mines (4)



Surveyed by:
 R. V. Zainierunas,
 G. R. Oppenheimer
 A. W. Beecham

Date: Sept. - Oct. 1979

Compton
 Dec 89
 Chubb, Ont.

ST. JOSEPH EXPLORATIONS LIMITED	
OBA AREA, Northern Ontario (East Sheet)	
GEOLOGY	
Scale: 1:2000	Sheet No: 2 of 5
Project No: 3356	Map No: 4257

54427