



41115SE0065 0030 RATHBUN

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MINING LANDS SECTION

GEOLOGICAL REPORT

ON THE

MATAGAMISI LAKE PROPERTY,

SUDBURY AREA, ONTARIO.

FOR

NEW AUGARITA PORCUPINE MINES LTD.

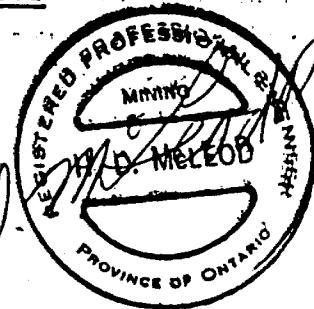
by

H.D. McLeod, P.Eng.

Geological Engineering Services

North Bay, Ontario.

October, 1983.



LIST OF MAPS

Map No.

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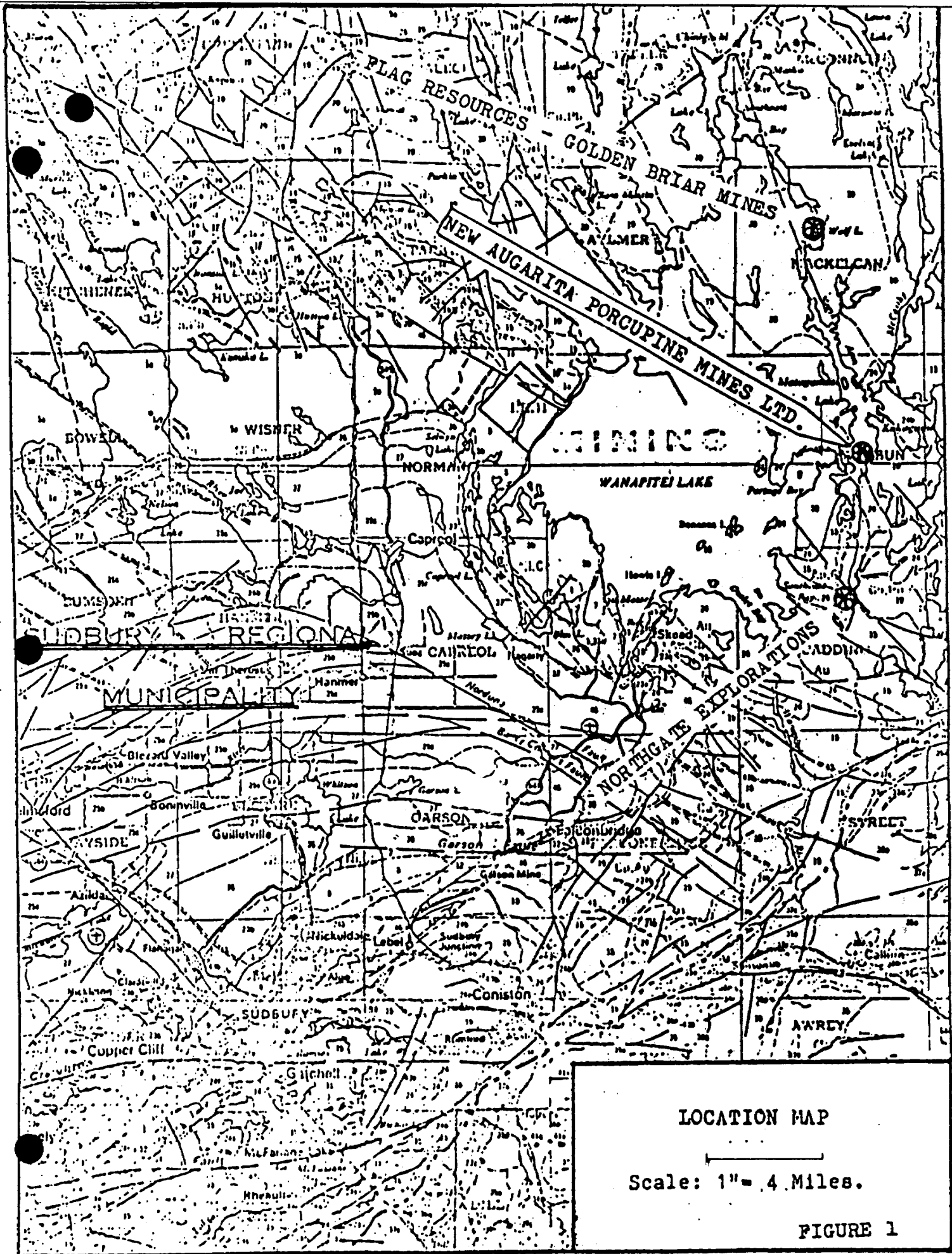
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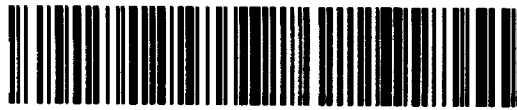


LOCATION MAP

Scale: 1" = 4 Miles.

FIGURE 1

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SUMMARY

The New Augarita Porcupine Mines property in Rathbun Township, Sudbury Area, Ontario was optioned from W & J Mackie in 1983. The claims were staked to cover the old Last Chance Mine gold deposit, a gold-bearing breccia, other gold-bearing quartz veins and the extension of one of the Crystal Mine's highgrade veins. Extensive work between 1888 and 1911 developed the Crystal Mine and Last Chance Mine veins, considerable gold production being reported. Intermittent exploration on the various occurrences within and adjacent to the claims has been carried out since 1911.

Geophysical surveys were completed over the land portion of the six eastern claims of the group where the Last Chance veins, the breccia zone and other gold-bearing veins are reported to occur. Geological investigation of nine geophysical anomalies outlined explained two as sulphides. The remainder have no obvious sources. The gold-bearing quartz veins have insufficient sulphide content to react to the surveys.

Exploration of the known veins for highgrade gold deposits and exploration of the quartz-gabbro intrusive, with which the veins are associated, for additional deposits is considered warranted. Exploration of the "Breccia Zone" and exploration for other similar structures is warranted on the basis of favourable results on similar structures to the south and north ---Northgate Explorations and Flag Resources-Golden Briar Mines respectively.

INTRODUCTION

The New Augarita Mines Ltd. property in Rathbun Township, Sudbury District, Ontario was acquired by option from W. Mackie and J. Mackie of North Bay in 1983. The claims were staked by the Mackies to cover the Last Chance Mine Occurrence, other known gold-bearing veins, a gold-bearing breccia zone and the northeastern extension of the Crystal Mine vein. These gold deposits were worked mainly during the period 1888 to 1911, however intermittent work was carried out up to 1944. Production is reported from the Last Chance Mine and Crystal Mine deposits.

In 1983 Rayan Explorations of North Bay were contracted to complete line cutting and geophysical surveys over that portion of the claims lying to the east of Matagamisi Lake. These surveys covered the Last Chance Mine veins, the breccia zone and other showings. A report on the geophysical surveys - magnetometer, VLF EM, I.P. Chargeability, I.P. resistivity - by R.J. Meikle accompanies.

In October 1983 the writer was contracted to make a geological investigation of the interesting geophysical anomalies and subsequently asked to prepare a detailed report. Two days were spent in the field on the geological investigation.

For the purpose of this report all available references to the occurrences within and close to the claims in Federal and Provincial publications were researched. Information provided by the Mackies from other sources including the Resident Geologists files in Sudbury are included.

Reference is made to the Northgate Explorations Scadding Township deposit to the south and to the Golden Briar Mines-Flag Resources exploration in Mackelcan Township to the north as these are considered to reflect possibilities on the New Augarita group. This report is a product of a study of available information, a brief geological examination of part of the property and a study of the geophysical survey results, the methods thoroughly familiar to the author.

The author's certificate is appended.

PROPERTY

The New Augarita Porcupine Mines Ltd. option consists of 15 contiguous unpatented mining claims numbered S608351, S608352, S608354, S608355, S608356, S608358, S608456, S608457, S608458, S608459, S608460, S608461, S608462, S608463 and S608464. The claims are presently held in the name of Percy W. Bishop of New Augarita. No assessment work has been applied to date, the claims being under extension to May 31, 1984. The claims were staked by W. Mackie and J. Mackie and optioned to New Augarita, the claims now wholly owned by the Company subject to the terms of the option agreement.

LOCATION AND ACCESS

The claims cover a portion of the south end of Matagamasi Lake, islands in the lake and some adjoining land in the central part of Rathbun Township, Sudbury Mining Division, a distance of approximately 28 miles northeast of Sudbury, Ontario.. Location and claim maps are included.

Access to the property is by the Kukagami Lake road which goes north from highway 17 at a point six miles to the east of Wahnapitei. The road leads to the south end of Matagamisi Lake, a distance of approximately 16 miles. From there a short boat trip is required.

HISTORY

Crystal Mine

- 1888 - the Crystal veins discovered.
- 1888 - 1894 - surface work, four shafts, the main shaft to 100 feet, adit to 106 feet.
- 1895 - 1897 - a 5-stamp mill installed and considerable (no records) gold production.
- 1907 - the mine re-opened by the Crystal Mining and Milling Company.
- 1907 - 1911 - gold production recorded (no confirming data).
- 1925 - 1926 - Crystal Comstock Mines - no.4 inclined shaft deepened to 210 feet, approximately 210 feet of drifting on the 200-foot level, some cross-cutting. Some diamond drilling.
- 1936 - some underground work, hand cobbing of highgrade reported.
- 1944 - Sylvanite Gold Mines - surface investigation, two drill holes totalling 378 feet.
- 1963 - 1970 - Little AG Mines Ltd - geophysical survey, surface work, diamond drilling.

New Augarita Property

- 1892 - Last Chance Mine - J. Larose and H. Ranger located gold-bearing quartz veins, some trenching.
- 1892 - ? - Last Chance Mine - shaft to approximately 35 feet, small mill erected, approximately \$30,000.00 in gold produced (no official record)
- 1907 - 1935 - intermittent surface work.
- 1936 - the claims re-staked as they had lapsed.
- 1944 - a drill moved to the property however no drilling done due to a dispute.
- 1949 - Vanda Mines - three drill holes totalling 925 feet for assessment purposes.
- 1968 - Kennco Explorations - airborne electromagnetic and radiometric surveys.

Comstock Mine

- 1897 - Comstock Gold Mining and Development Company - shaft to 102 feet, lateral work on the 90-foot level.

Gordon Mine

- 1895 - shaft sunk to 40 feet, two diamond drill holes.

REFERENCES

- (1) - Ontario Bureau of Mines Vol. 5, 1895, P. 263*
- (2) - Ontario Bureau of Mines Vol. 6 1896. Pgs. 57, 125, 126.
- (3) - Ontario Bureau of Mines Vol. 7, 1897, Pt. 1.*
- (4) - Ontario Bureau of Mines Vol. 7, 1897, Pt. 2.
- (5) - Ontario Bureau of Mines Vol. 17, 1908.
- (6) - Ontario Bureau of Mines Vol. 18, Pt. 1, 1909.

- (7) - Geological Survey of Canada Memoir 95, 1917 - "Onaping Map Area", W.H. Collins.*
 - (8) - Ontario Dept. of Mines Vol. 30, Pt. 2, 1921 - "Ontario Gold Deposits", P.E. Hopkins.
 - (9) - Geological Survey of Canada Summary Report 1921, Pt. D "Wahnapitei Map Area", T.T. Quirke.
 - (10) - Canada Department of Mines Memoir 192, 1936 - "Gold Occurrences East of Lake Superior", E.D. Kindle.
 - (11) - Canada Department of Mines and Resources Economic Geology Series No. 15 - "Canadian Lode Gold Areas", 1946, H.C. Cooke.
 - (12) - Ontario Geological Survey Preliminary Map Pl609 - "Rathbun Township", 1978.
 - (13) - Ontario Geological Survey Mineral Deposits Circular No. 18 - "Gold Deposits of Ontario, Part 2", 1979.
 - (14) - Ontario Geological Survey Preliminary Map 2197, Sudbury Data Series - "Rathbun Township", 1981.
 - (15) - Summary of Information and Sudbury Office Assessment Records - W. Mackie.
 - (16) - Verbal Information Provided by W. Mackie and J. Mackie.
- * - Not available to the author.

GEOLOGY

General - The most recently published data - O.G.S. Preliminary Map 1609, Rathbun Township, 1978 - shows the claims area to be underlain by Gowganda wackes and Nipissing quartz diabase in approximately equal proportions.

The wackes are a massive poorly bedded fine-grained siliceous sediment occupying the southeastern one-half of the claims area, probably underlying the most northerly claim-water claim S608464, and forming a narrow north-south band on claim S608354. Bedding is not common, however, where noted,

strikes N10°W to N10°E and dips from 20° to 50° to the east.

The quartz gabbro is a uniform massive medium-to coarse-grained intrusive forming an irregular plug-like mass underlying the central and west-central sections of the group. A north-south striking tongue extends south into the wackes in the southeastern part of the claims. The most westerly claim-S608456 - lies within the eastern part of a second quartz gabbro intrusive centered to the west. The quartz gabbro is intrusive and probably cross-cutting, however the true attitude is uncertain.

The geology of that portion of the claims examined by the author conforms well to that shown on the O.G.S. Preliminary Map.

Mineral Deposits

Last Chance Mine - Reference # 2 - "Two principal parallel veins have been discovered running east and west and a slight dip to the south, with several stringers or small veins running in the same direction. Work has been done on the two principal veins,---one of the veins has been traced by the outcropping quartz for a quarter of a mile, and the other for fully 300 feet. Stripping has been done in several places on the longer traced vein and a test shaft sunk twelve feet. Another shaft---was down eight feet, showing sulphide iron mixed with quartz. The other larger vein---has been opened by stripping for a few hundred feet, showing the width of vein to be 14 inches. On the hill above the lake,----there is a large band of mineral quartz, the small stringers running in the same direction as the other veins; some of them when opened showed liberal free gold".

Reference # 4 - "At the Last Chance---may be seen a vein

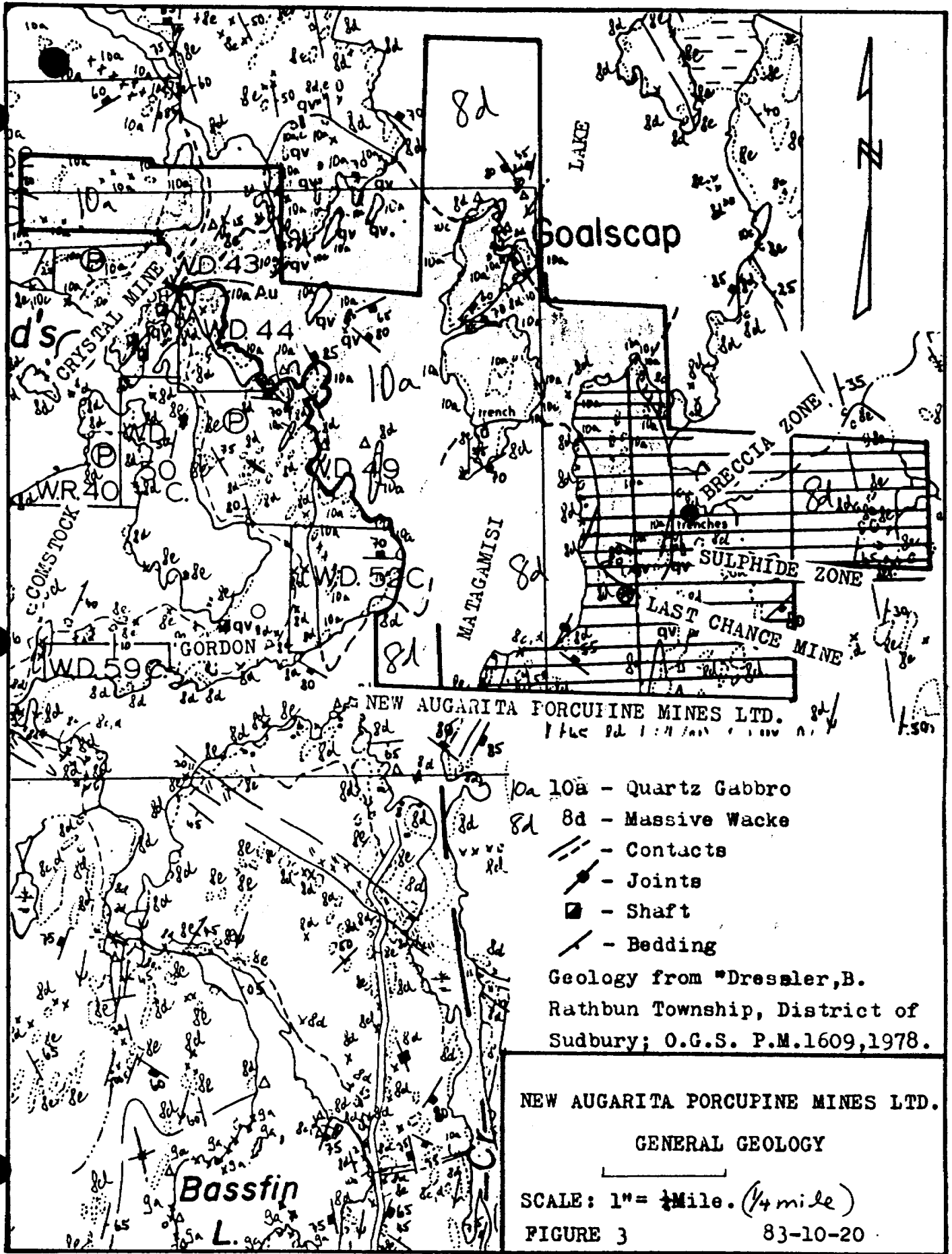
six or eight inches wide, said to be traceable for a long distance. It runs about 10° south of east and dips slightly to the south. The country rock is diabase. The quartz looks well and carries free gold---a shaft, which was 18 feet deep. There are several other veins of similar size on the property, but not so rich as the one worked."

Reference # 10 - "This property on Lake Matagamasi---in Rathbun Township. Between 1892 and 1897 two shallow shafts were sunk on quartz veins".

Reference # 15 - Previous to the turn of the century \$35,000.00 in gold at \$20.00 per ounce was mined from one shallow shaft".

Reference # 16 - "The old trenches and shafts were located but are now filled in and overgrown. A small slimes area and foundations indicate a small mill in production".

Breccia Zone - Reference # 15 - "East of the sill a large breccia zone (claim 608355) was opened up for a length of 700 feet. This zone was 250 feet wide at the west end where it came in contact with the diabase sill and 150 feet wide at the east end where it dipped under a swamp. On the south contact of this zone striking in an east-west direction is a porphyry dike. The mineralization in this zone was identified as a gold-bearing nickeliferous arsenide. Channel samples of this zone showed nickel values from 3% to 10% nickel per ton. Gold assays shown in dollars gold per ton with gold at \$35.00 per ounce were as follows: \$77.00, \$19.00, \$5.40, \$3.15, \$2.10, \$0.70. All visible gold was removed from the samples. Gold assays were higher near the porphyry contact and tapered off towards the north. One hundred and eighty ozs of small nuggets and wire gold was recovered from a rich pocket in a short



- 10a - Quartz Gabbro
- 8d - Massive Wacke
- - Contacts
- - Joints
- - Shaft
- - Bedding

Geology from "Dressler, B.
Rathbun Township, District of
Sudbury; O.G.S. P.M.1609,1978.

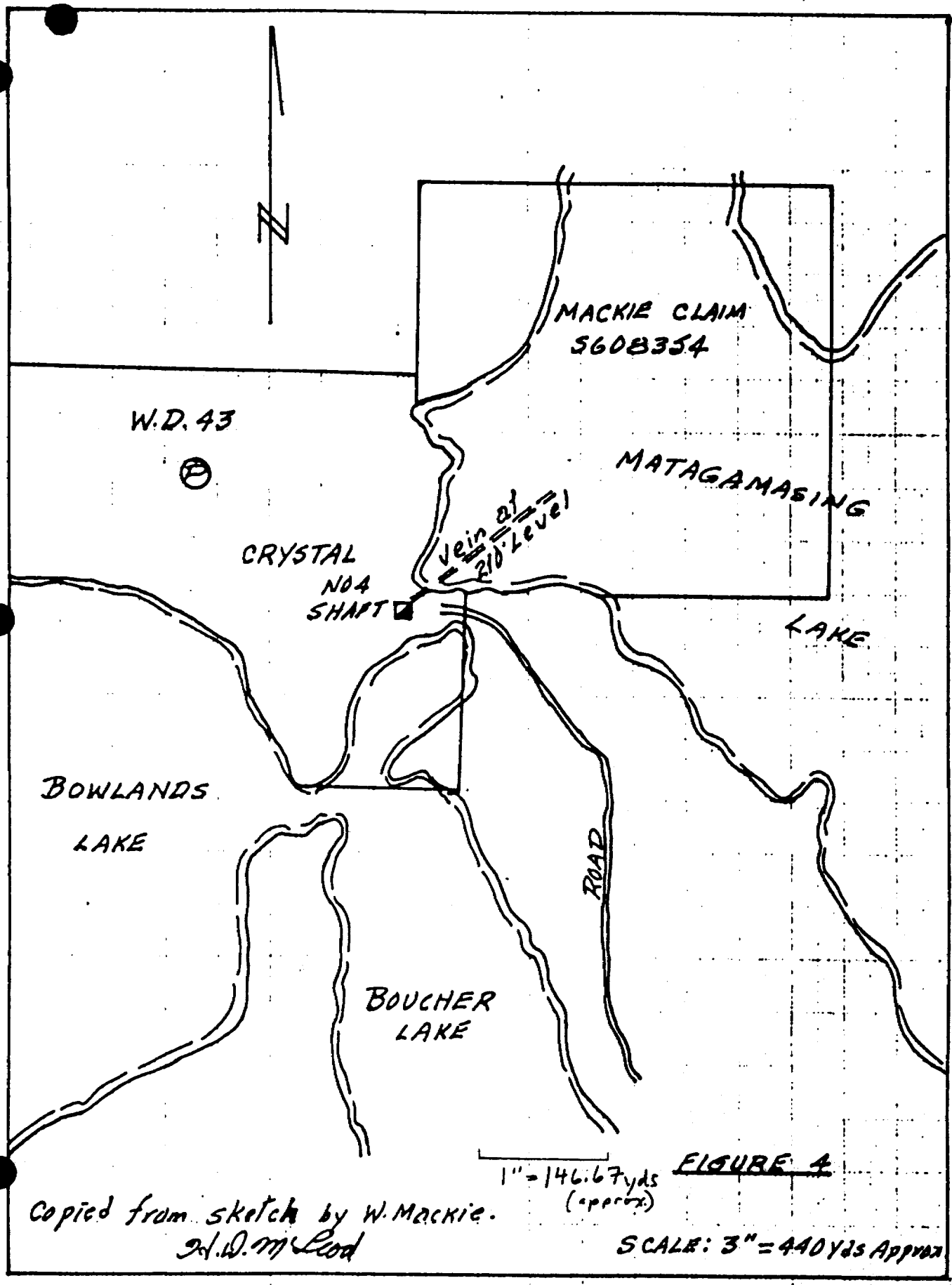
NEW AUGARITA PORCUPINE MINES LTD.

GENERAL GEOLOGY

SCALE: 1" = 1/4 Mile. (1/4 mile)

FIGURE 3

83-10-20



Copied from sketch by W. Mackie.
A.D. M. God

1" = 146.67 yds
(approx)

FIGURE 4

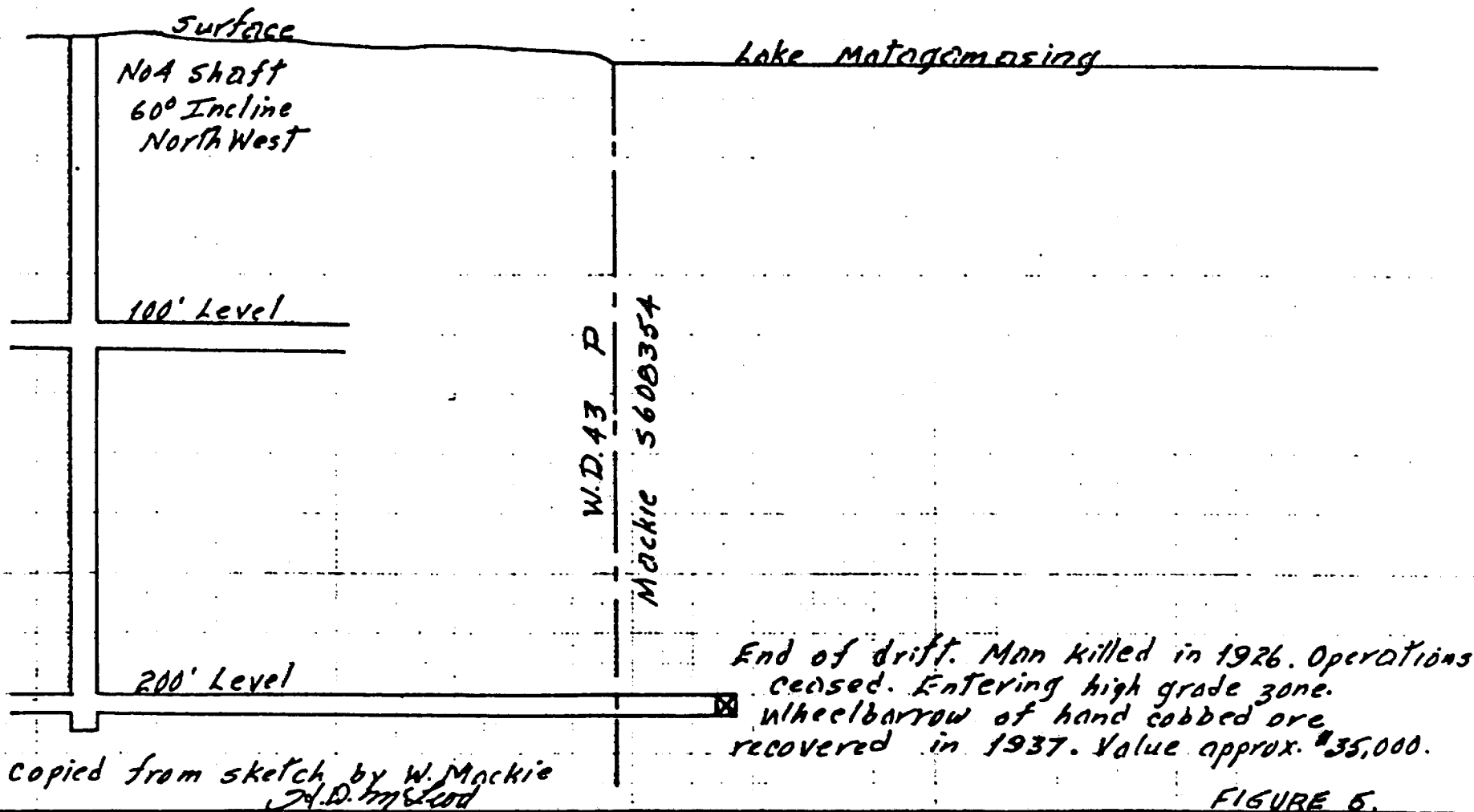
SCALE: 3" = 440 Yds Approx

narrow shallow section at the porphyry contact".

Crystal Mine - Reference #2 & #4 Summarized - "Two veins run east and west and five shafts have been sunk with lateral work at various levels as follows: No. 1 shaft depth 100 feet, lateral work on two levels totalling 265', raising 35'; No. 2 incline shaft or adit depth 60', lateral work 62'; No. 3 shaft depth 50'; No. 4 shaft depth 35', lateral work 15'. Comments "No. 1 shaft---cut the vein at 85'----and proved to be rich in free gold". No. 2 shaft----showed the vein to improve in size and quality". "----near No. 3 opening a vein about 2 feet wide has been uncovered for a distance of 55 feet and is richly studded with free gold". "About 200 tons of fine appearing ore were on the dumps". "A large amount of development work has already been done and about 500 tons of ore mined and four times that much in sight". "A 5-stamp mill----had just finished its first run----. The brick of gold just secured was said to represent about \$15 per ton of ore crushed".

Reference # 10 - "A description of the Crystal Mine has been given by W.H. Collins (Reference #7)" - "The mine is located on the contact between banded greywacke and greenish arkose, belonging to the Cobalt series, and an intrusive mass, probably a sill, of diabase similar in outward appearance to the other post-Cobalt diabases of the region. The normal dip of the Huronian beds is 25° or less, but near the diabase they are more steeply inclined and the contact itself is often marked by a crush breccia of both intruded and intruding rocks. In the small hill that contains the mine workings both diabase and sediments are intersected by numerous quartz veins usually less than a foot wide. These veins consist of quartz and a

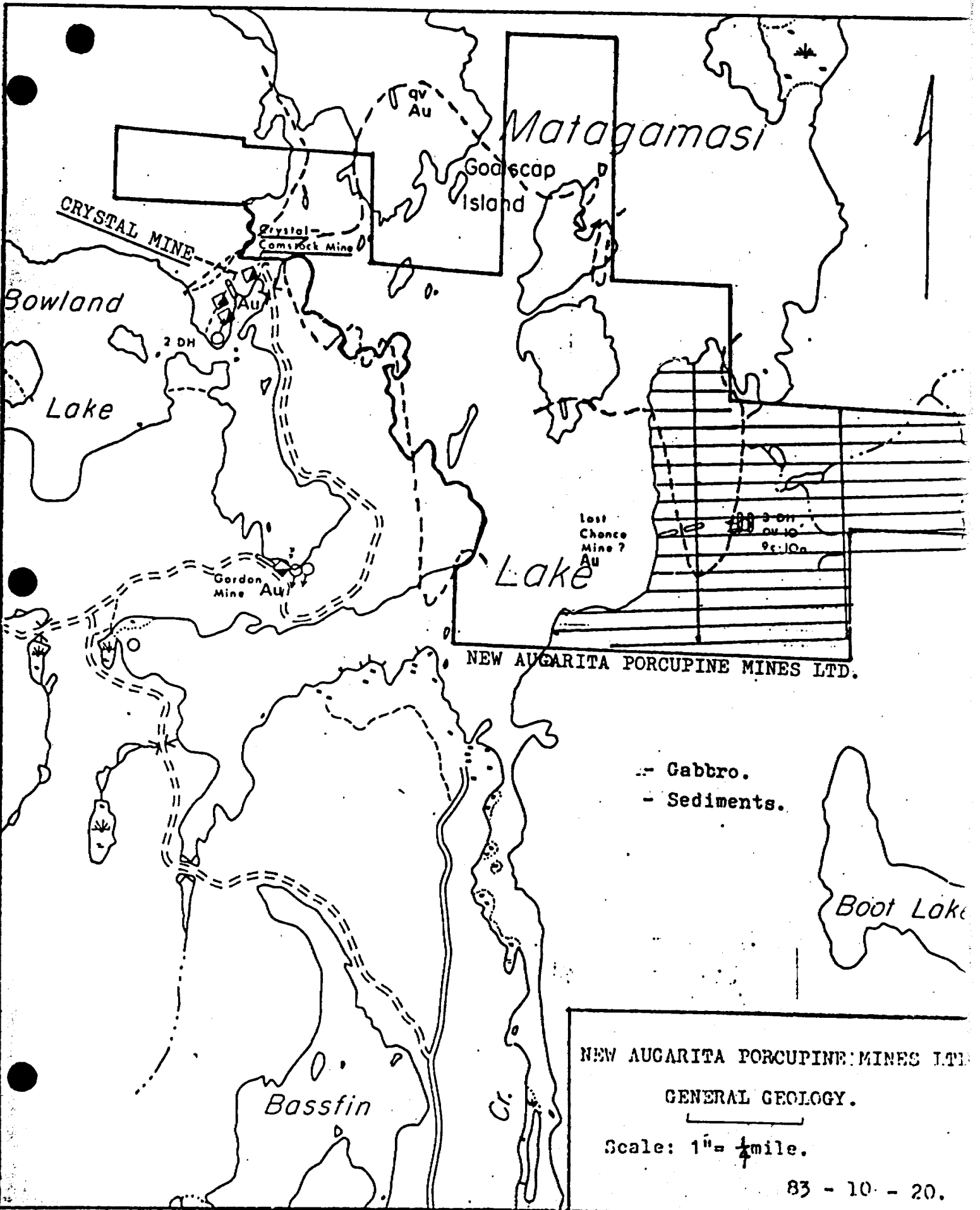
CRYSTAL MINE



End of drift. Man killed in 1926. Operations ceased. Entering high grade zone. Wheelbarrow of hand cobbled ore recovered in 1937. Value approx. \$35,000.

Copied from sketch by W. Mackie
J.D. McLeod

FIGURE 5.



pink or pale brown carbonate of magnesium and iron (breunnerite), the breunnerite weathering when exposed on the ore dump to a characteristic deep bronze colour. The gangue of quartz and breunnerite carries pyrite and native gold. The pyrite is evidently copper-bearing because it takes on brassy and purple weathering discolorations. The gold occurs in visible form often in pieces of considerable size. The Huronian wall-rock for about 6 inches away from the veins is bleached and strongly impregnated with crystals of breunnerite and with pyrite".

"A 5-stamp mill in use and considerable gold was produced. The mine is reported to have been reopened in 1907----and gold production was recorded until 1911".

References #15 & #16 - "The No. 4 shaft was deepened to 210 feet and 210 feet of drifting plus an unspecified amount of cross-cutting done on the 200-foot level. The drift runs north-east along the vein crossing into present claim S608354. It is reported that highgrade gold ore was encountered and hand cobbled; also that operations ceased due to an accident causing the death of one man".

Comstock - Reference #13 - "The property is underlain by southeast-trending gently-dipping Huronian metasediments which have been intruded by sills and dikes of Nipissing diabase. The main showing is a quartz-carbonate vein which strikes northeast and dips 80°S. It has been exposed by stripping for a distance of 100 feet and tested by a shaft to a depth of 102 feet. Visible gold was reported at a depth of 65 feet in the shaft. Assays reportedly ranged from 3.5 to 12.9 ozs Au per ton. A subsidiary vein, 17 feet from

the main one and running parallel to it, has been stripped for 75 feet".

Gordon - Reference #10 - "The property is situated about one mile south of Bowland Lake in Rathbun Township. A shaft was put down for 40 feet and two diamond drill holes bored in 1895".

Northgate Explorations, Scadding Township - Four miles to the south, Northgate explorations are going into production from an open pit on a chloritised breccia pipe estimated to contain 25,000 tons averaging 0.27 ozs gold per ton. Underground development of two other zones in underway. Total reserves are estimated at 230,750 tons averaging 0.26 ozs gold per ton.

Flag Resources - Golden Briar Mines, Mackelcan Township - Six miles to the north these Companies are actively exploring, by means of extensive diamond drilling, breccia pipes mineralized with pyrite, chalcopyrite and gold.

Investigation of Geophysical Anomalies

An investigation of the geology in the vicinity of the I.P. chargeability and some resistivity anomalies was made. The anomalies are numbered on the accompanying I.P. chargeability and geology maps for reference.

Anomaly 1 - located along the west edge of a prominent bare outcrop ridge of massive gabbro with no evidence of mineralization. No resistivity or magnetic correlation is evident. The extreme south end of the anomaly may correlate with an extensive old trench apparently exploring a quartz vein with possible associated mineralization.

Anomaly 2 - located on gabbro outcrop but possibly related to a narrow (3" to 6" where exposed) quartz vein striking east-west parallel to the lines. Old trenching on the vein is now filled with dirt and rubble preventing examination.

Anomaly 3 - located at the south edge of a prominent bare outcrop massive gabbro hill with no evidence of mineralization. No resistivity or magnetic correlation is evident. A very old dirt-filled trench 100 feet to the west suggests the possibility of quartz veining and accompanying mineralization in the area.

Anomaly 4 - coincides with old trenches and pits on a zone of disseminated and massive veins of pyrite in strongly carbonated sediments. An excellent resistivity anomaly coincides. Flanking strong magnetics suggest the presence of pyrrhotite or magnetite. This apparently is the breccia zone described in the Mackie report. Due to water, rubble and deep oxidation, detailed examination and sampling were impossible. Evidence of the 1949 diamond drilling was noted.

Anomaly 5 - located mostly in overburden on the north slope of a ridge with scattered outcrops of massive gabbro. No obvious source was seen.

Anomaly 6 - coincides in part with a small exposure (3' by 6') of seams and stringers of brassy pyrite in sediments.

Anomaly 7 - located in a shallow overburden valley between outcrops of siliceous sediments. Probably related to a localized concentration of pyrite similar to anomaly 6.

Anomaly 8 - located in a sharp overburden valley between bare outcrop hills of massive barren gabbro. Possibly related to a buried mineralized quartz vein.

Anomaly 9 - located in a partly overburdened area with massive non-mineralized gabbro outcrops. Good resistivity correlation suggests the presence of mineralized material possibly another quartz vein.

A resistivity anomaly to the east of 9+00e tie line coincides with a swamp.

CONCLUSIONS

One I.P. chargeability - resistivity anomaly (No.4) definitely correlates with strong mineralization. Old reports record a porphyry dike with associated vein material and free gold.

Anomaly 6 reflects a limited area of sulphide in sediments, and anomaly 7 is assumed to have a similar source. Neither warrant further interest.

Anomaly 1 (east end), anomaly 2 and possibly anomaly 3 are associated with old trenching on narrow quartz veins reported to carry gold. Further work in the form of trenching is warranted.

Anomalies 8 and 9 have no obvious association with veins or mineralization, however warrant trenching.

The Crystal Mine has recorded gold production from narrow highgrade veins and the records indicate that a highgrade vein extends northward into the south part of claim 608354 on the 200-foot level.

Geophysical surveys might establish the location of this structure however the logical method to check the values and widths is by diamond drilling from the ice in winter.

The New Augarita covers the major part of a quartz gabbro intrusive with which many quartz and quartz-carbonate veins containing significant concentrations of free gold are associated. Extensive work between 1890 and 1911, particularly on the Crystal and Last Chance veins, produced considerable gold at \$20.00 per ounce. The veins are narrow but persistent and the presence of pockets of coarse free gold make them an attractive exploration target at the present prices for gold. Detailed exploration for additional veins is warranted.

The "breccia zone" carries significant gold values and may be considered similar to the Northgate Exploration deposits in Scadding Township and Flag-Resources-Golden Briar Mines occurrences in Mackelcan Township. The former probably will be a viable mine, the latter is an excellent prospect.

These developments combined with the occurrences on and adjacent to the claims makes the New Augarita group an excellent exploration target.

RECOMMENDATIONS

- (1) - Rehabilitation and extension of old trenches on anomalies 1, 2 and 3.
- (2) - Trenching of anomalies 8 and 9
- (3) - Bulldozer trenching of anomaly 4 and the breccia zone followed by cleanup, rock trenching, geology and sampling.
- (4) - Soil sampling for gold in the overburdened area of the gabbro contacts.
- (5) - Diamond drilling of the north extension of the Crystal vein. (Acquisition of the Crystal property would greatly increase the potential of this section)
- (6) - Diamond drilling of other vein structures, geophysical or geochemical anomalies depending on the results of the surface program.

ESTIMATED BUDGET

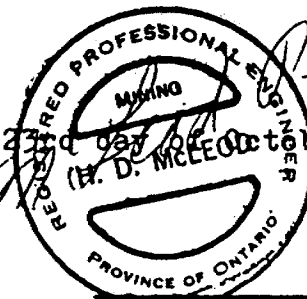
(1) - Surface trenching, sampling, mapping -----	\$20,000.00
(2) - Geochemical sampling 250 samples @ \$35.00	\$ 7,000.00
(3) - Diamond drilling Crystal vein extension	
5 holes - 1800' @ \$25.00 -	\$45,000.00
Engineering, etc,-----	<u>8,000.00</u>
	\$53,000.00
(4) - Diamond drilling of other veins -	
5 holes - 1500' @ \$25.00 -	\$37,500.00
Engineering, etc. -----	<u>8,000.00</u>
	\$45,500.00
Total-----	\$125,500.00
Contingency 15%-----	18,825.00
Grand Total-----	\$144,325.00

CERTIFICATION

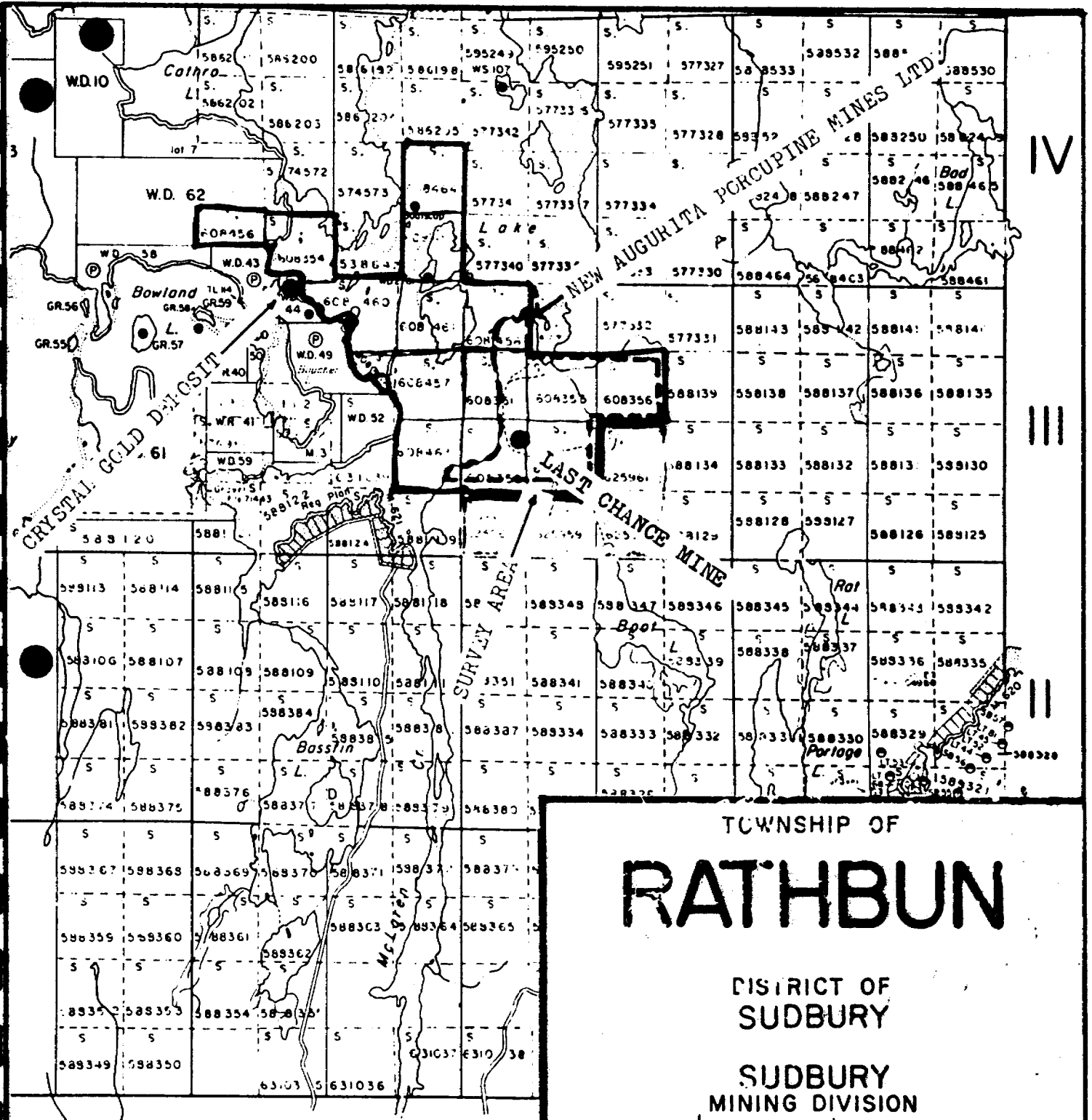
I, H.D. McLeod P. Eng., of 673 Norman Ave., in the City of North Bay, Province of Ontario, certify as follows concerning the report on the New Augarita Porcupine Mines Ltd. Matamagasi Lake Property in the Sudbury Area of Ontario dated October, 1983:

- (1) I am a member in good standing of the Association of Professional Engineers of the Province of Ontario.
- (2) I am a graduate of Queens University, Kingston, Ontario with a BaSc. degree in Geology and Mineralogy obtained in 1946.
- (3) I have been actively practising my profession in Canada for a period of 40 years.
- (4) I have no direct or indirect interest in the property other than professional fees, nor do I expect to receive any.
- (5) The attached report is a product of:
 - (a) Data listed in the references.
 - (b) A field examination of part of the property.
 - (c) A study of the ground geophysical data.

Dated at North Bay, Ontario this 23rd day of October, 1983.



H.D. McLeod P. Eng.



SCADDING TWP.

DR. D.T.
DATE APR /72

PLAN NO. **M.1071**

ONTARIO
MINISTRY OF NATURAL RESOURCES
SUDBURY BRANCH



411155E0065 0030 RATHBUN

900

Mining Lands Section

File No 2.7147

Control Sheet

TYPE OF SURVEY _____ GEOPHYSICAL
_____ GEOLOGICAL
_____ GEOCHEMICAL
_____ EXPENDITURE

MINING LANDS COMMENTS:

L.D. Leg.

J. Hurst

Signature of Assessor

24 09-17

Date



GEOLOGICAL - GEOLOGICAL - GEOCHEMICAL
TECHNICAL DATA STATEMENT

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

Type of Survey(s) GEOLOGICAL
Township or Area RATHBUN TWP.
Claim Holder(s) NEW AUGARITA PORCUPINE
MINES LTD.
Survey Company H.D. McCleod P Eng
Author of Report H.D. McCleod
Address of Author 90 RAVAN EXPL. LTD. RR#2 NORTH BAY
Covering Dates of Survey 22/08/83 - 24/08/83
(linecutting to office)
Total Miles of Line Cut 16

MINING CLAIMS TRAVERSED
List numerically

S 608 351
(prefix) (number)
S 608 352
S 608 354
S 608 355
S 608 356
S 608 358
S 608 456
S 608 457
S 608 458
S 608 459
S 608 461
S 608 463

If space insufficient, attach list

SPECIAL PROVISIONS CREDITS REQUESTED	Geophysical	DAYS per claim
ENTER 40 days (includes line cutting) for first survey.	-Electromagnetic	_____
	-Magnetometer	_____
	-Radiometric	_____
	-Other	_____
ENTER 20 days for each additional survey using same grid.	Geological	<u>20</u>
	Geochemical	_____

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

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

DATE: July 5/84 SIGNATURE: J. Ch... ..
Author of Report or Agent

Res. Geol. _____ Qualifications 63.1050

Previous Surveys

File No.	Type	Date	Claim Holder

TOTAL CLAIMS 12



Ministry of
Natural
Resources

**Technical Assessment
Work Credits**

File
2.7147

Date
1984 09 24

Mining Recorder's Report of
Work No. 84-77

Recorded Holder
NEW AUGARITA PORCUPINE MINES LTD

Township or Area
RATHBUN TOWNSHIP

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical Electromagnetic _____ days Magnetometer _____ days Radiometric _____ days Induced polarization _____ days Other _____ days Section 77 (19) See "Mining Claims Assessed" column Geological _____ 15 days Geochemical _____ days Man days <input type="checkbox"/> Airborne <input type="checkbox"/> Special provision <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/> <input checked="" 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.	S 608351 - 52 608354-55-56 608456-58-59-61-63

Special credits under section 77 (16) for the following mining claims

No credits have been allowed for the following mining claims

<input type="checkbox"/> not sufficiently covered by the survey	<input checked="" type="checkbox"/> Insufficient technical data filed
S 608457	S 608358

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; Section 77(19)—60:
828 (83/6)



Ministry of
Natural
Resources

Report of Work
(Geophysical, Geological,
Geochemical and Expenditures)

The Mining Act

File S-60835/127
Instructions: - Please type or print.
- If number of mining claims traversed exceeds space on this form, attach a list.
Note: - Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
- Do not use shaded areas below.

27147
27147

Type of Survey(s) Geological	Township or Area Rathbun Twp. (M 1271)
Claim Holder(s) New Augarita Porcupine Mines Ltd.	Prospector's Licence No. 1668
Address 3240 Bloor St. W. Toronto M8X 1E4	
Survey Company H.D. McCleod Geological Services	Date of Survey (from A to) 14 09 83 Total Miles of line Cut 16
Name and Address of Author (of Geo-technical report) North Bay, Ontario	

Credits Requested per Each Claim in Columns at right

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
For each additional survey: using the same grid: Enter 20 days (for each)	Geological	20
	Geochemical	
Man Days	Geophysical	Days per Claim
Complete reverse side and enter total(s) here	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	
Airborne Credits	Geophysical	Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	- Electromagnetic	
	- Magnetometer	
	- Radiometric	

Mining Claims Traversed (List in numerical sequence)

Mining Claim		Expend. Days Cr.	Mining Claim		Expend. Days Cr.
Prefix	Number		Prefix	Number	
S	608 351	20			
	608 352	20			
	608 354	20			
	608 355	20			
	608 356	20			
	608 358	20			
	608 459	20			
	608 456	20			
	608 457	20			
	608 458	20			
	608 461	20			
	608 463	20			

RECEIVED
AUG 14 1984
MINING LANDS SECTION
RECEIVED
AUG 13 1984

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures **S** + **15** = Total Days Credits

Instructions
Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

Total number of mining claims covered by this report of work. **12**

For Office Use Only

Total Days Cr. Use Recorded	Mining Recorder
Recorded 240	Shand
Date Approved as Recorded Aug 13 84	Director
	See Revised Statement

Date **July 9, 1984**

Recorded Holder or Agent's Signature **J.C. Archibald**

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying
J.C. Archibald
702-100 Adelaide St. W., Toronto M5H 1S3

Date Certified **July 9, 1984** Certified by (Signature) **J.C. Archibald**

2.7147

608351 4/2

52 1/4

(53) 53 NS

(54) 51 3/4

(55) 55 NA

(56) 56 NC

(459) 45 1/2

(456) 456 ✓

(457) 457 NC

(458) 458 1/2

(461) 461 1/4

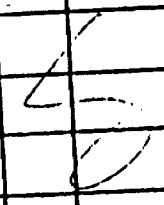
(463) 463 3/4

3 1/2

10x20=200

200²:135=148

=15





Ministry of
Natural
Resources

Ontario

Notice of Intent
for Technical Reports

1984 09 24

2.7147/84-77

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 Land Management Branch, Toronto. The report will be re-assessed and a new statement of credits based on actual days worked will be issued.

1984 09 14

Your File: 84-77
Our File: 2.7147

Mining Recorder
Ministry of Natural Resources
199 Larch Street
Sudbury, Ontario
P3E 5P9

We have received reports and maps for a Geological Survey submitted under Special Provisions (credit for Performance and Coverage) on Mining Claims S 608351 et al in the Township of Rathbun.

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

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: (416)965-6918

A. Barr:sc

cc: New Augarita Porcupine Mines Limited
3240 Bloor Street West
Toronto, Ontario
MBX 1E4



Ministry of
Natural
Resources

Oct/9/84

1984 09 24

Your File: 2.7147
Our File: 84-77

Mining Recorder
Ministry of Natural Resources
199 Larch Street
Sudbury, Ontario
P3E 5P9

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.

For further information, if required, please contact Mr. R.J. Pichette at 416/965-4888.

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3

R/S S. Hurst:mc

Encls.

cc: New Augarita Porcupine Mines Limited
3240 Bloor Street West
Toronto, Ontario
M8X 1E4

cc: Mr. G.H. Ferguson
Mining & Lands Commissioner
Toronto, Ontario

845

1984 10 19

Your File: 84-77
Our File: 2.7147

Mining Recorder
Ministry of Natural Resources
199 Larch Street
Sudbury, Ontario
P3E 5P9

Dear Sir:

RE: Notice of Intent dated September 24, 1984.
Geological Survey on Mining Claims S 608351
et al in the Township of Rathbun.

The assessment work credits, as listed with the
above mentioned Notice of Intent, have been approved
as of the above date.

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

Yours sincerely,

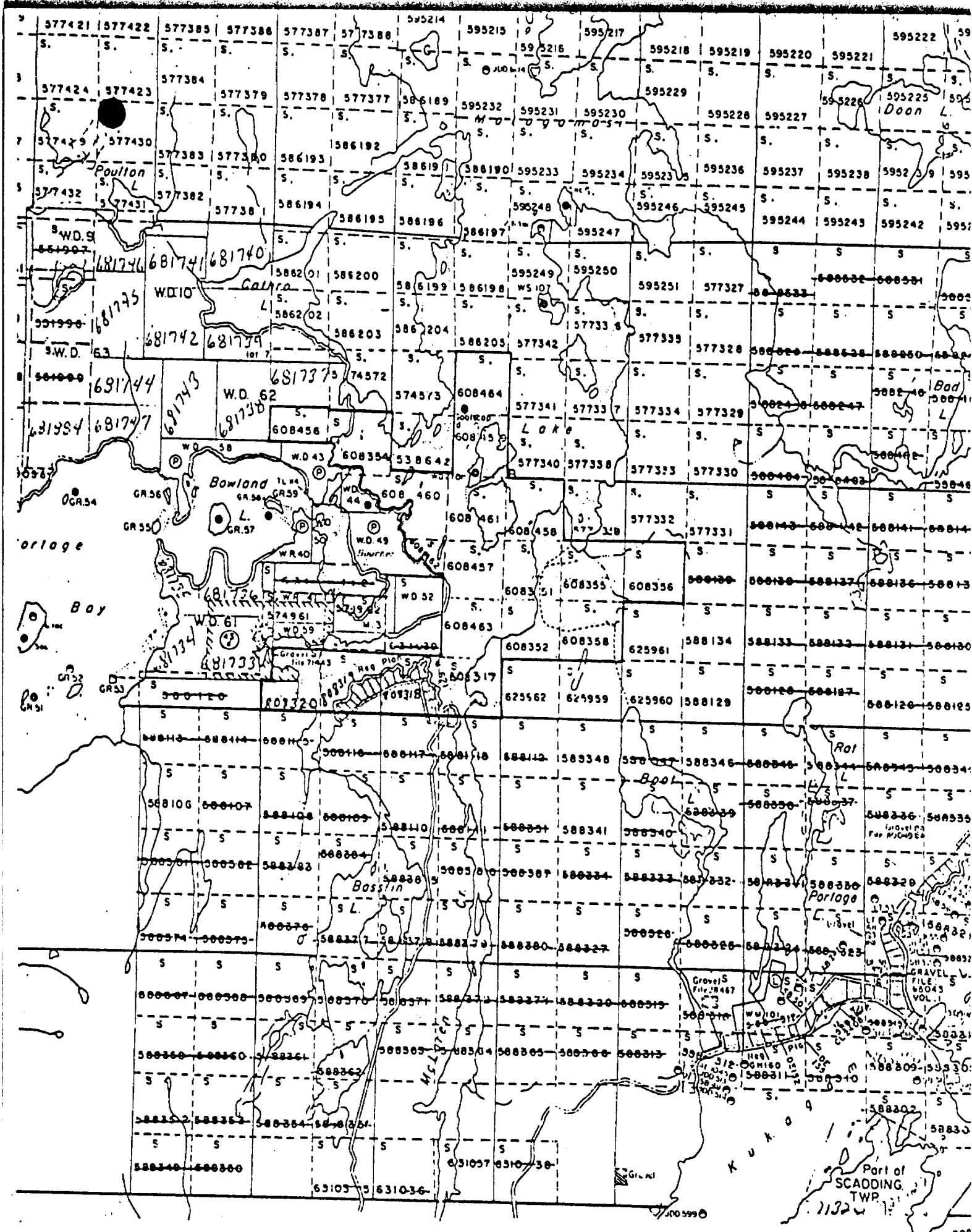
S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: (416) 965-6918

S. Hurst:sc

cc: New Augarita Porcupine Mines Limited
3240 Bloor Street West
Toronto, Ontario
M8X 1E4

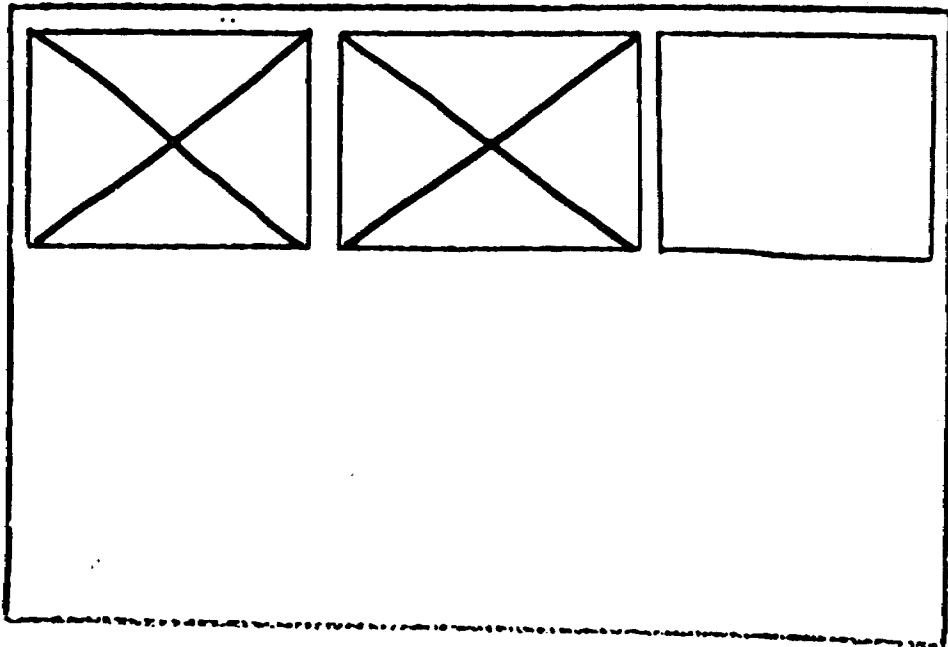
cc: Mr. G.H. Ferguson cc: Resident Geologist
Mining & Lands Commissioner Sudbury, Ontario
Toronto, Ontario

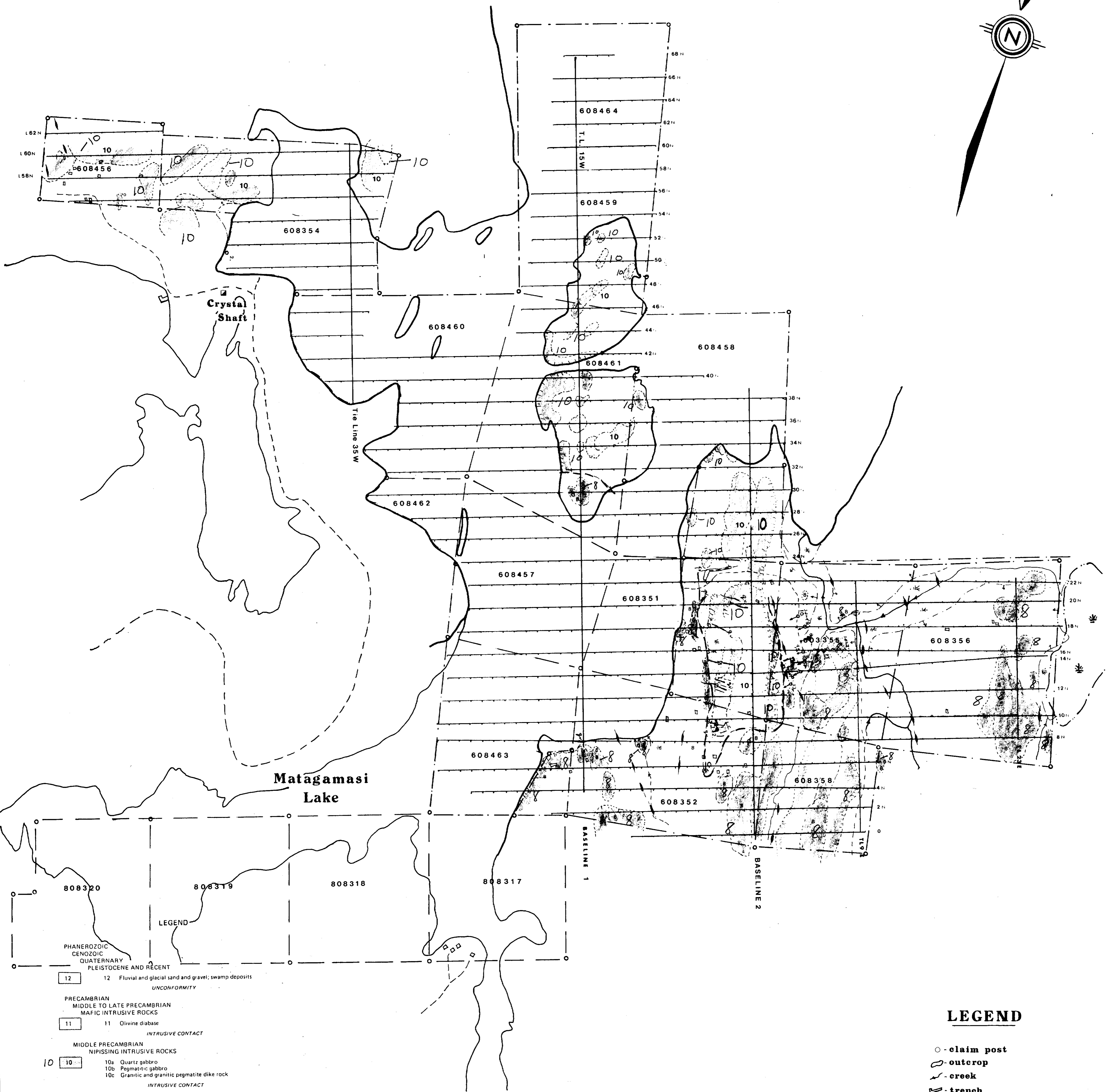
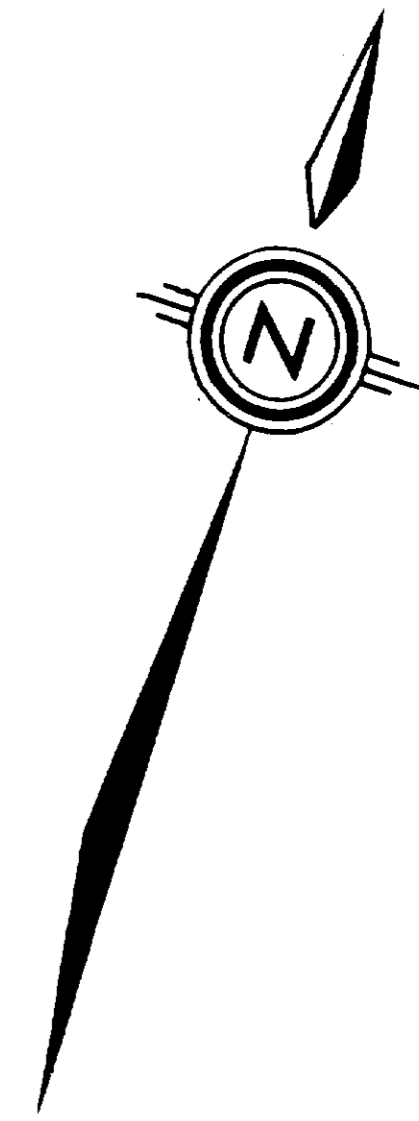


Part of
SCADING
TWP.

SEE ACCOMPANYING
MAP(S) IDENTIFIED AS
RATHBUN-0030, #1, #2

LOCATED IN THE MAP
CHANNEL IN THE FOLLOWING
SEQUENCE (X)



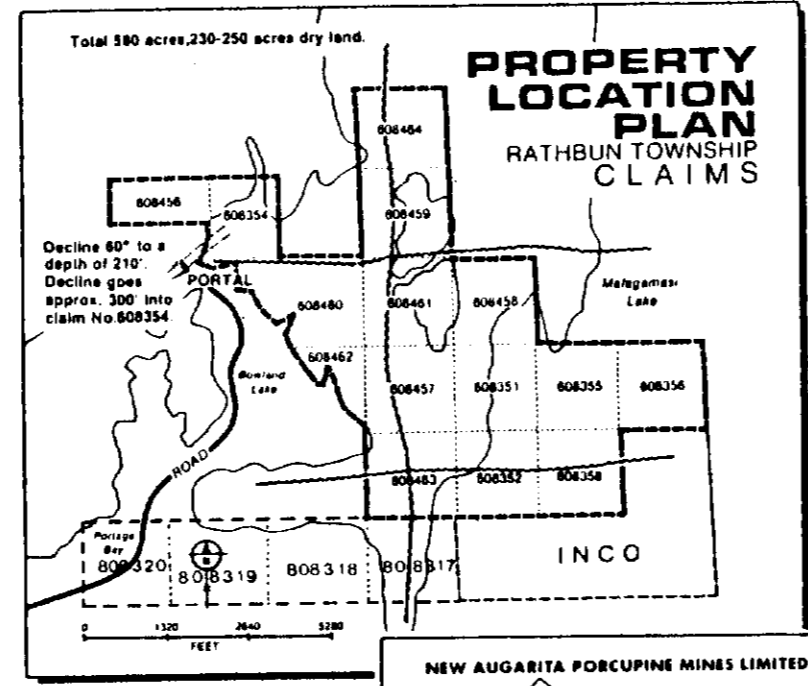


LEGEND

- 12 Fluvial and glacial sand and gravel; swamp deposits
- 11 Olivine diabase
- 10a Quartz gabbro
- 10b Pegmatitic gabbro
- 10c Granitic and granitic pegmatite dike rock
- 9a Pink to pinkish grey arkose
- 9b Grey wacke
- 9c Grey arkose
- 9d Grey to greenish grey arkose
- 8a Orthoconglomerate
- 8b Paraconglomerate
- 8c Arkose
- 8d Massive wacke
- 8e Laminated wacke
- 7 Quartz sandstone
- 6a Limestone, carbonaceous wacke
- 6b Carbonaceous wacke
- 5 Conglomerate
- 4 Quartz sandstone and arkose
- 3 Diabase
- 2 Quartz sandstone, quartz wacke
- 1 Mafic to Intermediate Metavolcanics*

LEGEND

- - claim post
- ◊ - outcrop
- ~ - creek
- ≡ - trench
- ⊠ - shaft
- ☁ - swamp



RATHBUN - 0030, #1

NEW AUGARITA PORCUPINE MINES LTD.

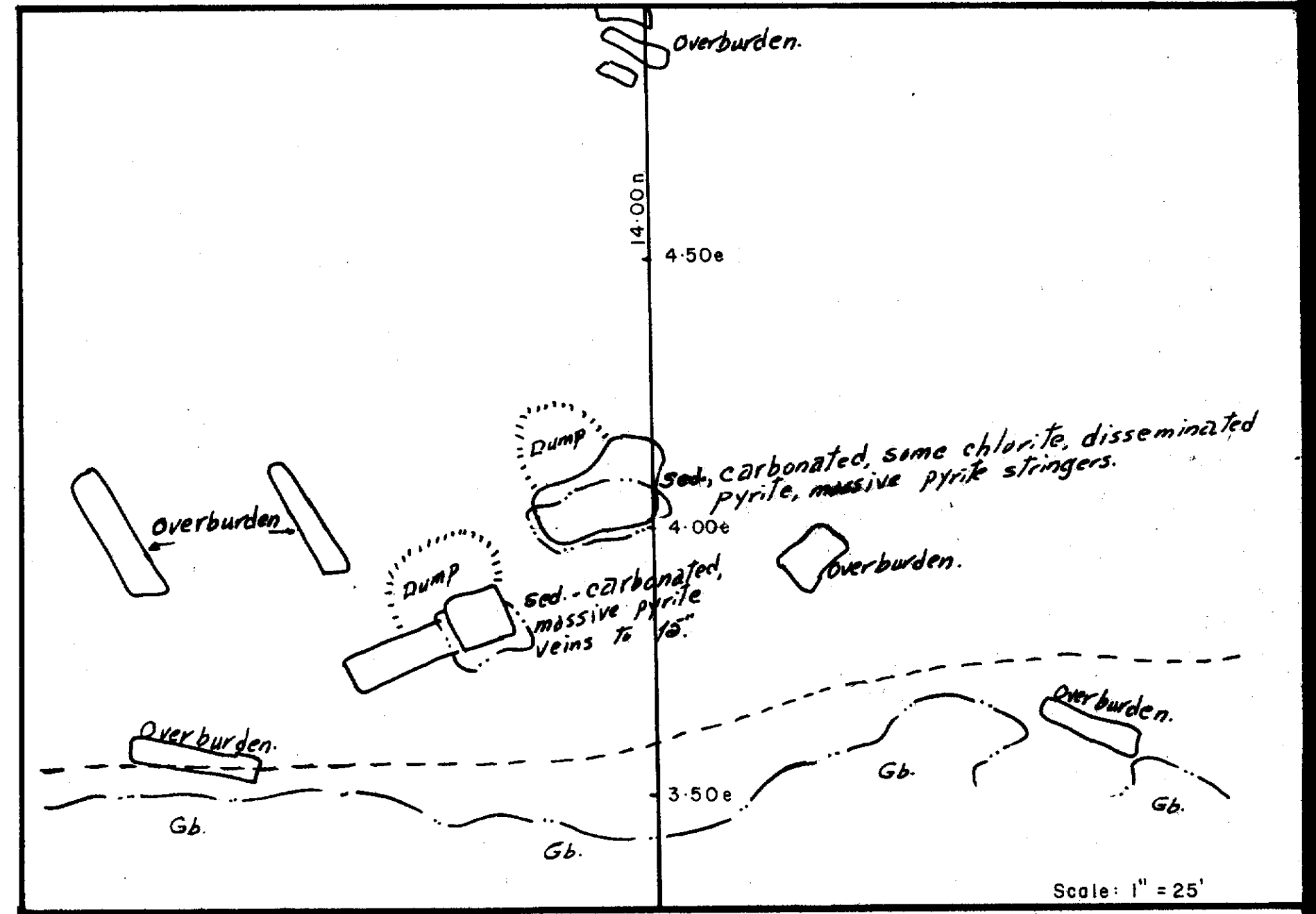
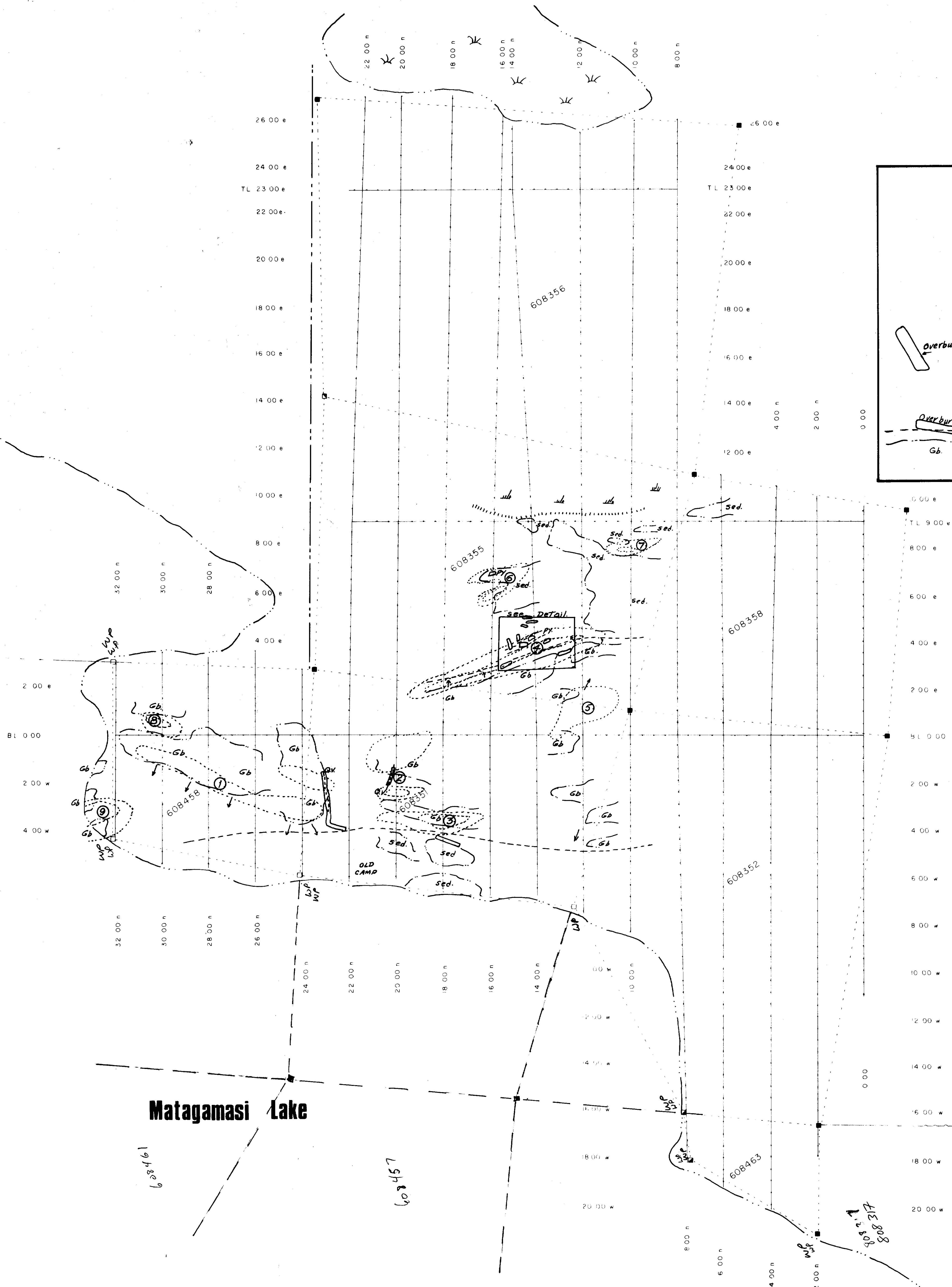
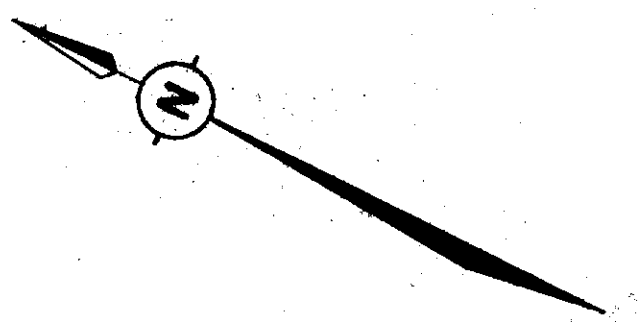
Geological Survey

Scale
1 in. = 400 ft.

2.7147
2.7147

Plate 2



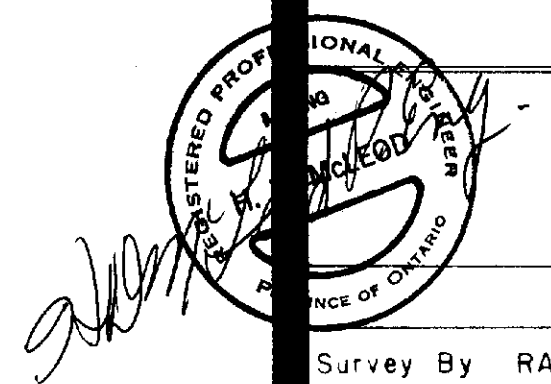


- Gb. - Gabbro
- Sed. - Sediments
- Q.V. - Quartz Vein
- - - - - Outcrop Area Contact
- ↓ - Slope Direction
- - - - - Trench
- ⊙ - I.P. Chargeability Anomaly

Geology By: *S.D. McLeod P.Eng.*

■	Claim Post	—	Boundary Lines
□	Assumed Post	—	Lakes & Ponds
■	Witnessed Post	—	Claim Lines

NEW AUGARITA PORCUPINE MINES LTD.



geology 27147			
Survey By RAYAN EXPLORATION LTD.			
Property MATAGAMASI LAKE PROPERTY			
Twp/Area RATHBUN - SUDBURY MINING DISTRICT			
Prov Ontario	NTS 41	M/OE, ISE	
Drafted P. Belanger	Plotted by	Checked by	
Scale 1" = 200'	Date	September	1983

RATHBUN - 0030 #2

