



42L07NE0001 W9440-00225 MAUN LAKE

010

**Stripping and Sampling
of
East Block
of the
Muriel Lake Property**

August 1994

J.G.Clark



42L07NE0001 W9440-00225 MAUN LAKE

010C

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INTRODUCTION

The Muriel Lake area was identified as having potential to host a base metal deposit after research by Aubrey Eveleigh and Garry Clark turned up significant data in the assessment files at the Ministry of Northern Development and Mines in 1992. The Muriel Lake property was subsequently staked in February of 1992 to cover the historical showings and the airborne anomalies associated with them.

The property is located approximately 300km northeast of Thunder Bay, Ontario in the Beardmore-Geraldton Area. There are two separate claim blocks with a total of 96 claim units.

There are three separate zones of interest: North Zone (Holland-Chellew Occurrence), Galena Vein Zone and the J.J. Perry Zone. All three display significant base metal type mineralization.

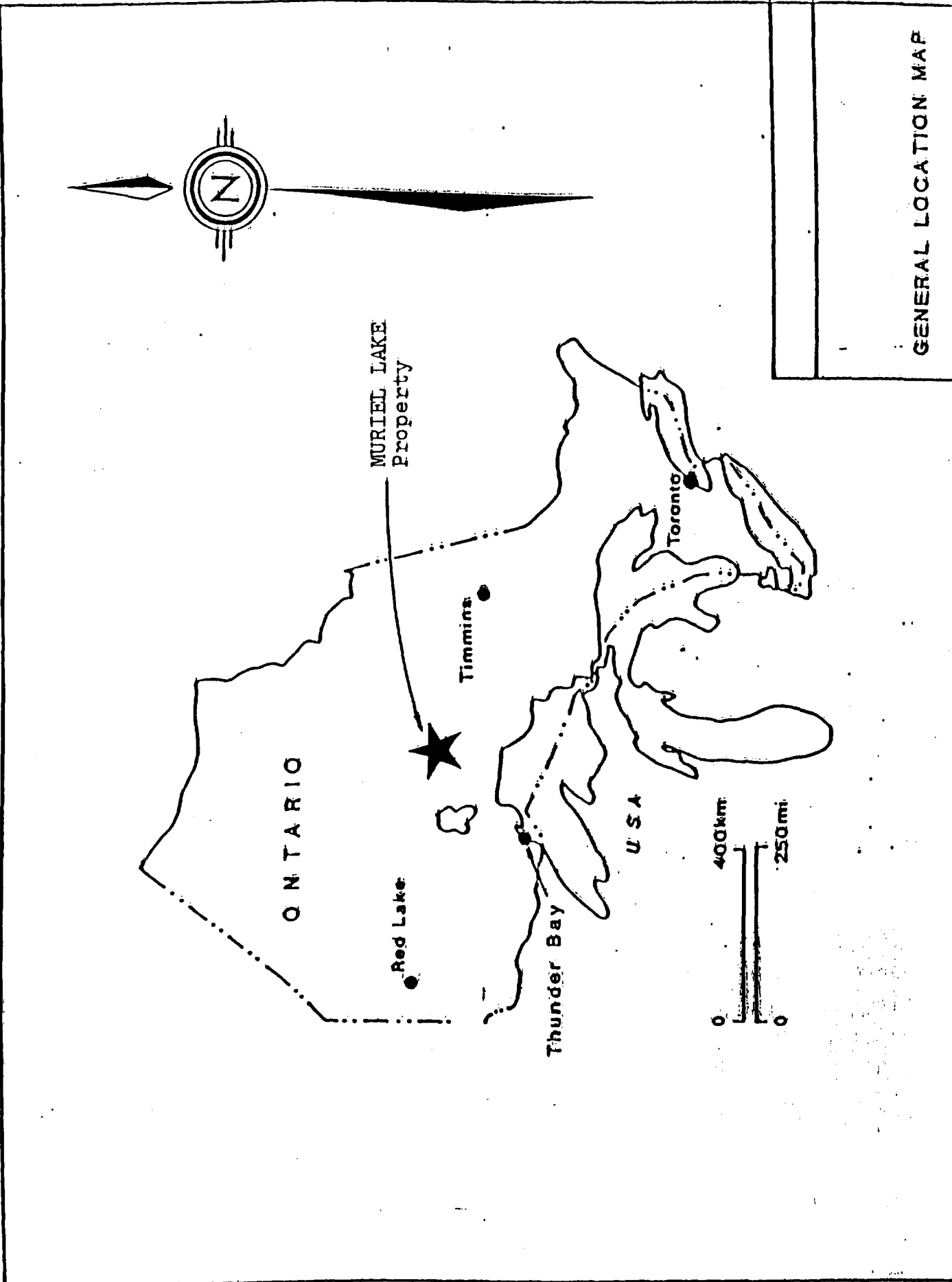
Until recently access to this area was very difficult with a fixed wing aircraft having to be used in most cases. In 1989 Kimberly-Clark constructed a forest access road which runs along the south boundary of the property. This made exploration in the area more feasible.

The property was first explored in 1929 but has not received a serious exploration program since. The Muriel Lake property, considered to be a favourable site for a Volcanogenic Massive Sulphide deposit, needs an aggressive exploration program to determine the extent of the base metal mineralization.

LOCATION AND ACCESS

The property lies approximately 300km northeast of Thunder Bay, Ontario within the Beardmore-Geraldton Area of the Thunder Bay Mining Division. The claim map sheet is Maun Lake (G-319) with latitude 50°27'57" longitude 86°49'55" in the NTS block 42 L 7/ NE.

The Muriel Lake property can be accessed via the Anaconda Road (road 643) from Highway 584, which leads to Nakina. At a distance of 30.7km, the Maun Lake Road, a Kimberly-Clark forest road, heads northeast to the property. At kilometre 24, the road runs along the south boundary of the property with a spur road that heads north to access the mineralized zones, a distance of 0.5km. See figure 1 for general location.



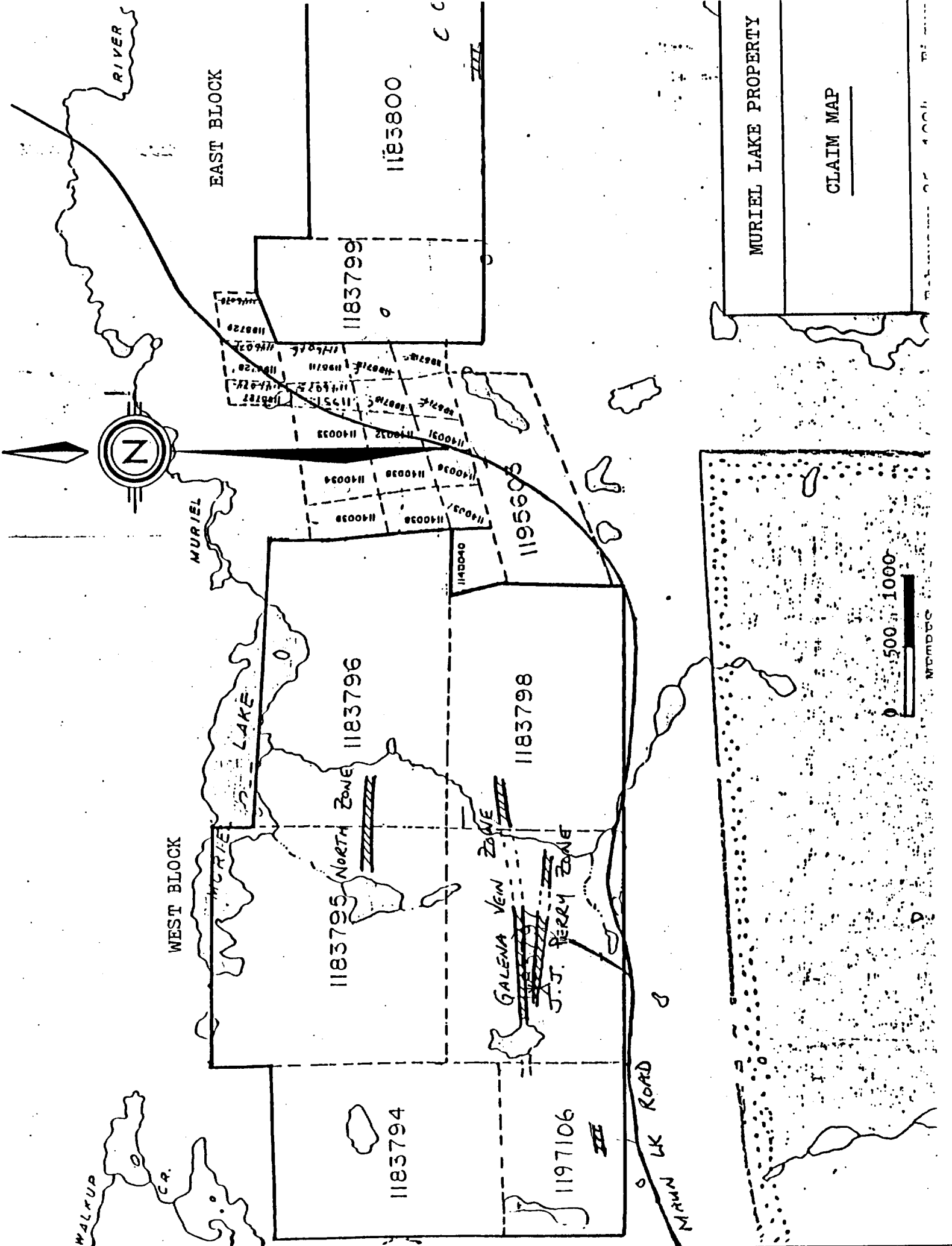
GENERAL LOCATION MAP

Figure 1

CLAIM STATUS

The Muriel Lake claim group consists of two separate blocks, a west block and an east block, with a total of 96 units. This represents a total area of 1536 hectares or 3840 acres. Ninety of the units were recorded on February 28, 1992 with the other six units (TB 1197106) being recorded on September 27, 1993 at the Mining Recorders Office in Thunder Bay. All claims are located on the claim map sheet Maun Lake (G-319). The property is owned 33.34% Garry Clark, 33.33% Aubrey Eveleigh and 33.33% Pierre Gagne. The following are the claim numbers for the Muriel Lake property (see figure 2 for claim sketch):

	Claim	Units
<u>West Block</u>	TB 1183794	12
	TB 1183795	16
	TB 1183796	12
	TB 1183797	15
	TB 1183798	12
	TB 1197106	6
<u>East Block</u>	TB 1183799	8
	TB 1183800	15
<hr/>		
Total:	8 claims	96 units



RIVER

EAST BLOCK

1183800

1183799



MURIEL

MURIEL LAKE

1183796

NORTH ZONE

1183798

GALENA VEIN ZONE

J.J. PERRY ZONE

WEST BLOCK

1183795

1183794

1197106

1195603

1140040

1140038

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MURIEL LK ROAD

MURIEL LAKE PROPERTY

CLAIM MAP



SCALE

PREVIOUS EXPLORATION

- 1993 During the summer of 1993, with the financial aid of an OPAP grant, Garry Clark and Aubrey Eveleigh carried out a prospecting and sampling program. New showings were found as well as existing showings extended.
- 1992 With the financial aid of two OPAP grants, Aubrey Eveleigh and Garry Clark carried out prospecting, trenching and sampling on the Muriel Lake property. The trenching and sampling revealed a more significant showing than was first thought to be on the property. (See Appendix A for assay and whole rock results.)
- 1980 Between July 5 and August 18, AMAX Minerals Exploration Limited performed pace and compass geological mapping on their 54 claim Muriel group. It was concluded that the property contains a dominantly mafic, submarine volcanic pile with several sulphide rich horizons associated with interflow tuffs and sediments.
- 1980 During March, Questor Limited flew an AMAG/AEM survey for AMAX Minerals Exploration Limited. The survey was flown in order to evaluate a narrow, approximately E-W trending "greenstone belt" which was found to be of interest from previous reconnaissance mapping of the area by AMAX staff. This airborne survey led to the staking of the Muriel group of claims.
- 1976 Texasgulf Inc. flew an airborne geophysical survey (AMAG/AEM) over 8 contiguous claims (TB 405081-84, TB 4050087-90) located south of Muriel Lake. This property would have covered the present day North Zone (Holland-Chellew Showing). A single conductive zone was detected with a near surface expression and a fairly strong response. It was suggested that a ground check be done, but was never performed.
- 1955 Quebec Chibougamau Gold Fields drilled 12 holes, of which 9 were targeted on the J.J. Perry or Galena Vein Horizons. The other 3 locations are unknown. Hole #1 contained 2 feet of sphalerite while several of the other holes contained significant mineralized sections. No assays were reported.
- 1950 Goldhar Resources drilled 7 short winkle drill holes on the North Zone (Holland-Chellew Showing). All the holes were drilled on either claim number 4763 or 4754. The

drill logs are very brief, with only the mention of tuff and rhyolite. No assays were reported.

- 1932 L.R. Kindle of the Ontario Department of Mines reported on the Holland-Chellew occurrence south of Muriel Lake. It was reported on claim KK 1886, which is believed to be the J.J. Perry Horizon, a channel sample across 4 feet of mineralized material contained 12% copper, 5.4 oz/ton silver and .05 oz/ton gold.
- 1929 E.J. Holland and C. Chellew discovered the sulphide occurrences south of Muriel Lake. They subsequently carried out manual trenching to further expose these zones. At the Perry claims, approximately 1.5km southeast of the Holland-Chellew Occurrence, massive chalcopyrite, pyrrhotite and minor sphalerite is hosted by a limestone unit, which was trenched by J. Perry. This horizon is bounded on the north by a rhyolite and on the south by a coarse mafic flow. 50m north of the J.J. Perry showing Holland and Chellew uncovered what is known as the Galena Vein zone.

REGIONAL GEOLOGY

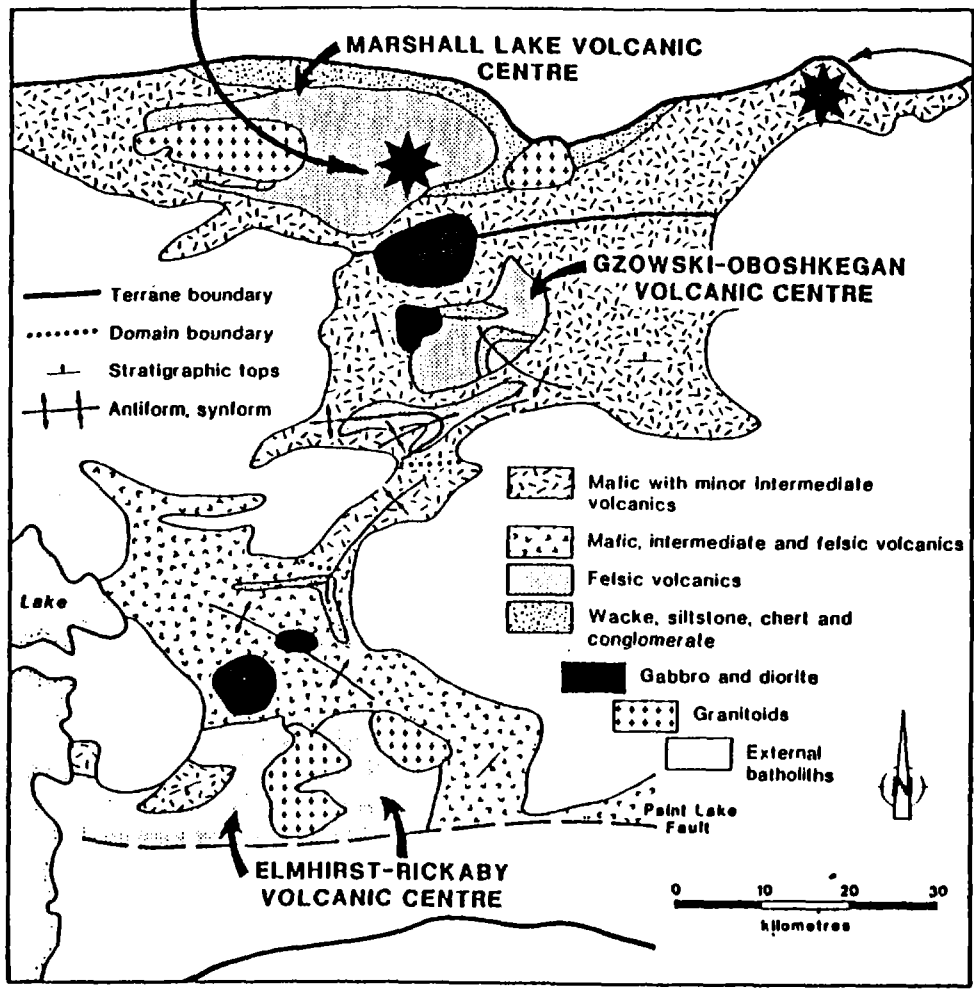
The Muriel Lake area is located in the Onaman-Tashota metavolcanic belt, at the extreme northeastern end where the belt appears to pinch out to approximately 10km wide. The area is predominantly underlain by metavolcanics, extending east from O'Sullivan Lake, consisting of mafic massive and pillowed mafic flows intruded by gabbro and diabase. Recently a considerable amount of felsic metavolcanics have been noted in the area comprised of pyroclastics and rhyolite to dacite flows.

The rocks of the area generally strike east-west with a vertical dip. Although tops direction seems to have evidence for north and south, the general consensus is south for this area.

The metamorphic grade of the Muriel Lake area seems to be upper greenschist to lower amphibolite facies.

The Muriel Lake metavolcanic area is bounded on south by massive to foliated granite to granodiorite and on the north by metasedimentary and gneissic rock units.

MARSHALL LAKE DEPOSIT
 2.2 million tons
 1.2% copper, 4.2% zinc,
 2.45 oz/t Ag, 0.012 oz/t Au



Generalized geology of the eastern Wabigoon Subprovince between Lake Nipigon and Geraldton.

MURIEL LAKE PROPERTY

REGIONAL GEOLOGY

Feb. 25, 1994 Figure 3.

PROPERTY GEOLOGY

The Muriel Lake property contains all the units desirable for a base metal deposit. Although the property has not received a proper geological mapping survey, several of the main rock types have been observed on traverses and will be described as follows:

Mafic Metavolcanics

Most of the property is made up of this rock type, with the greatest percentage being pillowed metavolcanics. Quite often the pillow selvages are silicified, carbonatized and mineralized with sulphides. A number of outcrops were observed to be very coarse, suggesting either coarse flow centres or gabbroic units. Other mafic metavolcanic units observed were amphibolites, chlorite schists and massive flows. Thin section work by Inco Exploration Inc. on the altered pillow basalt revealed a strongly foliated, very fine grained assemblage of actinolite, quartz, epidote, carbonate and albite.

Felsic Metavolcanics

These rock types are represented by tuffs, lapilli tuffs, rhyolite and dacite. The fragments observed in the tuff units range in size from 1cm to 10cm with the majority of the rock unit being comprised of ash size particles. The rhyolite displays a spotted texture, which in thin section appears to be sericite clots. The felsic units occur in close proximity to the mineralized zones on the property. It has been observed, in the past, that Muriel Lake itself seems to contain a felsic intrusive/extrusive body of limited extent, now highly elongated along the strike of the greenstone belt (Waddington, 1982).

Metasedimentary Rocks

These occur as interflow units ranging in width from 1m to 5m wide. They are quite often altered to the point of being undistinguishable from some of the felsic metavolcanic units. The metasediments are usually altered to a biotite-garnet and garnet-staurolite schists. Thin section also revealed the presence of actinolite.

Mafic Intrusives

These are comprised of gabbro and diabase. The gabbro can be very coarse with the finer grained material being similar to the coarse mafic metavolcanic flows. The diabase dykes are usually narrow (5m wide) and run north-south across the property.

North Zone (Holland-Chellew Occurrence)

This horizon is a massive sulphide zone of pyrite, pyrrhotite and traces of chalcopyrite from 2m to 4m in width. It has a series of regional airborne EM conductors associated with it that stretches for approximately 9km. Consistent values of .4% Zn and .2% Cu are returned from this zone.

Galena Vein Zone

This horizon consists of a chert with massive to disseminated pyrite, sphalerite, chalcopyrite and galena. The sphalerite, chalcopyrite and galena can be traced at times along what appears to be bedding planes in the cherty exhalative unit. This zone is up to 20m wide and intensely folded at the trenched location. The cherty horizon is bounded on the north by pillowed volcanics and on the south by felsic metavolcanics (tuffs, dacite and rhyolite) and coarse mafic flows or gabbro. This horizon has been traced for approximately 2km on strike to the west. Assays from the Galena Vein Zone have returned values as high as 5.8% Zn, .86% Cu, 1.17% Pb, 1.52 oz/ton Ag and .01 oz/ton Au.

J.J. Perry Zone

The J.J. Perry occurrence is hosted by a limestone (marble) unit striking 85° and dipping 86° north in contact with mafic to felsic metavolcanic rocks and gabbro. The zone is bounded on the north by a rhyolite and on the south by a gabbro or coarse flow. The limestone unit is recrystallized and up to 2m wide. Chalcopyrite, pyrrhotite and minor sphalerite occurs as massive patches and fracture fillings within the limestone and proximal to the limestone along the contacts. This zone has been traced for approximately 1km. Assay values up to 16.22% Cu, .2% Zn, 6.46 oz/t Ag and .05 oz/ton Au were obtained from this horizon.

Structure

The strike of the rocks on the Muriel Lake property are generally east-west with dips varying from steep northwards to vertical. The pillows, mostly, indicate tops direction to be south, although there are outcrops that showed tops to be north. Folding is most prominent in the Galena Vein trench where plunge directions are vertical to 40°W.

Alteration

Several outcrops on the property display alteration that is potentially related to hydrothermal volcanogenic massive sulphide activity. Rock types such as garnetiferous schists, garnet-staurolite schists and chlorite-amphibolite schists may be the

result of base metal type alteration. The thin sections by Inco Exploration prove the existence of these minerals. There have been a number of samples taken for whole rock analysis and several of them indicate a subtle presence of hydrothermal alteration.

1994 Assessment Work

A 3 day (June 3-6th) stripping and sampling program was completed on claim TB 1183800 by Garry Clark, Aubrey Eveleigh and Todd Maitland. The program consisted of stripping and sampling of areas of sulfide mineralization (Table 1)(Map 1).

The work concentrated on locating the ground expression of the Ministry Airborne Geophysical Electromagnetic Anomaly.

The program also located a new copper showing within the granitic rocks on the south end of the claim (Map 1).

TABLE 1
SAMPLE DESCRIPTION

<u>Sample</u>	<u>Description (assay certificate in appendix)</u>
TM-8	Silica rich sediment 2% pyrite
TM-9	Silica rich sediment trace pyrite
TM-10	Granite with quartz stringers 3% cpy, 1%py, 1%po
TM-11	Same as TM-10
TM-12	Massive sulphides and 50% magnetite (3% chalco and 1% pyrrhotite)
TM-13	Same as TM-12 but 10% pyrrhotite, 3% chalcopyrite and 2% magnetite
TM-14	10-15% pyrite silica rich sediments
TM-15	10-15% pyrite, cherty metsasediments
TM-16	Same as TM-15
TM-17	10-15% pyrite with minor quartz stringers
TM-18	Chert 1% magnetite and 1% pyrite

REFERENCES

Watts, A., 1980, Report on An Aeromagnetic Survey, Muriel Lake Area, N-W Ontario; AMAX Minerals Exploration Limited

Slankis, J.A., 1976, Texasgulf Inc., Report on Airborne Geophysical Survey in the Muriel Lake Area

Waddington, D.H., 1982, Geology of the Muriel Group, Muriel Lake Project 1087-5, AMAX Minerals Exploration

Kindle, L.F., 1932, Kowkash-Ogoki Gold Area, District of Thunder Bay, Ontario Department of Mines, Fortieth Annual Report, pp. 100-102

APPENDIX I
ASSAY CERTIFICATE



ACCURASSAY LABORATORIES

A DIVISION OF ASSAY LABORATORY SERVICES INC.

1070 LITHIUM DRIVE, UNIT 2
THUNDER BAY, ONTARIO P7B 6G3
PHONE (807) 623-6448
FAX (807) 623-6820

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CLARK GEOLOGICAL
618 North Vickers Street
Thunder Bay, Ontario
P7B 5B7

June 17, 1994

Job #944553

Project # Murilk OPAP

Accurassay	Sample #	Customer	Copper ppm	Zinc ppm	Silver ppm	Lead ppm
	1	TM-1	6558	441	8	11
	2	TM-2	2385	51	2	3
	3	TM-3	1.53%	76	8	1
	4	TM-4	2673	43	2	2
	5	TM-5	5712	256	7	15
	6	TM-6	6904	258	8	25
	7	TM-7	1192	113	3	6
	8	TM-8	136	123	1	7
	9	TM-9	96	34	<1	6
	10	TM-10	1923	14	2	6
	11	TM-11	6038	45	6	5
	12	TM-12	1673	171	3	3
	13	TM-13	3654	49	5	5
	14	TM-14	304	16	1	3
	15	TM-15	223	1173	2	60
	16	TM-16	98	5	<1	4
	17	TM-17	113	22	<1	6
	18	TM-18	26	3	<1	4

Certified By: Bob Beuch



Personal information collected on this form is obtained under the authority of the Mining Act. This collection should be directed to the Provincial Manager, Mining Lands, Ministry of Northern Development and Mines, Sudbury, Ontario, P3E 8A5, telephone (705) 670-7284.



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- Instructions:**
- Please type or print and submit in duplicate.
 - Refer to the Mining Act and Regulations for requirements.
 - A separate copy of this form must be completed for each Work Group.
 - Technical reports and maps must accompany this form in duplicate.
 - A sketch, showing the claims the work is assigned to, must accompany this form.

Recorded Holder(s) <i>Aubrey Eveleigh / James G. Clark / Pierre Bayne</i>		Client No. <i>130266 / 118570 / 134280</i>
Address <i>103 - 79th Court. St. Thunder Bay.</i>		Telephone No. <i>345-2446</i>
Mining Division <i>Thunder Bay</i>	Township/Area <i>Maun Lk. G-</i>	M or G Plan No. <i>G-319</i>
Date Work Performed	From: <i>June 3 / 94</i>	To: <i>Aug 8 / 94</i>

Work Performed (Check One Work Group Only)

Work Group	Type
Geotechnical Survey	<i>W20 (PSTRIP)</i>
Physical Work, including Drilling	<i>Stripping + Sampling</i>
Rehabilitation	
Other Authorized Work	
Assays	
Assignment from Reserve	

Total Assessment Work Claimed on the Attached Statement of Costs \$ *3008*

Note: The Minister may reject for assessment work credit all or part of the assessment work submitted if the recorded holder cannot verify expenditures claimed in the statement of costs within 30 days of a request for verification.

Persons and Survey Company Who Performed the Work (Give Name and Address of Author of Report)

Name	Address
<i>Garry Clark</i>	<i>Same as Above</i>

(attach a schedule if necessary)

Certification of Beneficial Interest * See Note No. 1 on reverse side

I certify that at the time the work was performed, the claims covered in this work report were recorded in the current holder's name or held under a beneficial interest by the current recorded holder.	Date <i>Aug 8 / 94</i>	Recorded Holder or Agent (Signature) <i>[Signature]</i>
--	---------------------------	--

Certification of Work Report

I certify that I have a personal knowledge of the facts set forth in this Work report, having performed the work or witnessed same during and/or after its completion and annexed report is true.		
Name and Address of Person Certifying <i>J. G. Clark. Same as Above</i>		
Telephone No. <i>345-2446</i>	Date <i>Aug 8 / 94</i>	Certified By (Signature) <i>[Signature]</i>

For Office Use Only

Total Value Cr. Recorded <i>\$3008</i>	Date Recorded <i>Aug 8 / 94</i>	Mining Recorder <i>[Signature]</i>	Received Stamp <i>3 PM 8 AUG 94</i> MINING DIVISION THUNDER BAY RECEIVED
	Deemed Approval Date	Date Approved <i>Aug 8 / 94</i>	
	Date Notice for Amendments Sent		

État des coûts aux fins
du crédit d'évaluation

Mining Act/Loi sur les mines

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used to maintain a record and ongoing status of the mining claim(s). Questions about this collection should be directed to the Provincial Manager, Minings Lands, Ministry of Northern Development and Mines, 4th Floor, 159 Cedar Street, Sudbury, Ontario P3E 6A5, telephone (705) 670-7264.

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

1. Direct Costs/Coûts directs

Type	Description	Amount Montant	Totals Total global
Wages Salaires	Labour Main-d'oeuvre	1800.-	
	Field Supervision Supervision sur le terrain	200.-	2000.-
Contractor's and Consultant's Fees Droits de l'entrepreneur et de l'expert- conseil	Type		
	Assaying.	484.-	484
Supplies Used Fournitures utilisées	Type		
	Flags & bags.	24.-	24.-
Equipment Rental Location de matériel	Type		
Total Direct Costs Total des coûts directs			2508.-

2. Indirect Costs/Coûts indirects

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

Type	Description	Amount Montant	Totals Total global
Transportation Transport	Type		
	Truck 1200km @ 30¢	360.-	360.-
Food and Lodging Nourriture et hébergement	3 days @ 150/day for 3 men		450.-
Mobilization and Demobilization Mobilisation et démobilisation			
Sub Total of Indirect Costs Total partiel des coûts indirects			810.-
Amount Allowable (not greater than 20% of Direct Costs) Montant admissible (n'excédant pas 20 % des coûts directs)			500.-
Total Value of Assessment Credit (Total of Direct and Allowable indirect costs)			3008.-
Valeur totale du crédit d'évaluation (Total des coûts directs et indirects admissibles)			

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

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

Filing Discounts

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

Total Value of Assessment Credit	Total Assessment Claimed
	x 0.50 =

Remises pour dépôt

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

Valeur totale du crédit d'évaluation	Evaluation totale demandée
	x 0,50 =

Certification Verifying Statement of Costs

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

that as [Signature] I am authorized
(Recorded Holder/Agent Position in Company)

to make this certification

Attestation de l'état des coûts

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

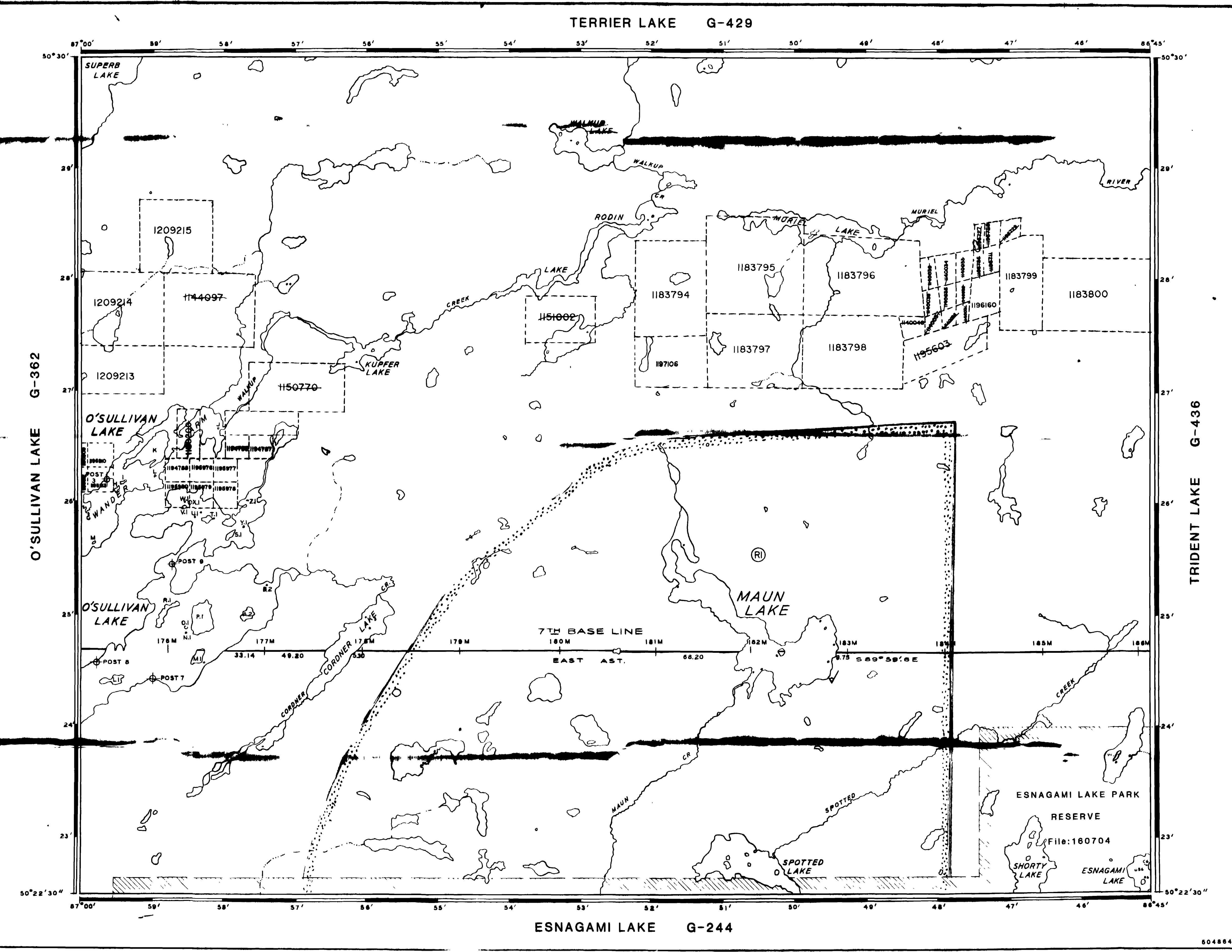
Et qu'à titre de [Signature] je suis autorisé
(titulaire enregistré, représentant, poste occupé dans la compagnie)

à faire cette attestation.

Signature [Signature] Date Aug 8/94

REFERENCES
 MINING & SURFACE RIGHTS WITHDRAWN FROM STAKING ORDER WTS 14/M/18/02/83 PROPOSED NATIVE RESERVE

NOTICE:
 The information that appears on this map has been compiled from various sources, and accuracy is not guaranteed. Those relating to staking mining claims should consult with the Mining Registrar, Ministry of Northern Development and Mines, for additional information on the status of the lands shown hereon.



REFERENCES

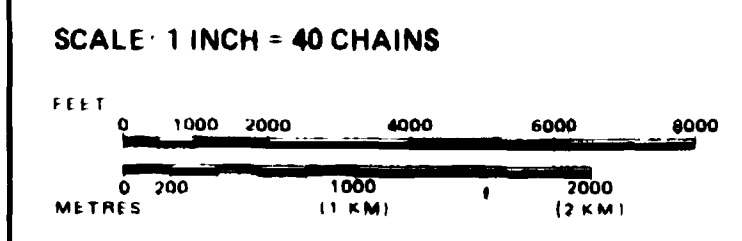
LEGEND

HIGHWAY AND ROUTE No	
OTHER ROADS	
TRAILS	
SURVEYED LINES	
TOWNSHIPS, BASE LINES, ETC	
LOTS, MINING CLAIMS, PARCELS, ETC	
UNSURVEYED LINES	
LOT LINES	
PARCEL BOUNDARY	
MINING CLAIMS ETC	
RAILWAY AND RIGHT OF WAY	
UTILITY LINES	
NON-PERENNIAL STREAM	
FLOODING OR FLOODING RIGHTS	
SUBDIVISION OR COMPOSITE PLAN	
RESERVATIONS	
ORIGINAL SHORELINE	
MARSH OR MUSKEG	
MINES	
TRAVERSE MONUMENT	

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	
" SURFACE RIGHTS ONLY	
" MINING RIGHTS ONLY	
LEASE, SURFACE & MINING RIGHTS	
" SURFACE RIGHTS ONLY	
" MINING RIGHTS ONLY	
LICENCE OF OCCUPATION	
ORDER IN COUNCIL	
RESERVATION	
CANCELLED	
SAND & GRAVEL	
LAND USE PERMIT FOR COMMERCIAL TOURISM, OUTPOST CAMP	

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 1912, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970 CHAP 280 SEC 83 SUBSEC 1



AREA
MAUN LAKE
 M.N.R. ADMINISTRATIVE DISTRICT
GERALDTON
 MINING DIVISION
THUNDER BAY
 LAND TITLES / REGISTRY DIVISION
THUNDER BAY

Ministry of Natural Resources
 Land Management Branch

Date: JULY, 1981
 Number: **G-319**
 In service Apr. 15/93.



