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MINING LANDS SECTION

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PROJECTS UNIT

HIBISCUS DEVELOPMENTS LIMITED

MONGOWIN, MCKINNON AND MERRITT TOWNSHIPS PROPERTY

ESPANOLA AREA, ONTARIO

SUDBURY, ONTARIO  
MAY 7, 1976

E.J. GAUVREAU, B.A. Sc. P. Eng.

T A B L E O F C O N T E N T S



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### SUMMARY

Hibiscus Developments Limited has acquired 330 mining claims comprising some 13,200 acres in Mongowin, McKinnon and Merritt Townships, Espanola, Ontario. The status of the claims are as follows:

Owens Option	- 6 patented & 23 unpatented
Ike Burns Option	- 56 unpatented
Staked Claims	- 245 unpatented

The property is underlain by a series of Huronian sediments in a basin-like structure in the Bass Lake Syncline.

The sediments have been intruded by amphibolite and porphyritic amphibolite dikes.

An ultrabasic pluton with nickel copper mineralization has intruded the above formations.

Structural information from aeromagnetic surveys suggests that other plutons are present at near surface localities around the rim of the basin.

Recent ground geophysical surveys have indicated several magnetic and electromagnetic anomalies which could be of the magnetic sulphide type being both magnetic and conductive.

The larger magnetic anomalies are interpreted as being caused by ultramafic bodies. These areas are more pronounced on the north side of the Bass Lake Syncline and have a closer correlation with the ground E.M. conductors. The zones are

weaker on the south side which suggests possibly deeper ultrabasic bodies.

The Owens Nickel occurrence in the Mongowin pluton on the north limb of the syncline contains a zone of 92,610 tons grading 0.53% Ni and 0.27% Cu.

A diamond drill program is recommended for nine areas on the property. These areas have been selected on the basis of geophysical and geological interpretations. The program is divided into 3 phases and the estimated cost is \$261,000.00.

HIBISCUS DEVELOPMENTS LIMITED  
MONGOWIN, MCKINNON AND MERRITT TOWNSHIPS PROPERTY  
ESPANOLA AREA, ONTARIO

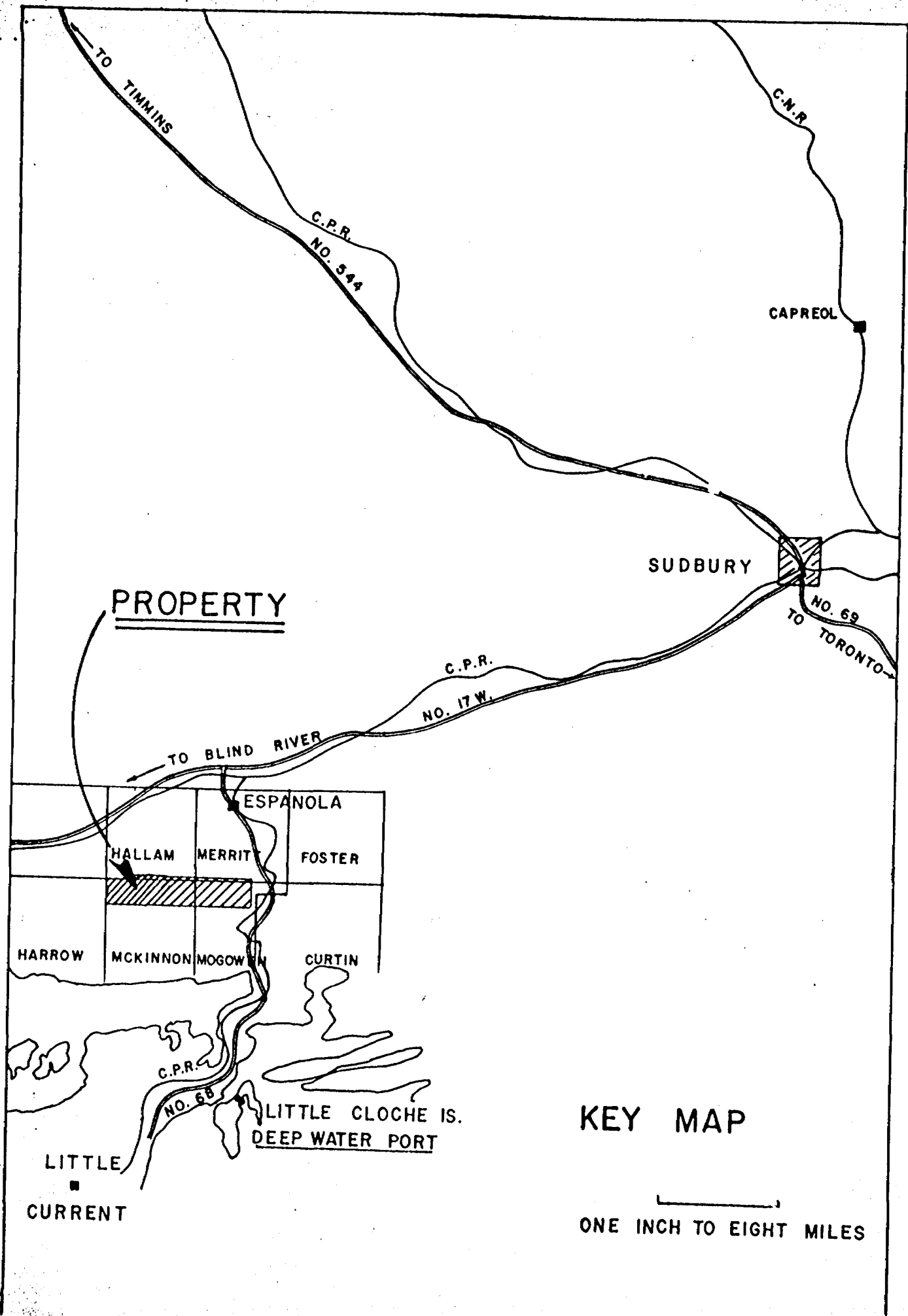
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INTRODUCTION

This report is written at the request of Hibiscus Developments Limited whose property lies approximately 7½ miles south of the town of Espanola, Ontario.

The property was first prospected in 1929 for nickel and copper, and from 1934 to 1951 Falconbridge Nickel Mines did several sampling and geophysical surveys on the Owens Nickel prospect. They drilled 1000 feet of diamond drill core in 1951 and indicated the presence of a small low grade nickel copper zone. In 1956 Trio Mining Company drilled 19 deep and 6 pack-sack holes.

In December 1975, ground magnetic and electromagnetic surveys were conducted over nine of the airborne anomalies.



PROPERTY AND LOCATION

Hibiscus Developments Limited has optioned and staked 6 patented and 324 unpatented mining claims consisting of approximately 13,200 acres in Concessions 4, 5 & 6 Mongowin and McKinnon Townships and Concession 1, Merritt Township. The claims are contiguous but do not comprise a solid block.

The claim numbers are as follows:

Optioned Claims

Owens Option

Patented Claims	S15705-07 inclusive	3
	S16448-50 "	3
Unpatented Claims	S425492-500 "	9
	S461525-32 "	7
	S461555-60 "	<u>7</u>
		29

Ike Burns Option

Unpatented Claims	S424227-62 inclusive	36
	S424299-313 "	15
	S424316 "	1
	S424360-61 "	2
	S426848-49 "	<u>2</u>
		56

Staked Unpatented Claims	S424314-15 inclusive	2
	S424501-11 "	11
	S425526-57 "	32
	S425670-82 "	13
	S426840-47 "	8
	S426850-52 "	3
	S443775-90 "	16
	S438945-55 "	11
	S461105-19 "	15
	S461124-36 "	13
	S461155-56 "	2
	S461180-98 "	19
	S461200-99 "	<u>100</u>
		<u>245</u>

Grand Total: 330

The town of Espanola is  $7\frac{1}{2}$  miles to the north and Inco's Lawson Quarry lies  $5\frac{1}{2}$  miles south-east. The property is five miles north of the North Channel of Lake Huron. Bass Lake and Raven Lake are totally enclosed in the claim area. The western portion of the property is just south of the village of Lee Valley.



### ACCESS

There is a good gravel road from Espanola to within one half mile of Bass Lake. The last section of road to the lake is passable for trucks or four wheel drive vehicles. The Lee Valley road extends south into the western portion of the property.

Bass Lake and Raven Lake in the east and Cutler and Maple Lakes in the west provide suitable space for float or ski equipped aircraft.

FACILITIES

Ample water is available for domestic drilling or mining purposes.

A power transmission line from Espanola to the old McMillan Mine crosses the east portion of the property.

The Canadian Pacific Railway spur line from McKerrow to Little Current crosses the northeast portion of the property.

New deep water harbour facilities are being constructed at Little Cloche Island about 10 miles south of the property.

A nickel-copper smelter is at Copper Cliff, 40 miles to the east. Sudbury, 45 miles away is the major supply centre for the area. Skilled labour can be obtained in either Espanola or Sudbury.

There is housing available in Espanola, an industrial town of 5,600 people.

TOPOGRAPHY

The east part of the property straddles Bass Lake in the north portion and Raven Lake in the south. In the western part of the property Maple and Cutler Lakes are the largest bodies of water. The terrain rises gently from the lake levels with maximum relief of 100 to 150 feet.

The property is forested with second growth birch and poplar mixed with maple, spruce and balsam. Tree cover is fairly dense except in the swampy areas.

PREVIOUS WORK

In 1951 Falconbridge Nickel Mines optioned the Owens Nickel property and drilled 4 holes on claims S16448 and S16449 for a total of 1,020 feet. This was to explore an E.M. anomaly along the north contact of the Mongowin pluton. A low grade nickel copper zone, approximately 15' x 300' was indicated.

Trio Mining Company in 1956 conducted a detailed diamond drill program on the same area and subsequent work by Mr. V. Kukoraitis, P. Eng. estimated that the zone contained 92,610 tons grading 0.53% Ni. and 0.27% Cu. to the 250 foot level.

Hole No. 5 by Trio intersected the zone at 600 feet vertically, and a 21 foot section assayed 0.84% Ni. and 0.36% Cu.

In December 1975 ground geophysical surveys were conducted over nine of the airborne anomalous areas and several magnetic and electromagnetic anomalies were indicated.

GEOLOGY

The property lies in the Bass Lake Syncline and the bed-rock formations are all of Precambrian Age.

The oldest rocks are a series of metasediments of Huronian Age and have been correlated with the Espanola formations of Bruce Group and the Gowganda formation of the Cobalt Group. These rocks are interbedded conglomerates, quartzites and argillites.

The conglomerate is a tilloid type composed mainly of granite pebbles and boulders in a greywacke or laminated argillite matrix.

The argillites are finely laminated ranging in thickness from 1/16" to 1/2" and have iron rich sections.

These rocks are intruded by numerous black amphibolite and porphyritic amphibolite dikes which strike northwest and are steeply dipping.

The Mongowin pluton intrudes the sediments and amphibolite dikes in the northwest corner of Mongowin Townships, just north of Bass Lake. It is composed of three-fifths peridotite, one-fifth gabbro and diorite and one-fifth granophyre.

The peridotite is composed of serpentized olivine, pyroxenes and amphiboles. The gabbros and diorites are chiefly amphiboles, plagioclase, chlorite and quartz. The granophyre is a graphic intergrowth of albite and quartz with considerable muscovite.

Several northwest trending olivine diabase dikes intrude the area.

STRUCTURE

The Bass Lake Syncline is a major doubly plunging canoe-shaped east-west trending fold whose axis cross the property. In McKinnon Township the fold plunges east and in Mongowin Township it plunges west. In the centre the axis plunges both east and west at low angles. The outer limbs of the fold dip inward  $70^{\circ}$  to  $80^{\circ}$  but decrease to low angles in the axial zone. In the Maple Lake area the fold apparently splits with one section having a southwest trend.

The Bass Lake Fault cuts the syncline at a small angle. The recent geophysical surveys suggests that the vertical displacement is in the order of 200 to 300 feet with the south side moving down.

Several northeast trending transcurrent faults are found in the western portion of the property.

Several zones of brecciation are found in the outer limbs of the syncline.

By super-imposing the aeromagnetic map over the Bass Lake Syncline there is a definite basin like structure suggested. There are 12 anomalous areas (including the Mongowin pluton)

within this structure. The breccia zones occur in or near some of these anomalous area.

The Mongowin pluton, in which the Owens Nickel prospect occurs, is located on the north limb of the Bass Lake Syncline in claims S16448 and S16449. It straddles the contact between the conglomerates and quartzites and is approximately 2,600 long by 1,400 feet wide. The contact dips outward which suggests that the pluton forcefully intruded the sediments.

The magnetic survey suggests that the pluton could extend to the south and may not be more than 200 feet below surface as it approaches Bass Lake.



MINERALIZATION

Pyrrhotite, chalcopyrite and minor pyrite occur near the northern and southern contacts of the Mongowin pluton. The sulphides are mainly disseminated but there are a few massive zones.

There is a small occurrence of gold in a quartz carbonate stockwork in brecciated sediments on claim S15706 on the south shore of Bass Lake.

THE OWENS NICKEL PROSPECT

The Owens Nickel prospect in claims S16448 and S16449, Mongowin Township occurs along the north contact of the Mongowin ultrabasic pluton with the sedimentary rocks. The showing is exposed in a pit about 20 feet deep, and the mineralization consists of disseminated to massive pyrrhotite and chalcopyrite. Diamond drilling by previous operators indicated that the zone is 15 to 20 feet wide and 300 feet long, strikes N80°W and dips 71°S.

Mr. V. Kukoraitis, P. Eng. calculated from diamond drill hole sections that the zone contains 92,610 tons grading 0.53% Ni. and 0.27% Cu. to the 250 foot level. A diamond drill hole by Trio Mining Company intersected the zone at 600 feet below the surface and returned assays of 0.84% Ni. and 0.36% Cu. across 21 feet.

GEOPHYSICAL DATA

The aeromagnetic survey map No. 1522 G shows a series of 12 anomalies in an oval shaped area that suggests a basin like structure within the Bass Lake Syncline. The ultramafic Mongowin pluton is the anomaly of greatest intensity which suggests that the other anomalies could be subsurface plutons from the same source.

Following up previous recommendations, ground magnetic and electromagnetic surveys over nine airborne anomalies including the Mongowin pluton were conducted in December, 1975. These will be referred to as Grids 1, 2, 3, etc. and are so numbered on the accompanying geophysical plans. The E.M. surveys were VLF and VHEM (horizontal loop) using a 300 foot cable. The following results were obtained.

Grid No. 1 was over the Mongowin pluton and the results of the magnetic survey suggests that the pluton extends to the south; and may be no more than 200 feet below surface as it approaches Bass Lake.

The VLF survey located several conductors that correlate very well with the magnetic zones and VHEM conductors. The

VHEM survey confirmed the location of the sulphide zone in the Owens Nickel deposit. Three other medium conductors were located.

Grid No. 2 is south and west of No. 1 and on the south side of the Bass Lake Fault. Weak to moderate results were obtained over the area but it appears that the grid was cut too far to the south and east to completely give a cross section of the magnetic anomaly. There is a suggestion of a plunge to the east. One medium and one weak VHEM conductors were located.

Grid No. 3 is located directly north of Grid No. 2 on the north limb of the syncline. The magnetic survey outlined 4 anomalies which could be caused by ultramafic bodies. The VHEM survey located four conductors of medium to strong conductivity and all are associated with magnetic anomalies.

Grid No. 4 is east of Grid No. 2 and on the south limb of the syncline. The magnetic survey outlined 3 zones with the most northerly one in the beaver pond area. Five VLF anomalies were located but none of them coincided with the weak VHEM anomalies. The magnetic anomalies suggest the presence of subsurface ultramafic rocks.

Grid No. 5 is located on the north limb of the syncline to the east of No. 1. The three surveys obtained positive results which strongly suggest a continuation of the ultramafic body at No. 1 Grid. The VHEM conductor at 4 N is very good and is in the same location as the magnetic anomaly.

The anomaly at 400E, 600S is of medium strength and was picked up with all instruments.

Grid No. 6 is located east of No. 5 and the magnetic survey shows a broad zone about 500 feet wide with a fairly steep dip to the south. The VLF survey indicated several conductors within the magnetic area. No VHEM survey could be carried out due to the proximity of the power line.

Grid No. 7 is west and south of No. 6 and shows a magnetic anomaly at the eastern end of the grid which suggests an ultrabasic horizon with a folding structure to the south. The magnetic anomaly along line 00 suggests a plug like continuous zone indicative of ultrabasic bodies. Several VLF conductors were obtained some of which may be caused by conductive lake bottom. Power line presence eliminated the VHEM survey.

Grid No. 8 is located south and west of No. 7 and two magnetic anomalies were outlined, one covered by the island and the second by the lake. The VLF survey indicated two conductors, both appear to represent lake bottom conductivity. No VHEM was used due to power line proximity.

Grid No. 9 is west of No. 8 and the magnetic survey outlined 2 anomalous zones. A weak high frequency conductor is associated with the zone of higher intensity.

The geophysical surveys have indicated several magnetic and electromagnetic anomalies that suggest the magnetic sulphide type as they are both magnetic and conductive.

The surveys also indicate that the depth to the top of the causative bodies is shallower on the north side of the Bass Lake Fault.

The larger magnetic bodies are interpreted as being caused by ultramafic bodies. These areas are more pronounced on the north side of the Bass Lake Fault and have a closer correlation with ground EM conductors. To the south the magnetic zones are broader and the conductors are weaker which suggests similar ultramafic bodies at depth.

CONCLUSIONS

The nickel copper occurrences in the Sudbury basin are associated with ultrabasic plutons around the rim of the meteoritic structures. This is suggested in the Bass Lake Syncline on a lesser scale.

The low angle dips of the sediments in the axial zone of the Bass Lake Syncline suggests subsurface intrusive action.

The Owens Nickel prospect in the Mongowin pluton contains 92,610 tons of Ni-Cu sulphides and further diamond drilling could increase this tonnage as the zone has not been delimited either laterally or at depth. Recent geophysical surveys confirms the location of the zone and indicated several more good conductors which could be caused by sulphides.

The geophysical surveys over the eight other airborne anomalies indicated several moderate to strong EM conductors associated with magnetic highs which are suggestive of sulphide zones. The size and altitude of the ground magnetic anomalies suggest that the causative bodies could be ultramafic.

Grid No. 3 represents the best target for diamond drilling as it has four moderate to strong conductors coinciding with

magnetic anomalies. Grids 1, 5 and 7 also show geophysical evidence for possible sulphide occurrences. The remaining grids suggest deeper horizons of ultramafic rocks.



RECOMMENDATIONS

A diamond drill program is recommended to test the favourable conductors, and with the large number of zones the program is divided into 3 phases.

Phase No. 1. Ten holes are proposed for Phase No. 1 for a total of 4,500 feet. The primary target is Grid No. 3 which has four strong E.M. conductors associated with magnetic anomalies. The proposed holes are shown on the geophysical plans and are as follows:

Grid No. 3

Hole No. 1	-	800W, 350N	@	-	45°N	450 feet
Hole No. 2	-	800W, 530S	@	-	45°N	400 "
Hole No. 3	-	00 , 140S	@	-	45°N	400 "
Hole No. 4	-	400W, 680N	@	-	45°N	400 "

Grid No. 2 - A moderate EM conductor

Hole No. 5	-	800W, 125S	@	-	50°N	500 feet
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Grid No. 1 - 2 medium strength EM conductors

Hole No. 6	-	400W, 400S	@	-	45°N	400 feet
Hole No. 7	-	800W, 220N	@	-	50°S	500 "

Grid No. 5 - 2 moderate EM conductors

Hole No. 8	-	400E, 460S	@	-	45°S	300 feet
Hole No. 9	-	400E, 300N	@	-	45°N	400 "

Grid No. 7 - A good magnetic anomaly

Hole No. 10	-	1600W, 500S	@	-	55°N	750 feet
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Total: 4500 feet

Phase No. 2. The ten holes recommended for phase 2 are to test the weaker anomalies which are mostly interpreted as being deeper. The total footage is 4,750 feet.

Grid No. 1

Hole No. 11	-	400W, 2450S	@	-	50°N	450 feet
Hole No. 12	-	800W, 950S	@	-	50°N	450 "

Grid No. 4

Hole No. 13	-	200W, 400N	@	-	50°S	450 feet
Hole No. 14	-	800W, 350N	@	-	45°S	400 "

Grid No. 5

Hole No. 15	-	1200E, 850S	@	-	45°N	350 feet
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Grid No. 6

Hole No. 16	-	00, 750S	@	-	45°N	400 feet
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Grid No. 7

Hole No. 17	-	200W, 400S	@	-	45°N	550 feet
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Grid No. 8

Hole No. 18	-	400E, 50S	@	-	55°S	600 feet
Hole No. 19	-	650N, 800E	@	-	45°S	400 "

Grid No. 9

Hole No. 20	-	400W, 1250N	@	-	45°S	700 feet
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Total: 4750 feet

Phase 3. 15 holes for a total of 6000 feet is recommended to redrill the Owens Nickel occurrence on 100 foot sections.

Geophysical Survey:

In conjunction with phase 1 diamond drilling, additional geophysical surveys are recommended over the following areas.

1. All the in-between grid areas previously not surveyed from  $\frac{1}{2}$  mile west of Grid No. 3 to Grid No. 7.

2. Area immediately west and north of Grid No. 2

3. The three remaining airborne anomalies in the western part of the property.

The total mileage involved is 6 miles of baseline and 40 miles of crosslines.

COSTS

The costs of the recommended program is estimated as followings.

Phase 1:	Diamond drilling 4500 feet	\$ 63,000.00
	Geophysical Surveys	<u>23,400.00</u>
		\$ 86,400.00
	Contingencies	<u>8,700.00</u>
		\$ 95,100.00
Phase 2:	Diamond drilling 4750 feet	\$ 66,500.00
	Contingencies	<u>6,600.00</u>
		\$ 73,100.00
Phase 3:	Diamond drilling 6000 feet	\$ 84,000.00
	Contingencies	<u>8,400.00</u>
		\$ 92,400.00

Total for all \$ 261,000.00

*E. J. Laurian*

CERTIFICATE

I, E.J. Gauvreau, of the city of Sudbury, in the District of Sudbury, Province of Ontario, hereby certify:

1. That I am a Geologist and reside at 420 Westview Drive, Sudbury, Ontario.
2. That I received my technical training at the University of Toronto, B.A. Sc. and I have been practising my profession for over 20 years.
3. That I am not an officer of the Company, and that I have no direct or indirect interest whatsoever in the mining claims, the subject of this report nor have I any direct or indirect interest in the securities of the Company nor do I expect to receive any direct or indirect interest in the securities or property of the Company.
4. That the accompanying report is based on a personal examination of the property in September 1975, and the following:

Geological Survey of Canada - Airborne Magnetic Map No. 1522 G.

Ontario Department of Mines, Geological Maps Nos. P391, P794.

Ontario Department of Mines, The Mongowin Pluton by K.D. Card.

Report on the Owen Prospect by V.K. Kukoraitis, P. Eng. 1973.

Logs and Sections of diamond drilling by Falconbridge Nickel Mines 1951 and Trio Mining Company 1956.

Review of recent Geophysical Survey Data, 1975-76.

Dated at Sudbury this 7th Day of May, 1976

E.J. Gauvreau B.A. Sc. P. Eng.

*E.J. Gauvreau*

MONDWIN-SUDBURY EXPLORATIONS LTD.

SCHEDULE OF GEOPHYSICAL WORK Dec. 1975, Jan. 1976

<u>Claim No.</u>	<u>Days</u>	<u>Claim where work was performed</u>
S425497	20	S425497
99	20	S461527
S461527	20	28
28	20	
S424242	20	S424242
43	20	43
50	20	50
51	20	51
S424228	20	S424228
29	20	29
34	20	34
35	20	35
S424255	20	S424255
56	20	56
59	20	59
60	20	60
S425501	20	S425501
S461135	20	S461135
36	20	36
S461555	20	S461555
S424313	20	S424313
14	20	14
15	20	15
16	20	16
S424299	20	S424299
S424361	20	S424361
S426843	20	S426843
44	20	S426844
S424303	20	S424303
04	20	04
S424360	20	60
S424307	20	S424307
08	20	08
09	20	09
10	20	10
Total	700	

*E. J. Lawrence*

MONGOWIN-SUDBURY EXPLORATIONS LTD

Geophysical Survey Dec. 1975, Jan. 1976

Expenditures and Man days

Line Cutting and Chaining. Contract to Ike Burns	\$3,864.00	
equals 78 man days		
Geophysical surveys, field work	33 man days	2,475.00
Office- drafting, general expenses, transportation, supervision, report.	54 man days	4,050.00
	Total	<u>\$10,389.00</u>

Total days :	Line cutting	78
	Geophysical	54 times ?
		$\frac{609}{687}$

*E. J. Gannon*



Recorded Holder **Mongowin-Sudbury Explorations Limited**

Township or Area **Mongowin, McKinnon & Merritt Townships**

Type of survey and number of Assessment days credit per claim	Mining Claims
<b>Geophysical</b> Electromagnetic <u>0</u> days Magnetometer <u>0</u> days Radiometric _____ days Induced polarization _____ days Section 86 (18) _____ days <b>Geological</b> _____ days <b>Geochemical</b> _____ days Man days <input type="checkbox"/> Airborne <input type="checkbox"/> Special provision <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/>	<b>NOTE:</b> Insufficient material/data was submitted for these Electromagnetic and Magnetometer surveys, therefore, <u>NO CREDITS</u> have been allowed on the following mining claims: S. 424228 - 29 424234 - 35 424242 - 43 424250 - 51 424255 - 56 424259 - 60 424299 424303 - 04 424307 to 10 inclusive 424313 to 16 " 424360 - 61 425497 - 99 425501 426843 - 44 461135 - 36 461527 - 28 461555
<b>Notice of Intent to be issued:</b> <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. <input checked="" type="checkbox"/> No credits have been allowed for the following mining claims as they were not sufficiently covered by the survey: _____ _____ _____ _____ _____	



900

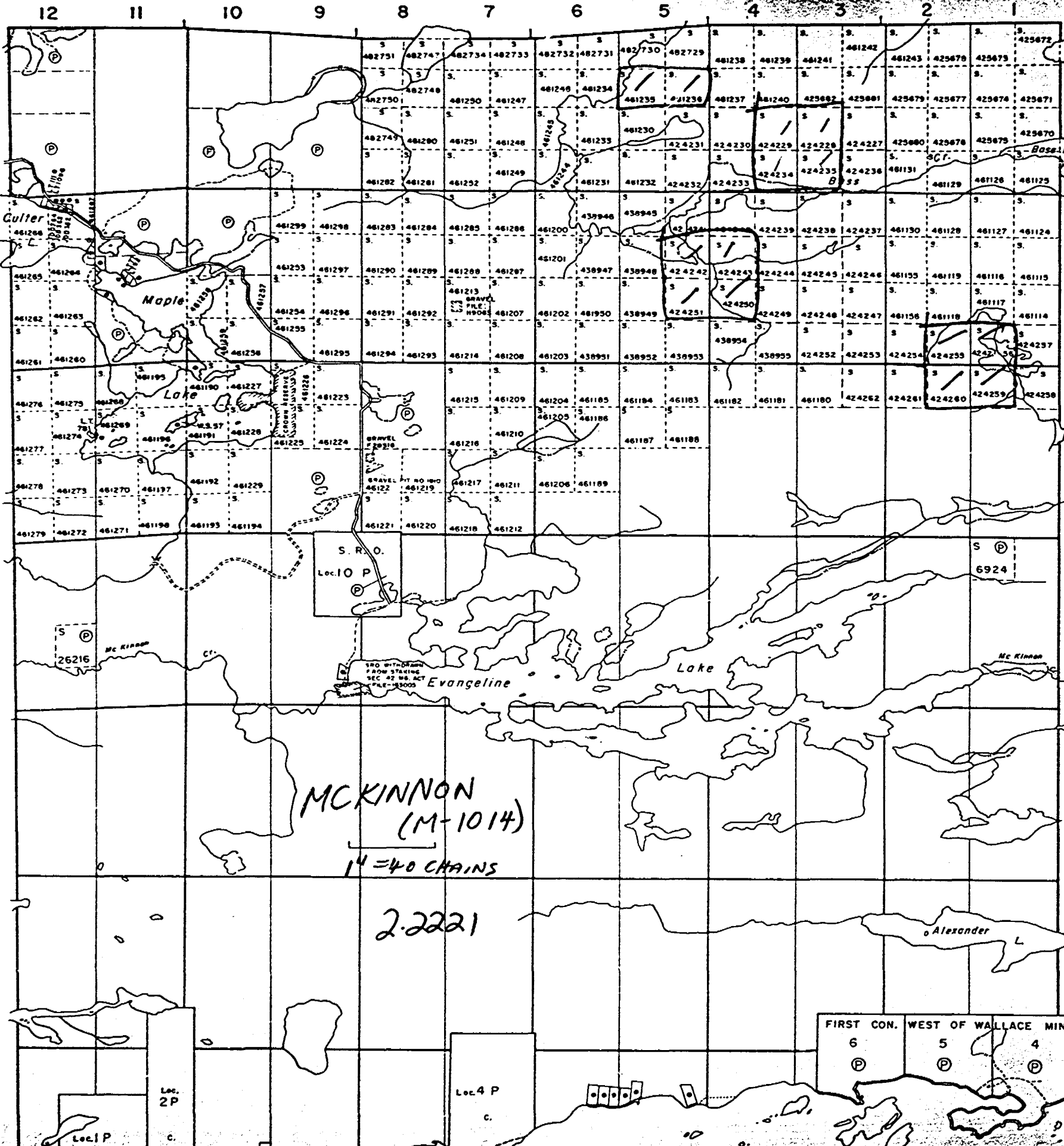
The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical — 80; Geological — 40; Geochemical — 40;



Hallam Twp. - M.909

Harrow Twp. - M.918

Mongowin Twp. - M.871



VI

V

IV

III

II

I

MCKINNON  
(M-1014)

1" = 40 CHAINS

2.2221

FIRST CON. WEST OF WALLACE MINE		
6	5	4
Ⓟ	Ⓟ	Ⓟ

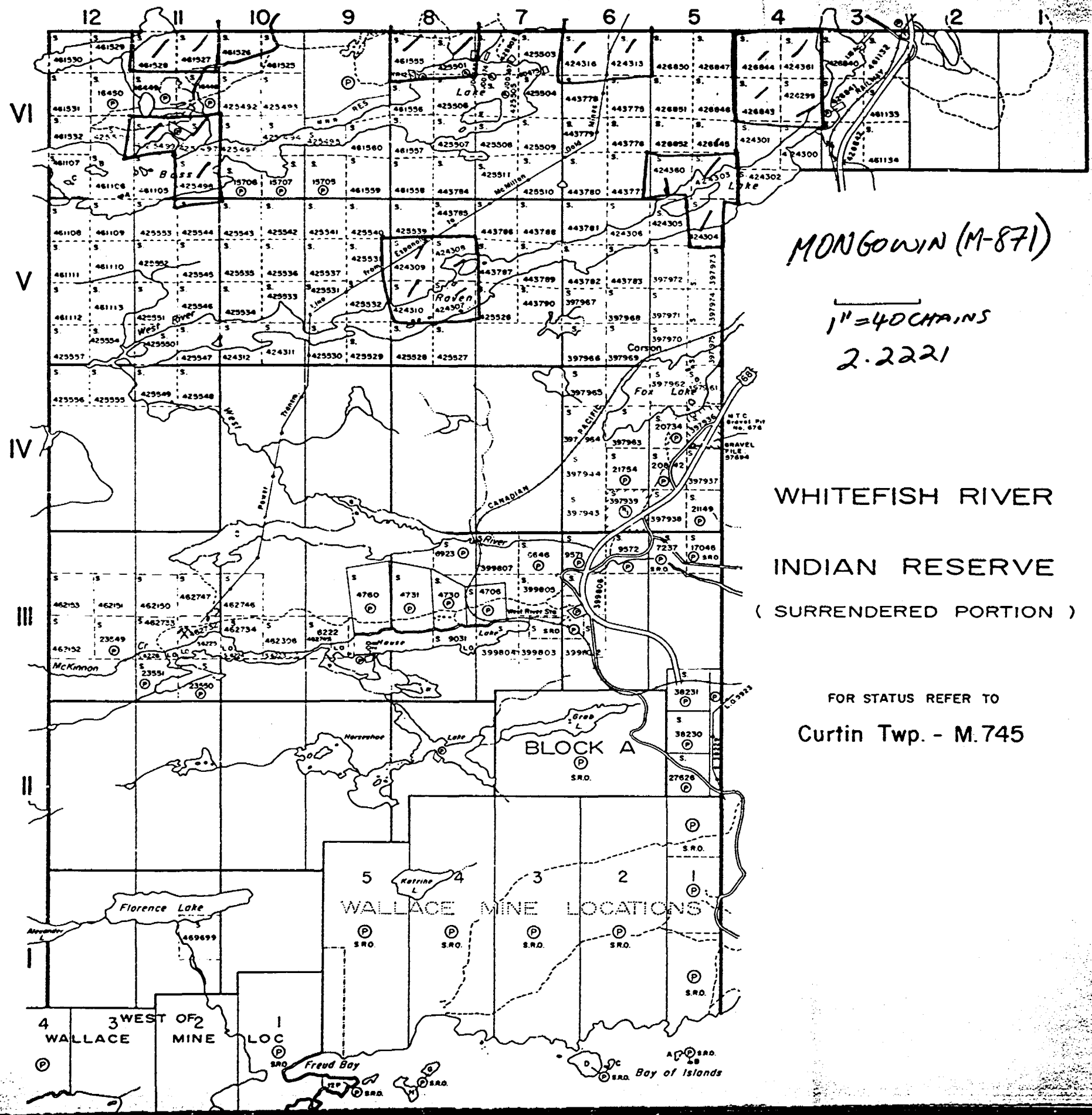
Loc. 2 P

Loc. 4 P

Loc. 1 P

A

Merritt Twp. - M. 863



MONGOWIN (M-871)

1" = 40 CHAINS  
2.2221

WHITEFISH RIVER  
INDIAN RESERVE  
( SURRENDERED PORTION )

FOR STATUS REFER TO  
Curtin Twp. - M. 745

McKinnon Twp. - M. 1014

VI

V

IV

III

II

I

12 11 10 9 8 7 6 5 4 3 2 1

BLOCK A

WALLACE MINE LOCATIONS

4 3 WEST OF 2 WALLACE MINE

1 LOC

Freud Bay

Bay of Islands

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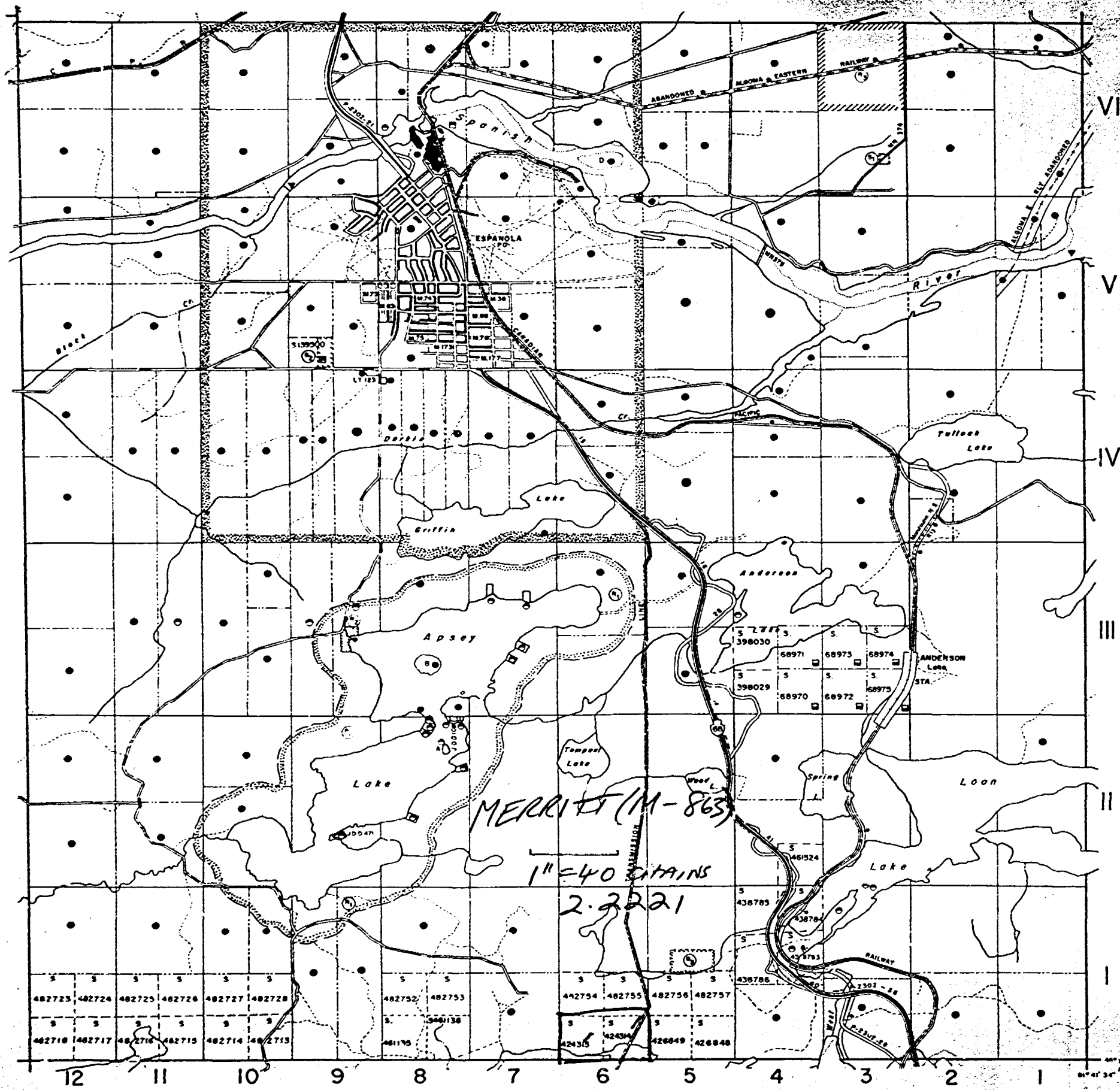
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BALDWIN TP. M.645

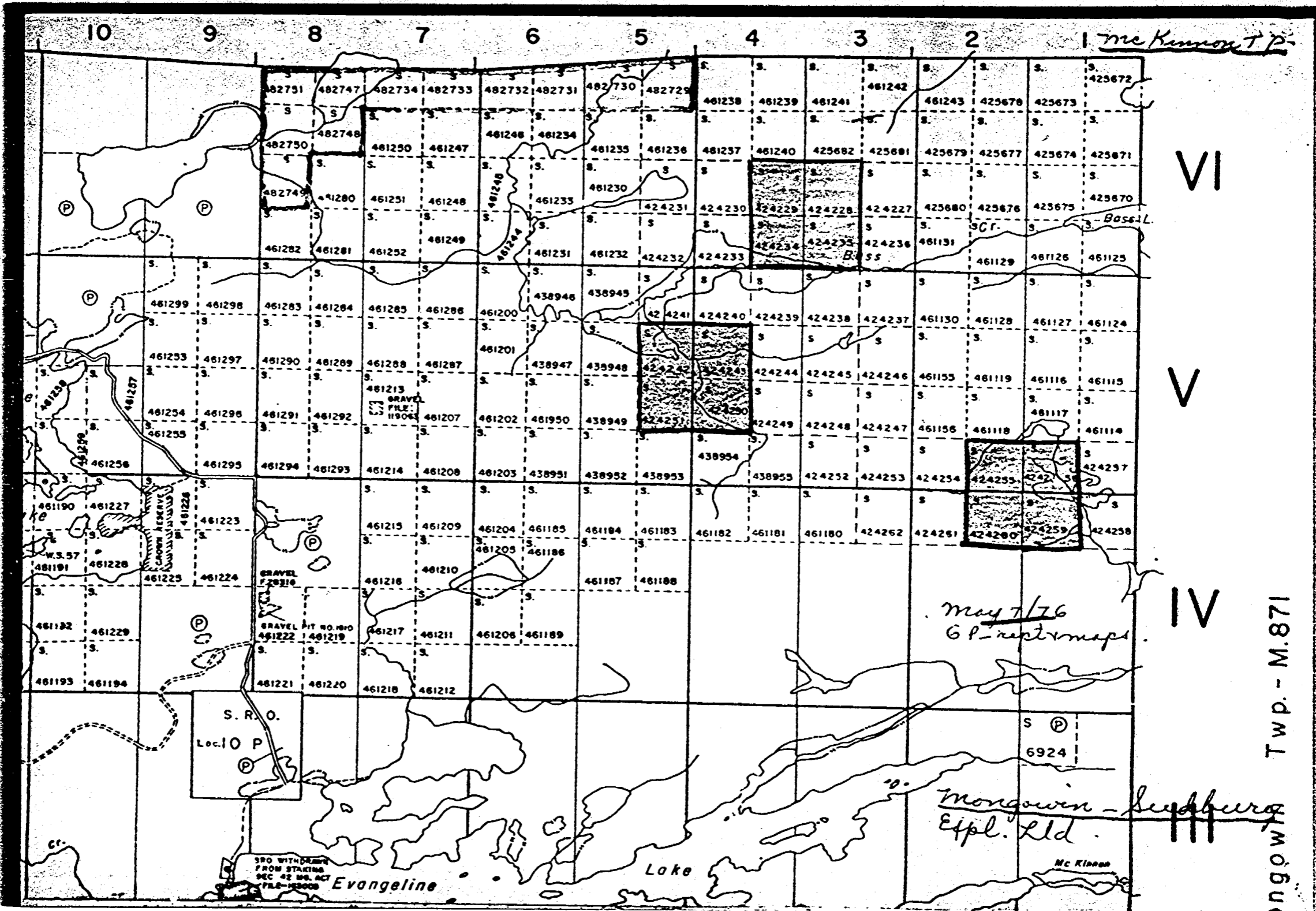
HALLAM TP. M.909

FOSTER TP. M.814



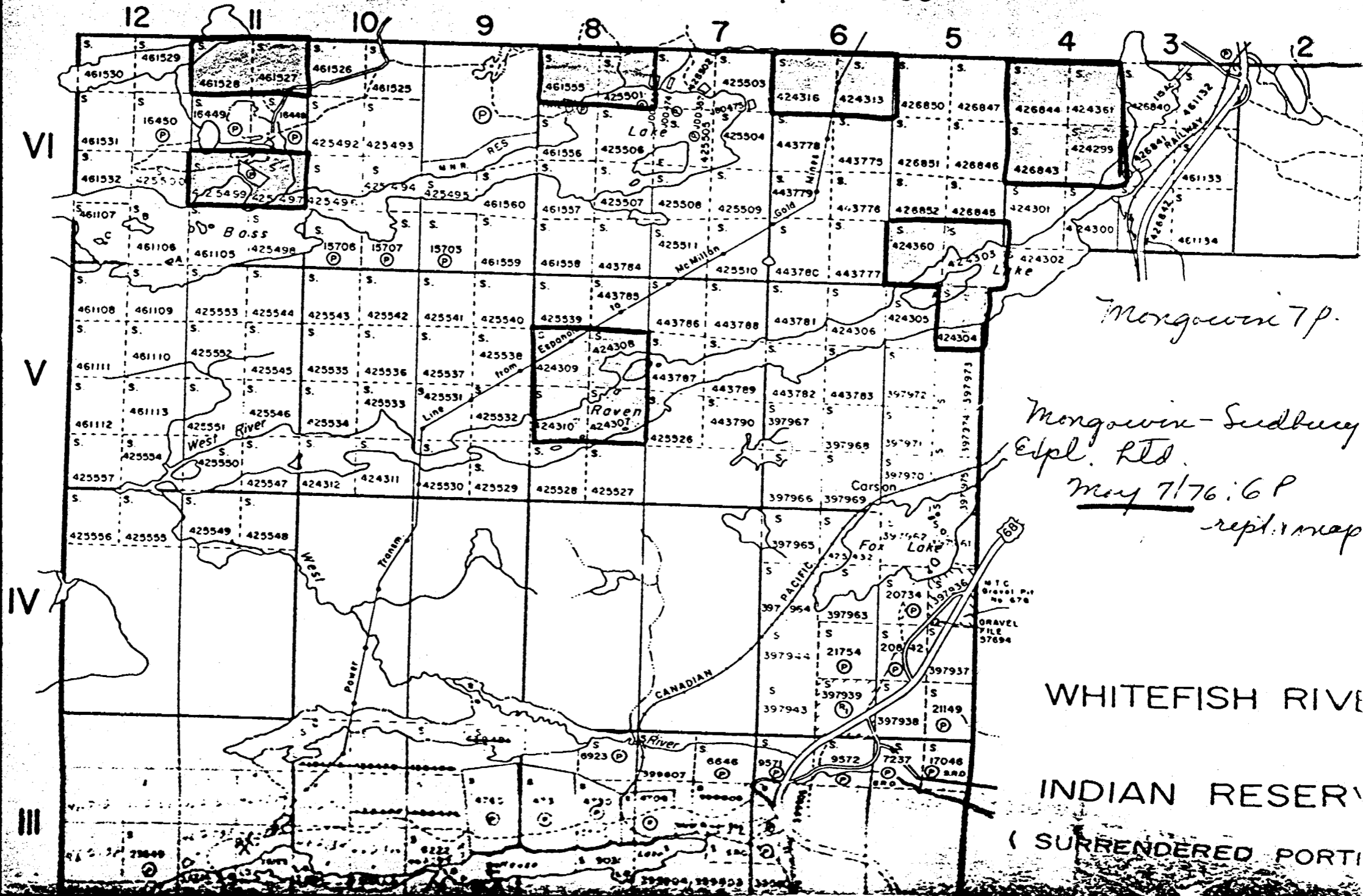
MONGOWIN TP. M.871

46° 11' 31" N  
91° 47' 34" W  
Approx.



Mongowin Twp. - M.871

Merritt Twp. - M. 863



*Mongowin Twp.*

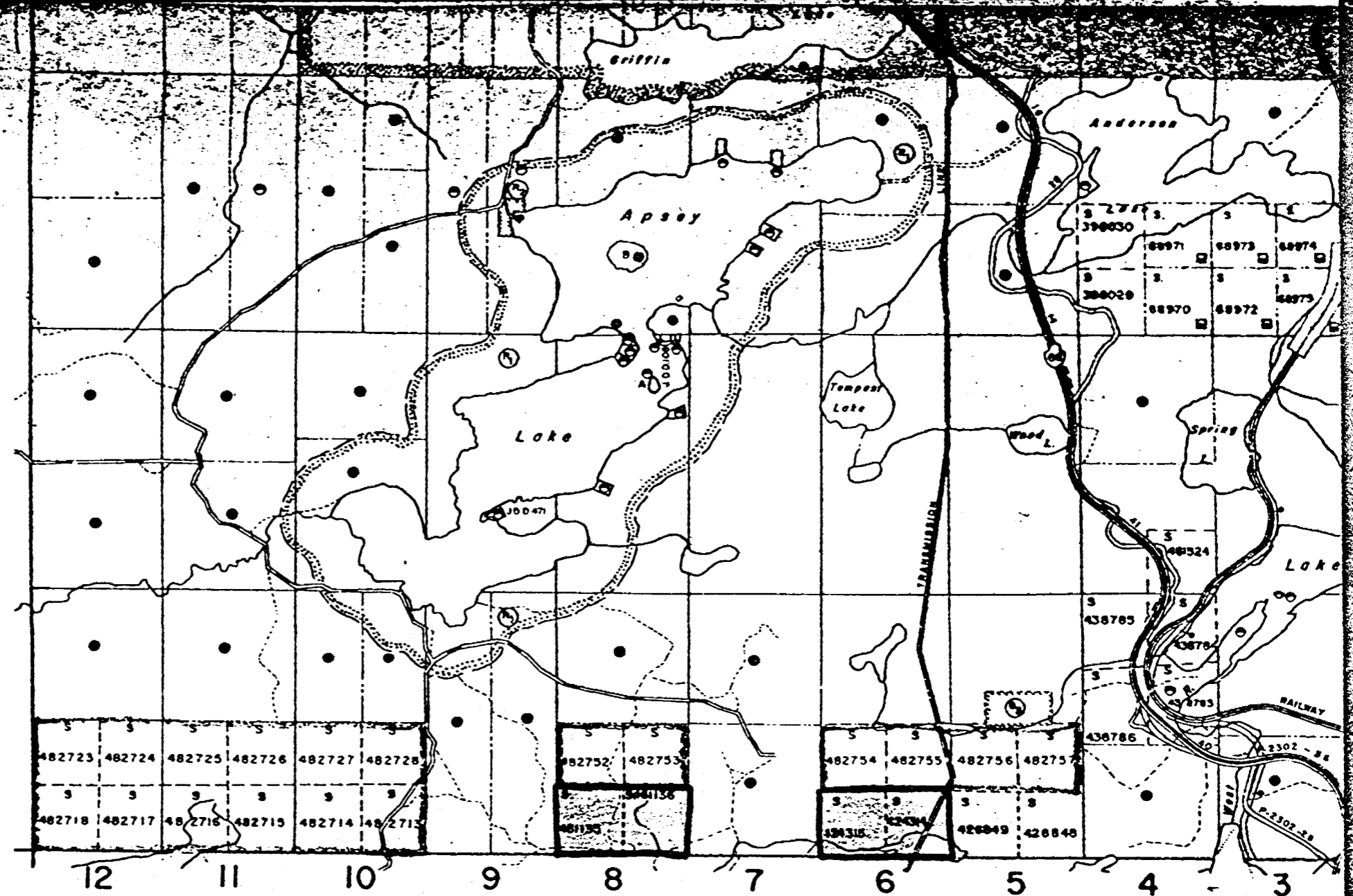
*Mongowin-Sudbury  
Expl. Ltd.  
May 7/76:6 P  
repl. map*

WHITEFISH RIVER

INDIAN RESERVE

(SURRENDERED PORTION)

HALLAM



*Mongowin - Sudbury  
Eupl. Ltd*

*GP - Rept v maps. May 7/76.*

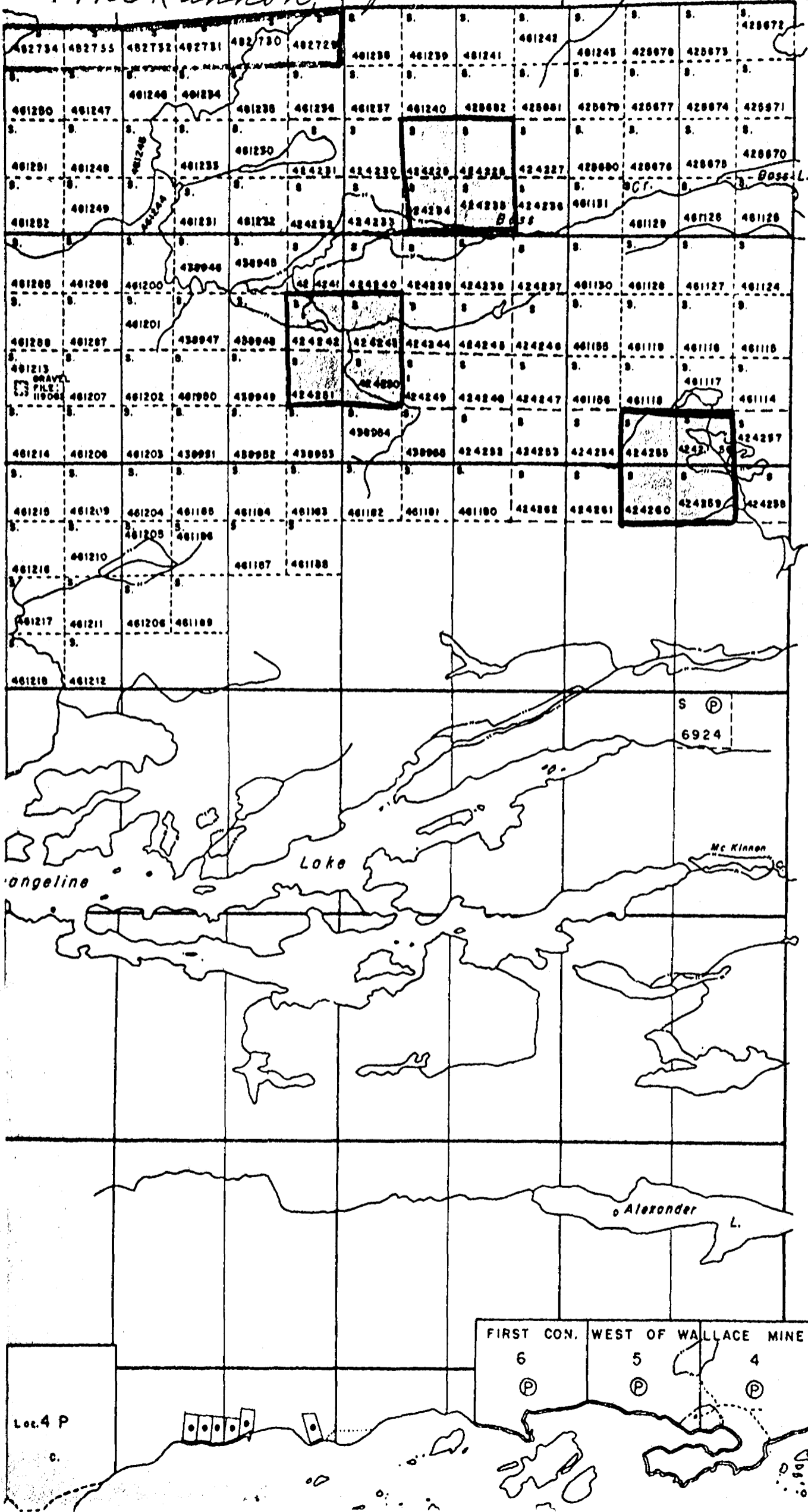
MONGOWIN TP. M.871

*Merritt Tp*

Hallam Twp. - M.909

McKinnon Twp.

Monguwin - subsidiary  
Explorations Ltd. GP - Oct. 12/74  
line cutting



VI

V

IV

III

II

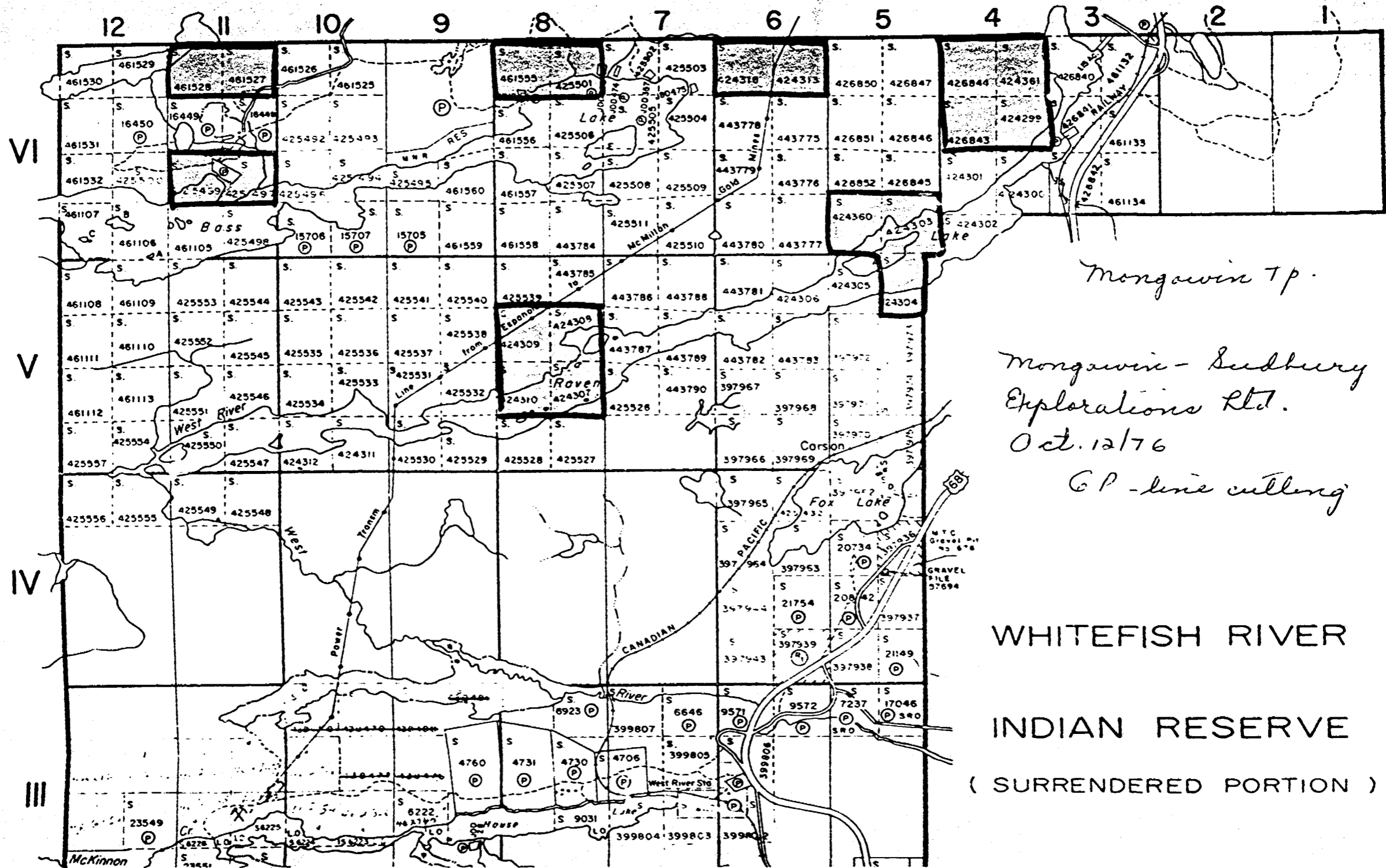
I

Monguwin Twp. - M.071

FIRST CON.	WEST OF WALLACE MINE
6	5
(P)	(P)
	4
	(P)

Loc. 4 P  
c.

Merrif Twp. - M. 863



Kinnon Twp. - M. 1014

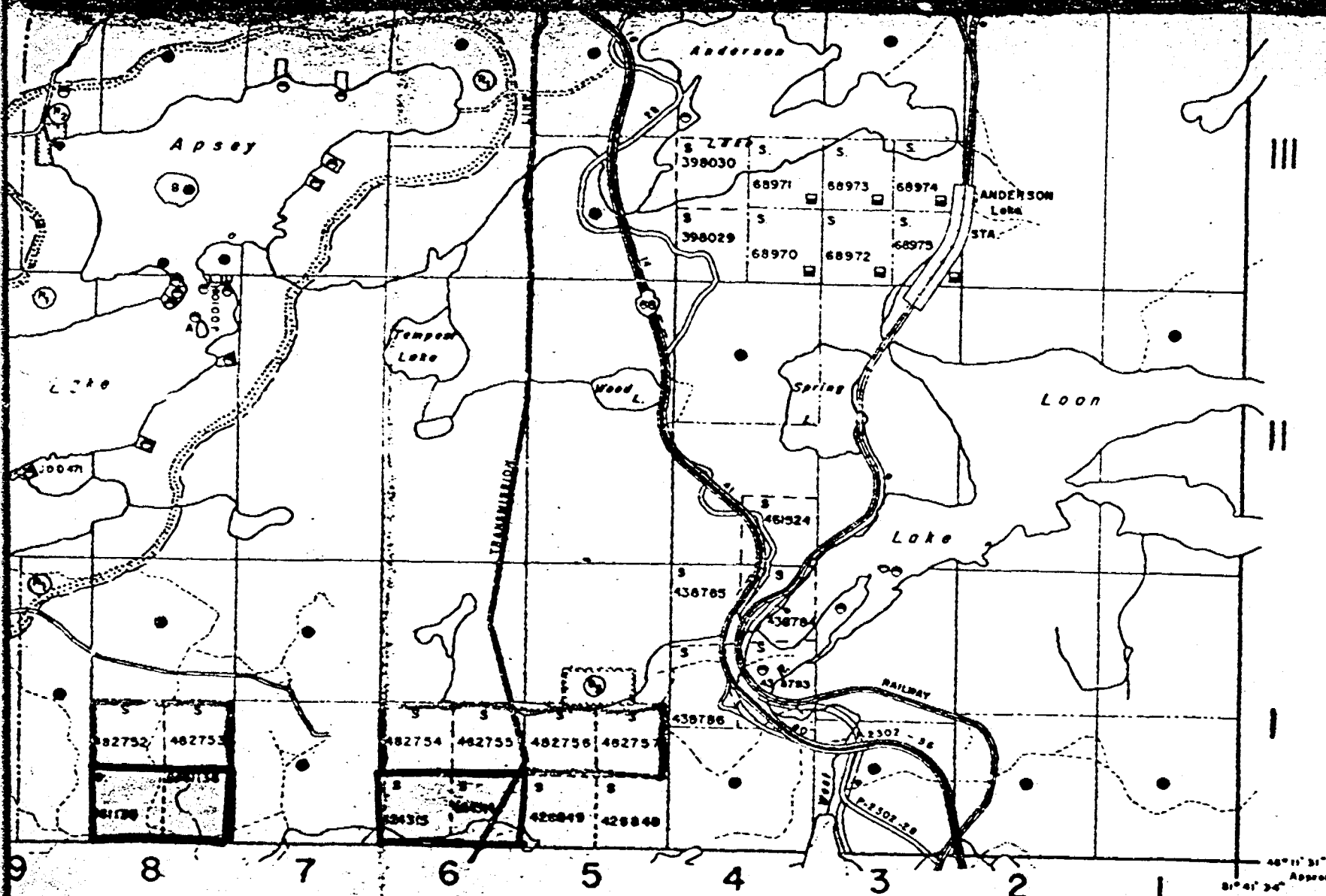
Mongawin Twp.

Mongawin - Sudbury  
Explorations Ltd.  
Oct. 12/76

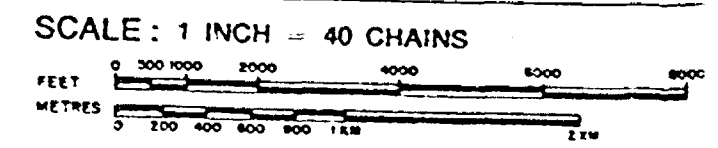
GP - line cutting

WHITEFISH RIVER  
INDIAN RESERVE  
( SURRENDERED PORTION )





FOSTER



ACRES	HECTARES
40	16

TOWNSHIP

# MERRITT

DISTRICT *4P.*

SUDBURY

MINING DIVISION

SUDBURY

MONGOWIN TP. M.871

*Mongowin - Sudbury Explorations Ltd.*

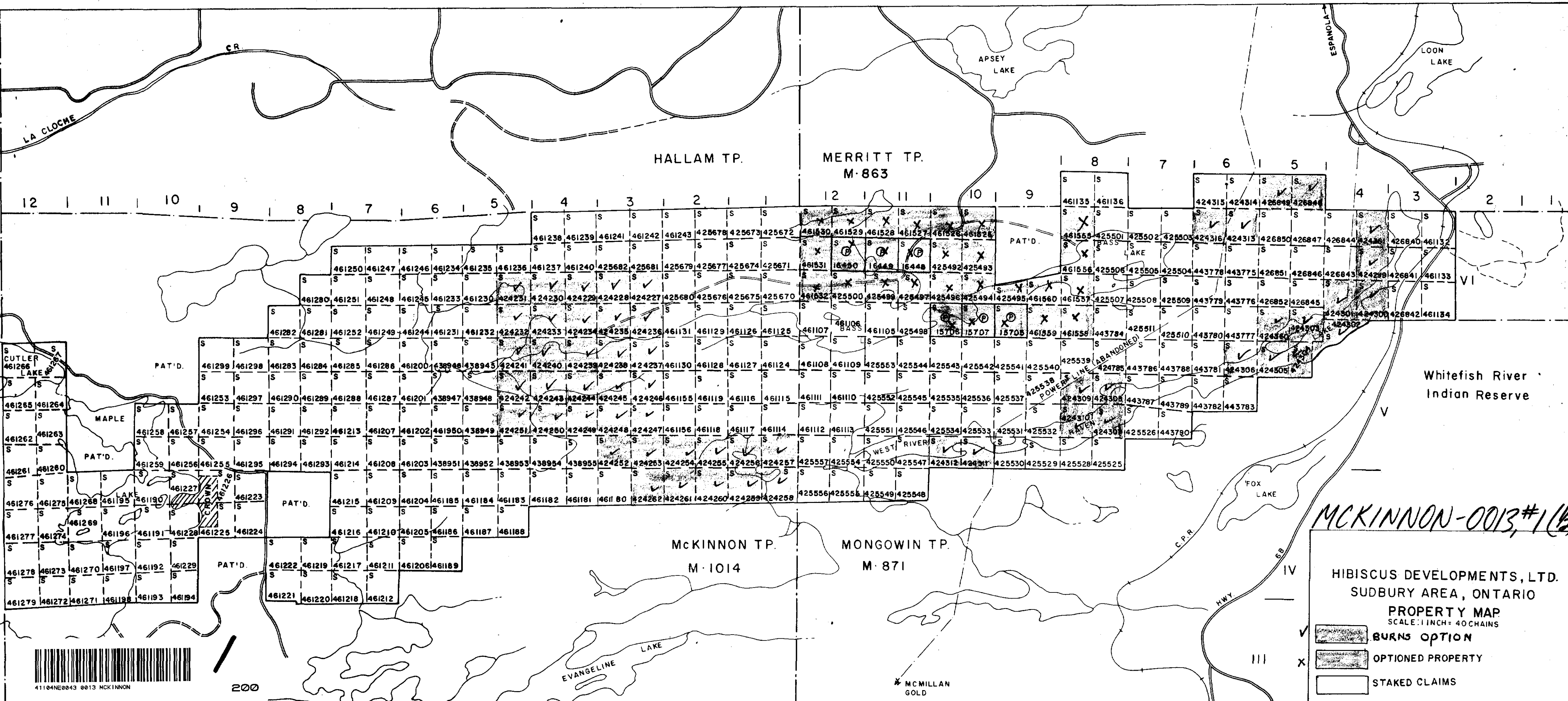
*Oct. 12/76 - GP - line cutting*

Ministry of Natural Resources  
Ontario Surveys and Mapping Branch

Date September 75 Plan No. **M.863**

Whitney Block  
Queen's Park, Toronto

1/2



HARROW T.P.

VI

V

IV

III

HALLAM TP.

MERRITT TP.  
M-863

McKINNON TP.  
M-1014

MONGOWIN TP.  
M-871

MCKINNON-0013, #1 (1/2)

HIBISCUS DEVELOPMENTS, LTD.  
SUDBURY AREA, ONTARIO  
PROPERTY MAP  
SCALE: 1 INCH = 40 CHAINS

- ✓ [Symbol] BURNS OPTION
- X [Symbol] OPTIONED PROPERTY
- [Symbol] STAKED CLAIMS



200

MC MILLAN GOLD

2/2

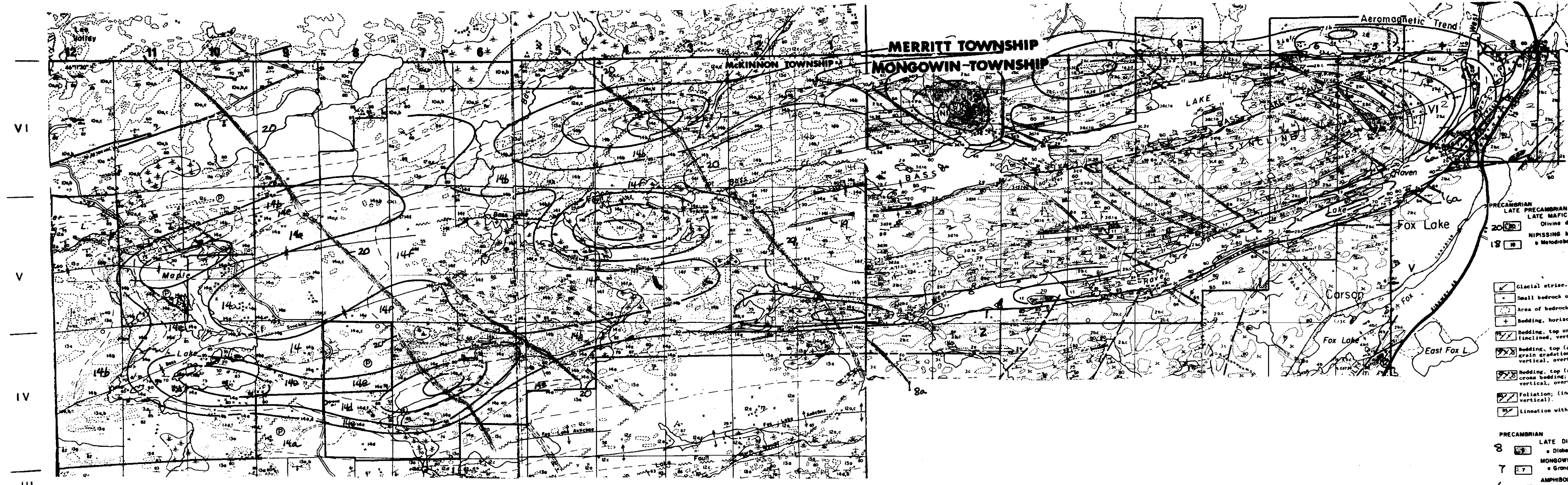
HALLAM TP.

MERRITT TOWNSHIP

MCKINNON TOWNSHIP

MONGOWIN TOWNSHIP

HARROW T.P.



Geology taken from Ontario Division of Mines map P391 by K.D. Cord and P794 by J.A. Robertson. Aeromagnetic survey from Ontario Division of Mines map 1522 G

- JONGANDA FORMATION**
- 14 [Symbol] Polymictic paraconglomerate - protoquartzite matrix
  - 2 [Symbol] Polymictic paraconglomerate - gneissic matrix
  - 1 [Symbol] Polymictic paraconglomerate - laminated to non-laminated argillite matrix
  - 1 [Symbol] Polymictic orthoconglomerate
  - 3 [Symbol] Massive to laminated argillite, siltstone
  - 2 [Symbol] Protoquartzite to feldspathic quartzite
  - [Symbol] BRECCIA
- PRECAMBRIAN LATE MAFIC INTRUSIONS**
- 20 [Symbol] Diabase
  - 18 [Symbol] NIPISSING MAFIC INTRUSIONS
  - [Symbol] Metadiabase (epidiorite), amphibolite

- GEOLOGICAL AND MINING SYMBOLS**
- [Symbol] Glacial striae
  - [Symbol] Small bedrock outcrop
  - [Symbol] Area of bedrock outcrop
  - [Symbol] Bedding, horizontal
  - [Symbol] Bedding, top unknown; (inclined, vertical)
  - [Symbol] Bedding, top (arrow) from grain gradation; (inclined, vertical, overturned)
  - [Symbol] Bedding, top (arrow) from cross bedding; (inclined, vertical, overturned)
  - [Symbol] Foliation; (inclined, vertical)
  - [Symbol] Lineation with plunge
  - [Symbol] Geological boundary, observed
  - [Symbol] Geological boundary, position interpreted
  - [Symbol] Fault; (assumed)
  - [Symbol] Jointing; (horizontal, inclined, vertical)
  - [Symbol] Drag folds with plunge
  - [Symbol] Anticline, syncline, with plunge
  - [Symbol] Drill hole; (vertical, inclined)
  - [Symbol] Vein, vein network
  - [Symbol] Shaft; depth in feet

- PRECAMBRIAN**
- 8 [Symbol] LATE DIABASE INTRUSIONS
  - [Symbol] Diabase
  - 7 [Symbol] MONGOWIN PLUTON
  - [Symbol] Granophyre ultrabasic intrusion
  - 6 [Symbol] AMPHIBOLITE & LAMPROPHYRE INTRUSIONS
  - [Symbol] Amphibolite
  - 5 [Symbol] GABBROIC INTRUSIONS
  - [Symbol] Pyroxene gabbro

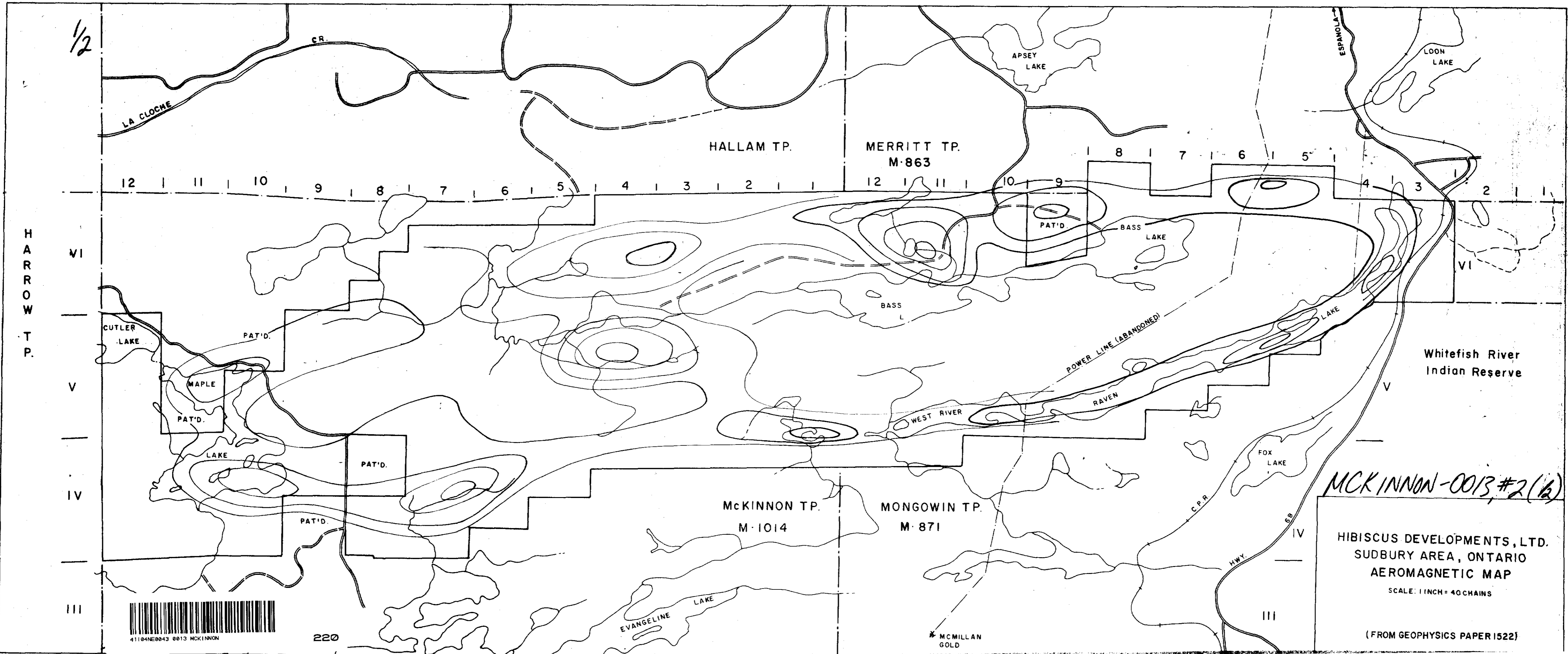
HIBISCUS DEVELOPMENTS, LTD.  
 SUDBURY AREA, ONTARIO  
 GEOLOGY MAP  
 of  
 STAKED and OPTIONED PROPERTY  
 SCALE 1 INCH = 40 CHAINS



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MCKINNON-0013, #1 (2/2)

1/2



HARROW T.P.

HALLAM TP.

MERRITT TP.  
M-863

MCKINNON TP.  
M-1014

MONGOWIN TP.  
M-871

Whitefish River  
Indian Reserve

MCKINNON-0013, #2 (b)

HIBISCUS DEVELOPMENTS, LTD.  
SUDBURY AREA, ONTARIO  
AEROMAGNETIC MAP

SCALE: 1 INCH = 40 CHAINS

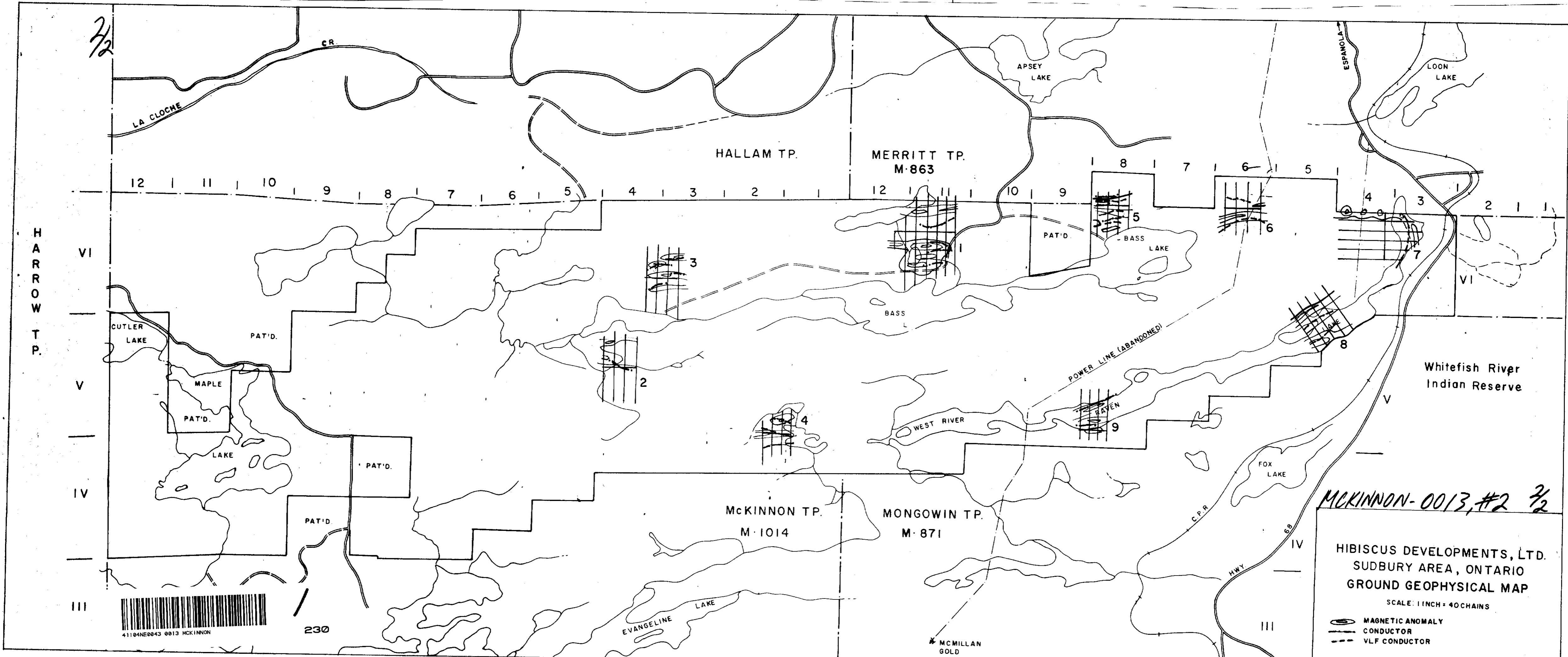
(FROM GEOPHYSICS PAPER 1522)



220




MCMILLAN  
GOLD

7/2



MCKINNON-0013, #2 7/2

HIBISCUS DEVELOPMENTS, LTD.  
 SUDBURY AREA, ONTARIO  
 GROUND GEOPHYSICAL MAP  
 SCALE: 1 INCH = 40 CHAINS

 MAGNETIC ANOMALY  
 CONDUCTOR  
 VLF CONDUCTOR



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