



41110NW0027 2.12866 MACLENNAN

010

**ASSESSMENT REPORT**  
**GEOLOGICAL AND GEOPHYSICAL SURVEYS**  
**McVITTIE OPTION**  
**MacLENNAN TOWNSHIP, ONTARIO**  
**NTS: 41-I-10**

**2 . 1 2 8 6 6**

*Qual. this report*

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Technical Services, Inc.  
Copper Cliff, Ontario  
September, 1989



41110NW0027 2.12866 MACLENNAN

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## SUMMARY

The McVittie Option consists of 12 mineral claims located in MacLennan Township approximately 25km northeast of Sudbury, Ontario. The property is underlain by Precambrian sediments of the Huronian Supergroup which are cut by Nipissing gabbros. These intrusives have locally brecciated and hydrothermally altered the country rocks. The main area of interest is located in the northern portion of the claim group at the contact between Nipissing gabbro, Mississagi Formation arkosic sediments and Espanola Formation limestones and calcareous siltstones. Assay values of up to 2.3 g/t gold have been obtained from samples collected from the property. Several old trenches were located but these are rubble filled and overgrown. Recommendations have been made to power strip the areas adjacent to the trenches.

## 1.0 INTRODUCTION

### 1.1 Location and Access

The property is located (Fig. 1) in the southeastern portion of MacLennan Township, approximately 25 km northeast of the City of Sudbury, Ontario, Sudbury Mining Division, NTS: 41-I-10. The claims can be accessed by travelling northeast along Highway 86, past the Sudbury Airport, towards the town of Skead. A secondary access road branches from Highway 86, approximately 4 km southwest of Skead, and continues east towards the Canadian National Railroad tracks. The tracks bisect the McVittie property.

### 1.2 Property

The property (Fig. 2) consists of 12 contiguous claims as listed below:

S 17397  
S 17398  
S 17399  
S 994014 - 994016 (inclusive)  
S 1076202 - 1076207 (inclusive)

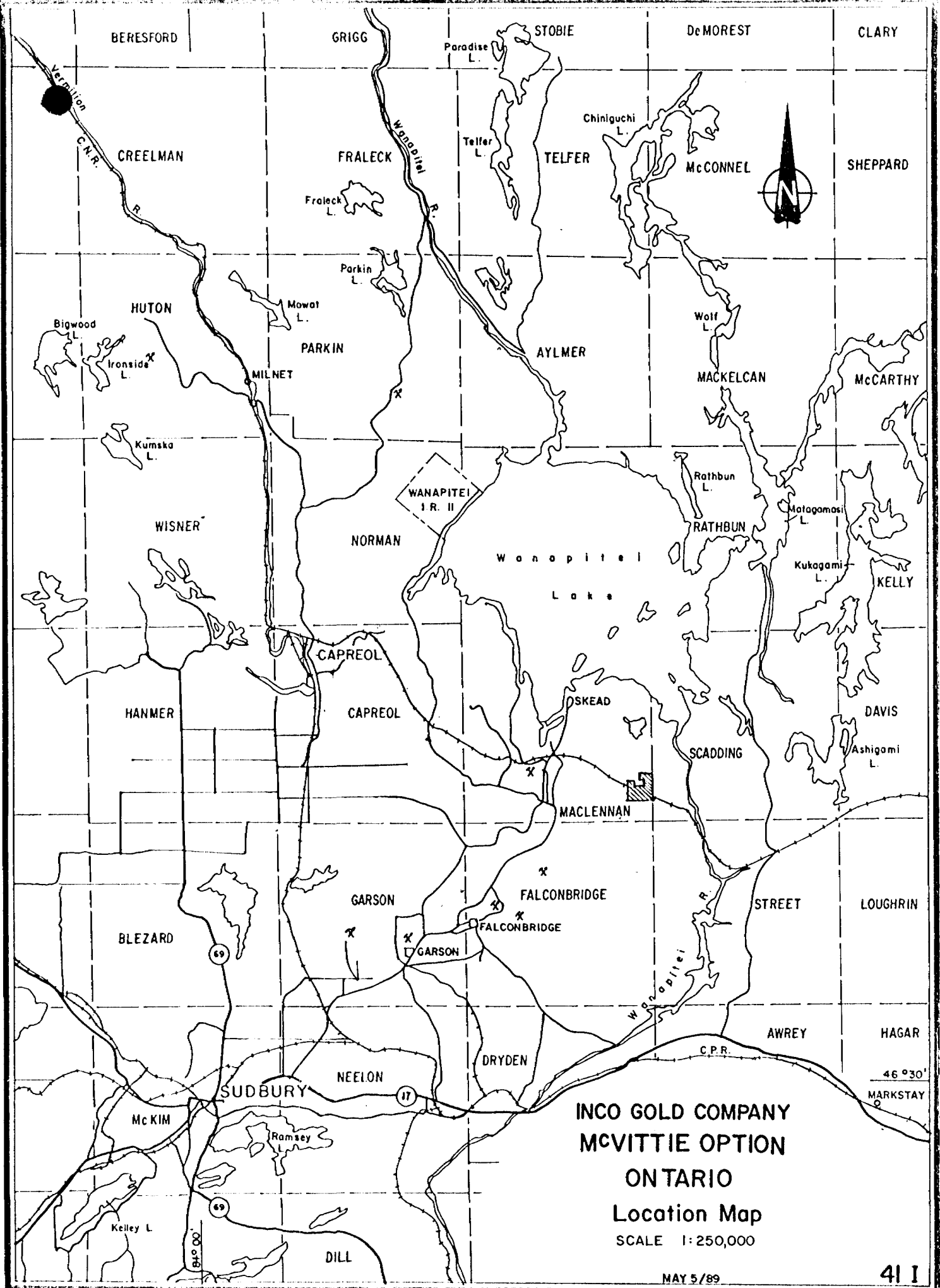
A total of six claims, comprising 3 patented claims and 3 mining claims were optioned from the McVittie Group on October 1, 1988. An additional 6 claims staked by Inco Limited were recorded on May 5, 1989, and were included in the option agreement.

### 1.3 History

To date no work has been filed for assessment credit on the property. The 3 original patented claims are shown as occurrence No. 37 on OGS map P.2228. However, a property description could not be located within the references given. From the available information it appears that previous exploration consisted of a few shallow pits and trenches exposing quartz -carbonate veining. No recent exploration has been carried out on the property or in the immediate vicinity of the property. Inco optioned the property on May 5, 1989, and staked an additional 6 claims.

### 1.4 Summary of Inco Exploration Investigations

The geological survey of the McVittie property commenced on June 7, 1989 and was completed on June 26, 1989. The geophysical surveys started on August 31 and were completed on September 6. The geophysical coverage consisted of a magnetic and electromagnetic survey. Approximately 21 km of grid lines (Fig. 3) were mapped and surveyed and 121 grab and chip samples were collected. All samples were submitted for gold analysis.

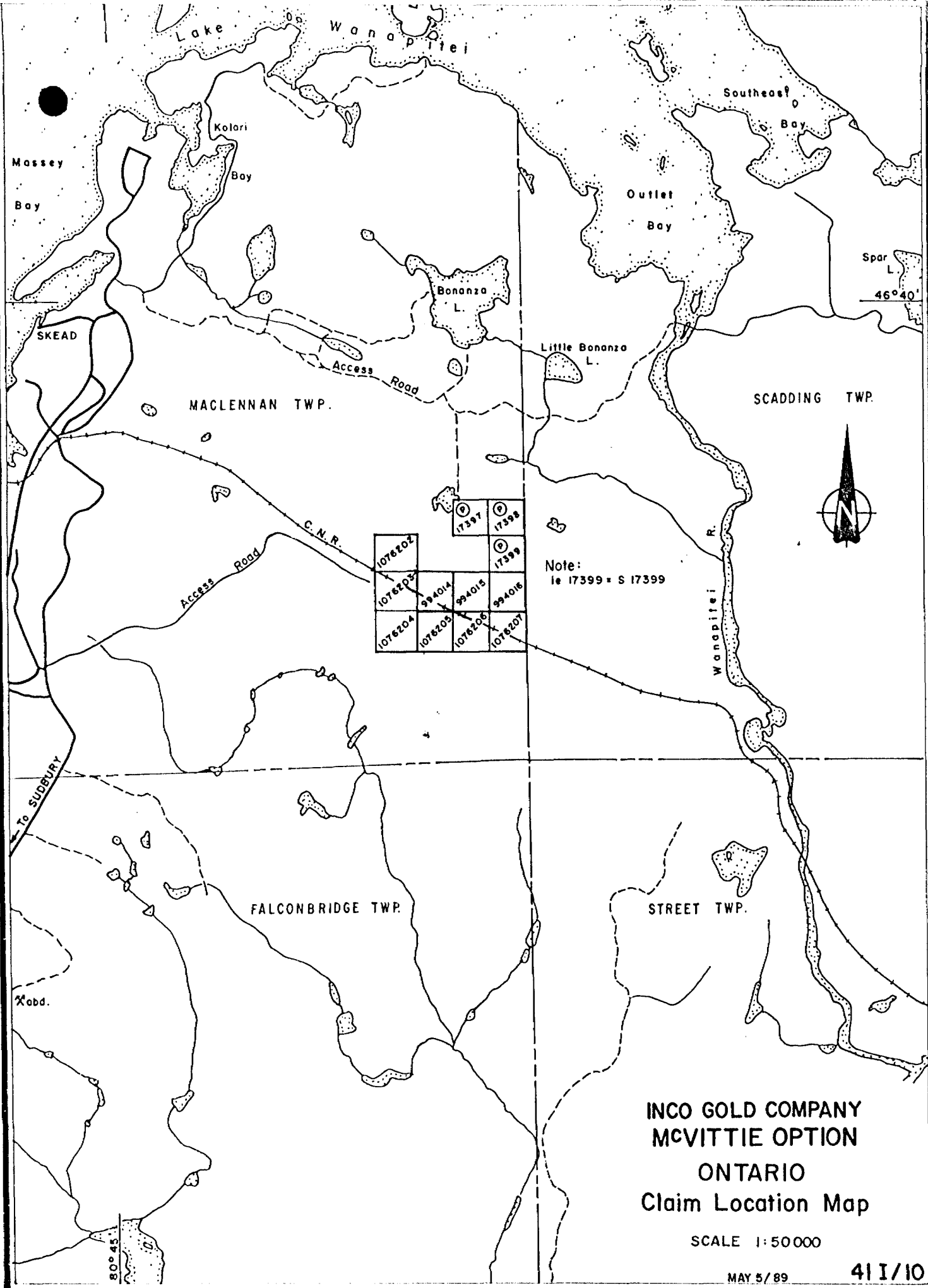


**INCO GOLD COMPANY**  
**MCVITTIE OPTION**  
**ONTARIO**  
**Location Map**  
 SCALE 1:250,000

MAY 5/89

41 I

**FIGURE 1**



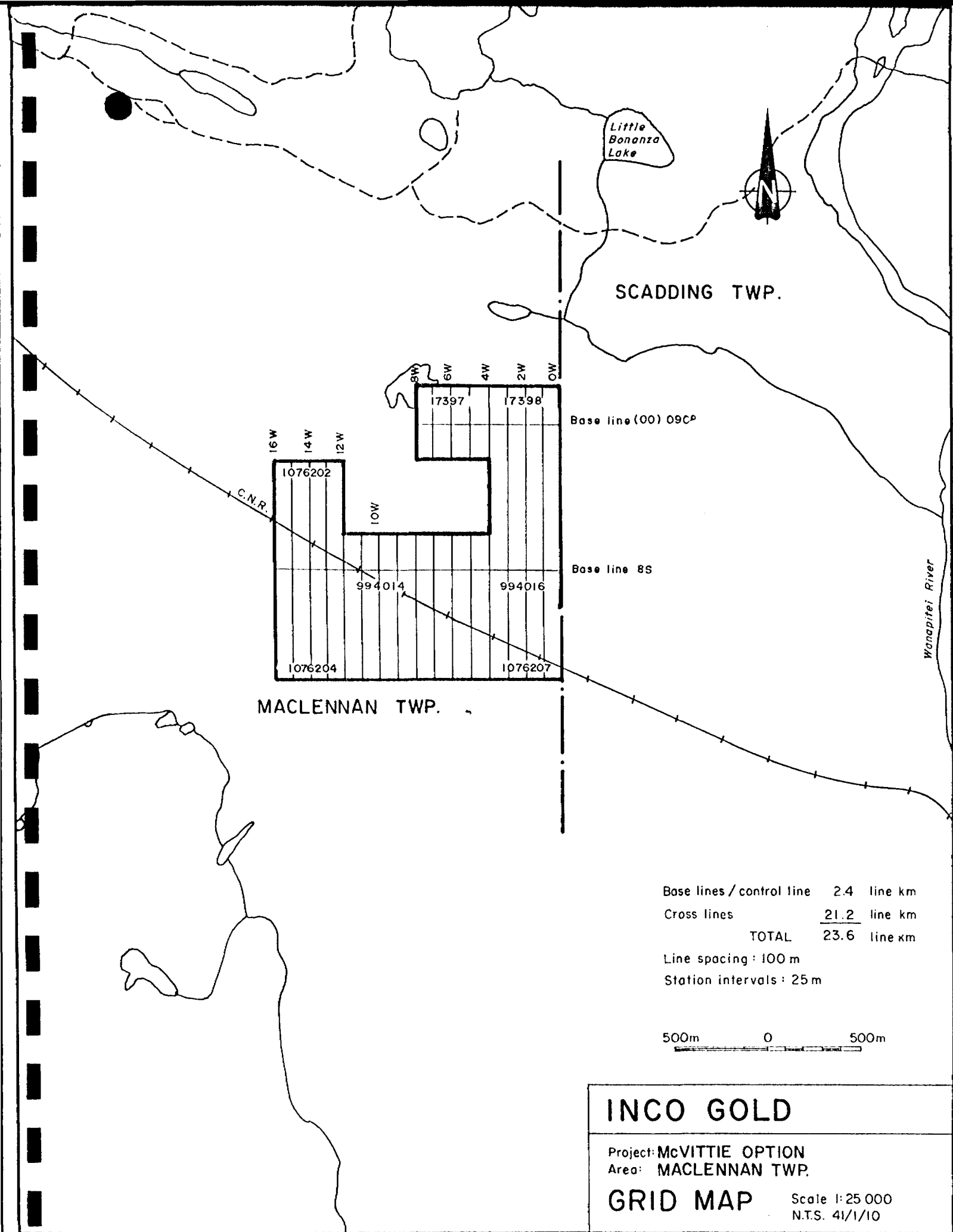
**INCO GOLD COMPANY  
MCVITTIE OPTION  
ONTARIO  
Claim Location Map**

SCALE 1:50 000

MAY 5/89

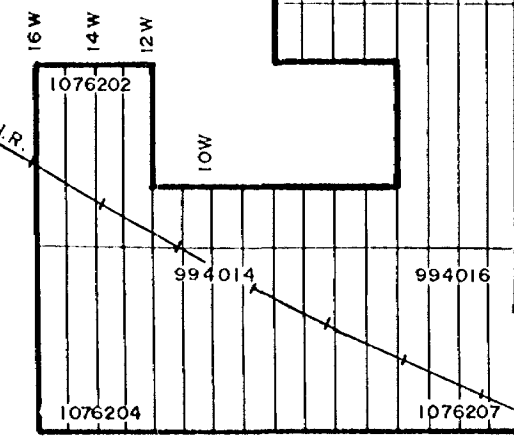
41 I/10

**FIGURE 2**



Little Bonanza Lake

SCADDING TWP.



MACLENNAN TWP.

Wanapitei River

Base lines / control line 2.4 line km  
 Cross lines 21.2 line km  
 TOTAL 23.6 line km  
 Line spacing: 100 m  
 Station intervals: 25 m

500m 0 500m

**INCO GOLD**

Project: McVITTIE OPTION  
 Area: MACLENNAN TWP.

**GRID MAP** Scale 1:25 000  
 N.T.S. 41/1/10

FIGURE 3



## 2.0 REGIONAL GEOLOGY

The map area lies within the Southern Structural Province near its intersection with the Superior and Grenville Structural Provinces. The area is underlain by Early Precambrian mafic to intermediate volcanics and by felsic plutonic rocks. Unconformably overlying these units are the sedimentary rock of the Huronian Supergroup. Middle Precambrian Nipissing gabbro intrudes all of the Early Precambrian rocks in the area.

## 3.0 PROPERTY GEOLOGY AND MINERALIZATION

The McVittie property (Fig. 4) is underlain by Mississagi Formation arkose, Espanola Formation calcareous siltstone and Nipissing gabbro intrusives. The largest portion of the property is underlain by arkose and arkosic wackes of the Mississagi Formation of the Huronian Supergroup. The arkose is typically fine grained, light grey to light green in colour, massive and has a granular or sugary texture. A trace amount of euhedral to subhedral pyrite is present in most of the samples.

In outcrop the arkose commonly weathers to a dark grey colour and locally to a rusty colour. The unit is weakly to moderately foliated and is locally well bedded. Crossbedding can also be locally observed in the arkose. The bedding varies in strike from 073 degrees to 092 degrees and dips steeply from about 80 degrees north to vertical. Some apparently erratic strike and dip measurements were obtained from the map area, however, these readings appear to be due to brecciation within particular units. The arkose is brecciated along the margins of the Nipissing gabbro intrusion and breccia fragments range in size from 0.3 m to 3.0 metres.

Nipissing gabbro intrusions occur in two localities in the northeastern part of the map area. The bodies vary from 50 metres wide to 350 metres wide, strike northwest from 280 degrees to 300 degrees and dip from 80 degrees north to vertical. Large rafted blocks of arkose can be observed locally throughout the bodies. The gabbroic intrusions appear to have brecciated and hydrothermally altered the arkose at the contact between the two units. The altered arkose is light pink to tan coloured, fine grained and massive. In thin section, the altered arkoses can be seen to contain andesine to labradorite rich plagioclase feldspars. Mineralization in the altered arkose consists of a trace to 1% scattered pyrite. The alteration occurs in the northern portion of the map area between the gabbroic intrusions from line 100W to line 400W and from line 1100W to line 1600W, all north of the 700S baseline. The alteration in the arkose may be directly associated with the intrusion of the Nipissing gabbro since the alteration appears as a halo effect around the gabbro bodies.

Quartz veins and quartz-carbonate veins commonly occur in the arkose near the contact with the gabbro intrusions. The veins vary from 30 mm to 50 cm in width and from 30 mm to several meters in length. The orientation of the veins is

random and reflects the jointing and fracture pattern within the arkose unit. Both calcite and iron carbonate occur within the veins. Sulphide mineralization within the veins consists of a trace of pyrite. Quartz and quartz-carbonate veining can also be observed in brecciated arkose outcrops. The brecciated arkose fragments are locally set in a quartz and carbonate healed matrix similar to the occurrence on line 1400W and line 350S.

Due to the spatial relationship of the veins, it appears that the quartz and quartz-carbonate veins are directly associated with the hydrothermal activity related to the emplacement of the gabbroic intrusions.

All type samples collected from gabbro, arkose, and quartz-carbonate veins on the property, returned assays of 35 ppb Au or less. Most of the values obtained assayed <5 ppb Au. Two anomalous assays of 55 ppb Au and 315 ppb Au were obtained from samples collected from an old pit (Fig. 7) located on line 480W at 100N. The pit is approximately 5 metres wide by 7 metres long and is extensively overgrown. Examination of the boulders in the pit revealed quartz and iron carbonate veining as well as tan coloured alteration with up to 1% fine grained, subhedral pyrite. This pit was examined early in 1988 by Inco Exploration personnel and 11 samples were collected. The highest assay from these samples yielded 2.3 g/t gold.

The contact between the Espanola Formation calcareous siltstones and the Nipissing gabbro is exposed in an outcrop north of the pit on line 460W at 120N. The unit is well bedded with alternating limestone and calcareous siltstone beds; the individual beds vary from about 1 cm to 4 cm thick. The limestone strikes at about 060 degrees and dips at 56 degrees to the west. The contact with the gabbro strikes at about 116 degrees and dips 61 degrees southwest. Another limestone exposure in the same outcrop area has contacts at 107/78 northeast and 052/85 north. The gabbro appears to enclose the outcrops of limestone and this apparent discontinuity of the limestone exposures and the irregular nature of the gabbro-limestone contacts suggests that these are blocks of limestone rafted within the gabbro. If this assumption is correct then the actual gabbro-limestone contact lies a short distance north of this exposure.

Calcareous siltstone is also exposed in the extreme north end of the map area on line 200W at 150N. The bedding orientation is 055/82N and an assay of <5 ppb Au was obtained from a sample collected at this location.

### 3.1 Power Stripping

Carman Construction of Sudbury was contracted to provide a D7 bulldozer and operator to strip outcrops on the McVittie property. Three sites were selected for stripping; all had been previously trenched or pitted and had returned anomalous assays from the summer mapping program.

The first site (Figure 5) is centred on L300W at 140S with an exposed area approximately 40 x 50 metres. Arkosic sediments are found in the southern portion of the stripped area with the Nipissing Gabbro occurring in the northern portion. The arkose has been recrystallized throughout the area and inclusions as well as short discontinuous beds can be found in the gabbro. Thirty-three samples were collected from the area; the highest value recorded was 90 ppb gold with a low of <5 ppb gold.

The second site (Figure 6) is centred on L1400W at 330S where outcrop was exposed in an area 40 m x 60 metres. The area is underlain by recrystallized arkosic sediments, a portion of which has been brecciated. The gabbro is believed to underlie the sediments at a shallow depth and its proximity recrystallized and brecciated the sediment. The brecciated area displays large arkosic blocks and fragments in a quartz "sweat" matrix. Both fragments and matrix were sampled; a high value of 30 ppb and a low of <5 ppb gold were returned from 38 samples.

The third site selected (Figure 7) is centred on 480 at 115N. Sampling returned anomalous assays from the preliminary examination and from the summer mapping program as well as the stripping program. Arkosic and argillic sediments occur as large rafted blocks and roof pendants in the gabbro intrusion. Three samples returned values which ranged from 1 ppm gold to 2.14 ppm gold. The anomalous samples consisted of recrystallized arkose with increased sulphide content. Adjacent samples, although anomalous, returned significantly decreased values suggesting that the mineralization is narrow with limited lateral extent.

The stripping program did not locate any significant new mineralization and did not increase the potential of the property.

#### 4.0 GEOPHYSICAL SURVEYS

##### 4.1 Instrumentation

##### 4.1.1 Magnetic

The survey was carried out with microprocessor controlled proton precession magnetometers built by EDA Instruments of Toronto, Ontario. These instruments measure the total magnetic field in nano Teslas (nT). These magnetometers have an accuracy of 0.1 nT. Diurnal variations are corrected by interpolation with magnetic base station recordings.

The results of the survey were computer plotted and contoured on maps at a scale of 1:2,500. To prepare the data for computer contouring a nine point Hanning filter was applied and a further three point Hanning filter was used to suppress sharp changes of the magnetic values.

#### 4.1.2 Electromagnetic

The survey was performed with EM-16 VLF receivers manufactured by Geonics Ltd. of Toronto. These receivers operate on the signal transmitted by stations of the US Navy. They measure the tilt angle and the quadrature component of the resultant electromagnetic field.

Copies of the manufacturers' specification for both instruments can be found in the appendix to this report.

#### 4.2 Magnetometer Survey

Magnetometer readings were taken at 12.5m station intervals along the grid lines and the results were plotted on a map with contour intervals of 20nT.

The results of the survey show two distinct magnetic features. The larger one is a positive anomaly of 500 to 1000nT in the southern portion of the surveyed area striking at a angle of 120 degrees. This is a relatively wide anomaly which indicates a dike like feature which is steeply dipping to the south. In the north-east quadrant of the map a similar but much smaller anomaly can be found. This anomaly is about 75m wide and indicates a near vertical dipping dike. Both anomalies are probably caused by olivine-diabase dikes or mafic sills that do not outcrop.

#### 4.3 Electromagnetic Survey

The electromagnetic survey was carried out using the VLF transmitter Cutler, Maine (NAA) which transmits at a frequency of 24.0kHz. The results were plotted as stacked profiles with a scale factor of 1cm equals 20 degrees tilt angle and 1cm equals 20% quadrature on maps at a scale of 1:2,500. Readings were taken at a station interval of 25m along the grid lines.

The results of the VLF-EM survey are severely distorted by the railway tracks that cross the lower portion of the property. There are however several VLF conductors that may be caused by superficial materials such as swamp edges and overburden troughs. They strike in an east-west direction in the southern portion of the grid. Typical conductors of this type are between 1300W/1100S and 1700W/1150S and between 00/1100S and 500W/925S. A short conductor shown between 1000W/975S and 1200W/1000S is possibly caused by a structural feature such as narrow shear zone. There is also a trend of very weak anomalies indicating a feature that is parallel to the magnetic anomaly in the north east corner of the area between 0/225S and 700W/100N. This may indicate some fracturing in the very shallow rock.

#### 4.4 Statistics

Cross lines cut:	21km
Base lines cut:	2.6km
Magnetic readings:	1700
Electromagnetic readings	818

#### 5.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the exploration data collected from the McVittie Option, the main area of interest is located in the northernmost section of the claim group where anomalous gold values were obtained at or near the Nipissing gabbro - Espanola Limestone contact. It is recommended that the area be stripped so that a more detailed examination of the mineralization can be made.

#### 6.0 BIBLIOGRAPHY

Bell, R.

1981: Internal Memo, Canadian Nickel Company Ltd. NTS: 41-I-10.29

Dressler, B.O.

1982: Geology of the Wanapitei Lake Area, District of Sudbury, Ontario Geological Survey, Geological Report 213, p.131.

APPENDIX 1

Sample Description Sheets

TRAVERSE NUMBER 1  
 N.T.S. H1 I 10

PROJECT Mc Vittie  
 AREA \_\_\_\_\_

GEOLOGIST(S) K. Hannila  
 DATE Oct. 18/89

SAMPLE NUMBER	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, AREA	LATITUDE, LONGITUDE and/or U.T.M.	SAMPLE DESCRIPTION Rock type, lithology, character of soil, stream silt, etc. Formation Mineralization, etc.	RESULTS (ppm. / % / oz. per ton)							
	RX Rock, Talus	SX Stream Silt, Soil	Grab, Chip, Channel				Au P b	Au P M						
x155685			M1			Site #1 Arkose fragment, recrystallized pinkish gray, fine grained, arkosic breccia fragment (30cm x 20cm), pyrite < 1% ↓	25							
155686			M2			Quartz sweat, matrix to sample M1, lt grayish white, massive, pyrite nil to trace.	5							
155687			M3			Arkose fragment as for M1	5							
155688			M4			Quartz sweat (matrix), 2 meters long x 10cm wide, very slightly gossaned. trace pyrite. ↓	<5							
x155689			M5			Arkose, fg recrystallized, pinkish gray, quartz veined < 1cm, py 1-2%	25							
155690			M6			Arkose recrystallized, minor quartz veining, pyrite trace to 1%	30							
155691			M7			Quartz sweat (matrix) 15x30cm surrounding arkosic fragment trace pyrite.	10							
155692			M8			Arkosic fragment recrystallized fg, pinkish gray, pyrite trace to 1%	15							
155693			M9			Arkosic fragment, fg quartz veined, sulphides (py) trace to 1%	5							

TRAVERSE NUMBER 2PROJECT Mc VittieGEOLOGIST(S) K. HannilaN.T.S. 41 E 10

AREA \_\_\_\_\_

DATE Oct. 18/89

SAMPLE NUMBER	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, AREA	LATITUDE, LONGITUDE and/or U.T.M.	SAMPLE DESCRIPTION Rock type, lithology, character of soil, stream silt, etc. Formation Mineralization, etc.	RESULTS (ppm. /% /oz. per ton)							
	RX Rock, Talus	SX Stream Silt, Soil	Grab, Ship, Channel				Au P b	Au P M						
155694			M10			Quartz sweat (matrix) 15x20 cm pyrite to trace	10							
155695			M11			Quartz sweat (matrix) 10x30 cm interstitial to quartz arkosic fragments	5							
155696			M12			Arkosic fragment recrystallized slightly quartz veined, pyrite to 1%	<5							
155697			M13			Arkose fragment recrystallized 5-10% quartz veining, pyrite trace to 1%	5							
155698			M14			Arkose fragment recrystallized minor quartz veining, pyrite trace to 1%	<5							
155699			M15			Quartz sweat matrix, 70x10 cm very slight gossan	<5							
155700			M16			Arkose recrystallized, fg 10-20% quartz veining, pyrite trace to 1%	<5							
155701			M17			Quartz sweat (matrix) 10x40 cm, barren	5							
155702			M18			Arkose recrystallized quartz veining < 1cm size, 5-10% pyrite trace to 1%	10							



TRAVERSE NUMBER 3N.T.S. 41 I 10PROJECT M<sup>c</sup> Vittis

AREA \_\_\_\_\_

GEOLOGIST(S) K. HannulaDATE Oct. 18, 89

SAMPLE NUMBER	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, AREA	LATITUDE, LONGITUDE and/or U.T.M.	SAMPLE DESCRIPTION Rock type, lithology, character of soil, stream silt, etc. Formation Mineralization, etc.	RESULTS (ppm. / % / oz. per ton)							
	RX Rock, Talus	SX Stream Silt, Soil	Grab, Ship, Channel				Au P b	Au F M						
Rx 155703			M19			Arkose recrystallized, fg minor quartz veining, pyrite 1%	15							
x 155704			M20			Arkose recrystallized, gossaned, minor quartz veining, pyrite trace to 1%	10							
155705			M21			Quartz sweat (matrix) 10x15 cm pyrite trace	<5							
x 155706			M22			Arkose recrystallized moderate gossan, minor quartz veining, pyrite trace to 1%	5							
x 155707			M23			Arkose recrystallized 10-20% quartz veining, pyrite trace to 1% sample taken above large quartz in pit sampled by J. Jackson	<5							
x 155708			M24			Arkose recrystallized, pinkish orange, slight gossan, trace pyrite	<5							
x 155709			M25			as for M24	10							
x 155710			M26			Arkose recrystallized, quartz veined 10-20%, pyrite trace to 1%	<5							
x 155711			M27			Arkose recrystallized, pinkish orange fine grained, quartz veined 10-20%, pyrite trace to 1%	15							



TRAVERSE NUMBER 5  
 N.T.S. 41 I 10

PROJECT McVittie  
 AREA \_\_\_\_\_

GEOLOGIST(S) K. Hannila  
 DATE \_\_\_\_\_

SAMPLE NUMBER	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, AREA	LATITUDE, LONGITUDE and/or U.T.M.	SAMPLE DESCRIPTION Rock type, lithology, character of soil, stream silt, etc. Formation Mineralization, etc.	RESULTS (ppm. / % / oz. per ton)							
	RX Rock, Talus	SX Stream Silt, Soil	Grab, Ship, Channel				Au	Au						
<155721			M37			Arkose recrystallized greenish gray, sheared, trace pyrite	10							
<155722			M38			Arkose recrystallized, greenish gray, trace pyrite	<5							
						McVittie Site #2								
<155723			M39			Arkose recrystallized, pinkish gray pegmatitic texture, 60-70% K feldspar, 25-30% quartz, 5-7% biotite, quartz obscuring as sweets, strong surface gossan, pyrite 1 to 3%	155							
<155724			M40			Arkose recrystallized, pinkish gray and creamy white, coarse grained (pegmatitic), 2/3 pink feldspar, 1/3 white feldspar, 75-80 feldspar, 15-20% quartz, 3-5% biotite, trace to 1% pyrite, strong surface gossan	<5							
155725			M41			Arkose recrystallized, pinkish gray pegmatitic texture, 60-70% feldspar, 25-30% quartz as 2mm veins and 1x2cm sweets (lobes), biotite 1-3% pyrite 2 to 3% disseminated surface gossan	145							

TRAVERSE NUMBER 6  
 N.T.S. 41 I 10

PROJECT M<sup>c</sup>Vittis  
 AREA \_\_\_\_\_

GEOLOGIST(S) K. Hannila  
 DATE \_\_\_\_\_

SAMPLE NUMBER	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, AREA	LATITUDE, LONGITUDE and/or U.T.M.	SAMPLE DESCRIPTION Rock type, lithology, character of soil, stream silt, etc. Formation Mineralization, etc.	RESULTS (ppm. / % / oz. per ton)							
	RX Rock, Talus	SX Stream Silt, Soil	Grab, Ship, Changel				Au P P b	Au P P M						
x155726			M42			Arkose recrystallized, pinkish gray, fine grained feldspar 50-60%, massive coarse grained quartz 40-50% pyrite 1-3%, surface quartz and weak surface gossan, blebby pyrite 1-3%	570							
x155727			M43			Arkose recrystallized, pinkish gray very fine grained massive, 75 to 85% feldspar, 15-20% quartz, blebby pyrite 1-3%, fresh, surface gossan		1	PPM					
x155728			M44			as for M43 but py 1-3% veined in 1mm veins		2.03	PPM					
x155729			M45			Arkose as for M43 but biotite content 15-20%, rock is a Quartz-Biotite-Feldspar-Gneiss pyrite trace to 1%, weak surface gossan	715							
x155730			M46			Graywacke recrystallized It gray to gray, fine grained with relict sedimentary granular texture weakly gneissic, quartz 50-60% feldspar 40-50%, biotite 7-10% pyrite trace to 1%, strong surface gossan 3mm thick, disseminated pyrite trace to 1%	10							

TRAVERSE NUMBER 7PROJECT M<sup>c</sup> V. HieGEOLOGIST(S) K. HannilaN.T.S. 41 I 10

AREA \_\_\_\_\_

DATE \_\_\_\_\_

SAMPLE NUMBER	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, AREA	LATITUDE, LONGITUDE and/or U.T.M.	SAMPLE DESCRIPTION Rock type, lithology, character of soil, stream silt, etc. Formation Mineralization, etc.	RESULTS (ppm. /% /oz. per ton)							
	RX Rock, Talus	SX Stream Silt, Soil	Grab, Chip, Channel				Au P P b	Au P P M						
155731			M47			Arkose recrystallized, light pinkish gray, fine grained, feldspar 60-70%, quartz 30-40%, biotite 5-7%, thin moderately gossaned surface, trace pyrite.	10							
155732			M48			Arkose recrystallized, pinkish gray fine to medium grained, feldspar 60-70%, quartz 30-40%, biotite 3-5%, pyrite trace to 1%, weak thin surface gossan.	320							
155733			M49			Arkose recrystallized, pinkish gray fine grained, feldspar 60-70%, quartz 30-40%, biotite 5-7%, trace pyrite.	2,140	244	PPM					
155734			M50			Arkose recrystallized, pinkish gray fine grained, massive, feldspar 65-75%, quartz 25-35%, trace pyrite, weak surface gossan.	145							
155735			M51			Arkose recrystallized, medium grained, massive, pinkish gray + white, weak surface gossan, trace pyrite.	95							
155736			M52			Arkose recrystallized, light pinkish gray, medium grained massive, feldspar 50-60%, quartz 40-50%, biotite 1-3%, pyrite trace, strong surface gossan.	400							

TRaverse NUMBER 8  
N.T.S. HI I 10PROJECT M<sup>c</sup> V. Hie  
AREA \_\_\_\_\_GEOLOGIST(S) K Hannila  
DATE \_\_\_\_\_

SAMPLE NUMBER	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, AREA	LATITUDE, LONGITUDE and/or U.T.M.	SAMPLE DESCRIPTION Rock type, lithology, character of soil, stream silt, etc. Formation Mineralization, etc.	RESULTS (ppm. / % / oz. per ton)							
	RX Rock, Talus	SX Stream Silt, Soil	Grab, Chip, Channel				Au P P b	Au P P M						
155737			M53			Arkose recrystallized, pinkish red and white, medium grained massive, luggy quartz rimed (no carbonates), strong gossan pyrite trace to 1%	205							
155738			M54			Arkose recrystallized, pinkish gray, medium to coarse grained, massive pyrite trace to 1%	595							
155739			M55			Arkose recrystallized, light yellowish gray, fine granular texture, feldspar 50-60% quartz 40-50%, biotite 5-10% trace pyrite, strong surface gossan, 2-3 mm thick	95							
155740			M56			Argillitic Arkose recrystallized (Biotite - Qtz - Feld - Gneiss) fine grained, segregated, banded no gossan, trace pyrite	15							
155741			M57			as for M56	<5							
155742			M58			Argillite recrystallized, sheared fine grained, schistose, chloritic trace pyrite, no surface gossan	5							
155743			M59			Quartz segregation, 10cm wide barren to trace sulphide	<5							







TRAVERSE NUMBER 11  
 N.T.S. 41 I 10

PROJECT McWitte  
 AREA \_\_\_\_\_

GEOLOGIST(S) K. Hannila  
 DATE \_\_\_\_\_

SAMPLE NUMBER	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, AREA	LATITUDE, LONGITUDE and/or U.T.M.	SAMPLE DESCRIPTION Rock type, lithology, character of soil, stream silt, etc. Formation Mineralization, etc.	RESULTS (ppm. / % / oz. per ton)							
	RX Rock, Talus	SX Stream Silt, Soil	Grab, Chip, Channel				Au	Au						
155760			M76			Argillite - Gabbro melange dark green, pyrite nil to trace	<5							
155761			M77			Gabbro with Argillite inclusions dark green, pyrite nil to trace	<5							
155762			M78			Gabbro, dark green with arkose remnants, pyrite nil to trace	5							
155763			M79			as for M78	<5							
155764			M80			Quartz vein (swcat) 1 to 5 cm's wide, 1 meter long barren	5							
155765			M81			Gabbro, dark green, medium grained pyrite nil to trace	<5							
155766			M82			Gabbro, dark green, medium grained pyrite nil to trace	<5							
155767			M83			Gabbro, dark green, medium grained, pyrite nil to trace	20							

TRAVERSE NUMBER 12  
 N.T.S. H I I 10

PROJECT M<sup>c</sup> Vittie  
 AREA \_\_\_\_\_

GEOLOGIST(S) K. Hannila  
 DATE \_\_\_\_\_

SAMPLE NUMBER	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, AREA	LATITUDE, LONGITUDE and/or U.T.M.	SAMPLE DESCRIPTION Rock type, lithology, character of soil, stream silt, etc. Formation Mineralization, etc.	RESULTS (ppm. /% /oz. per ton)							
	RX Rock, Talus	SX Stream Silt, Soil	Grab, Chip, Channel				Au P b	Au P M						
						Site #3								
x155768			M84			Gabbro with remnant sediments pyrite < 1%	30							
x155769			M85			Quartz vein, 3 to 5 cm wide pyrite < 1%	< 5							
x155770			M86			Quartz vein in Gabbro irregular and discontinuous, pyrite < 1%	< 5							
155771			M87			Gabbro with remnant arkose minor quartz veining, pyrite < 1%	20							
155772			M88			Arkose recrystallized quartz veined 1-5 cm's wide pyrite < 1%	20							
155773			M89			Arkose/Gabbro melange quartz veined, pyrite < 1%	40							
x155774			M90			Arkose recrystallized minor quartz veining, pyrite < 1%	5							
155775			M91			Arkose recrystallized, very minor quartz veining, pyrite < 1%	5							
155776			M92			Arkose recrystallized, bleached pyrite < 1%, no quartz veining	< 5							





TRAVERSE NUMBER 15  
 N.T.S. 41 I 10

PROJECT M<sup>c</sup>Vittie  
 AREA \_\_\_\_\_

GEOLOGIST(S) K. Hannila  
 DATE \_\_\_\_\_

SAMPLE NUMBER	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, AREA	LATITUDE, LONGITUDE and/or U.T.M.	SAMPLE DESCRIPTION Rock type, lithology, character of soil, stream silt, etc. Formation Mineralization, etc.	RESULTS (ppm. / % / oz. per ton)							
	RX Rock, Talus	SX Stream Silt, Soil	Grab, Chip, Channel				Au P P b	Au P P M						
x155797			M113			Quartz vein, 2-3 cm wide trace pyrite	<5							
x155798			M114			Arkose recrystallized, quartz veined, pyrite < 1%	20							
x155799			M115			Quartz vein, 2-3 cm thick pyrite < 1%	<5							
x155800			M116			Arkose recrystallized, minor quartz veining, pyrite < 1%	15							

TRAVERSE NUMBER GRID  
 N.T.S. 41-1-10

PROJECT McVittie  
 AREA McLENNAN TWP 1641-E-10

GEOLOGIST(S) J. Jakko  
 DATE JUNE 7, 1989

SAMPLE NUMBER Rx	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, AREA	LATITUDE, LONGITUDE and/or U.T.M.	SAMPLE DESCRIPTION Rock type, lithology, character of soil, stream silt, etc. Formation Mineralization, etc.	RESULTS (ppm. /% /oz. per ton)							
	RX Rock, Talus	SX <del>Stream</del> Grb, Silt	Grb, Chip, Channel				Au (ppb)	Pt	Pd	Cu	Ni			
143779	Rock	JJ-1	GRAB			fine GRAN, GREY, MASSIVE, silica rich, trace pyrite $\pm 3/4$ mm subhedral  ARKOSE	5							
143780	Rock	JJ-2	Grab			Same as previous, pyrite locally up to $\pm 1\%$ euhedral $\pm 4$ mm	<5							
143781	Rock	JJ-3	Grab			medium grain, grey green, plagioclase lathes subhedral to euhedral $\pm 2$ mm twinning striations hornblende, long needle like $\pm 2$ mm Pyroxene, stubby, $\pm 2$ mm GRABBO	5							
143782	Rock	JJ-4	Grab			SAME AS 143781, slight coarser grain	5							
143783	Rock	JJ-5	Grab			SAME AS 143781, slight finer grain	<5							

TRAVERSE NUMBER 6P1D  
 N.T.S. 41-1-10

PROJECT McU. He  
 AREA MacLENNAN TWP

GEOLOGIST(S) J. JACKSON  
 DATE June 7, 1989

SAMPLE NUMBER	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, AREA	LATITUDE, LONGITUDE and/or U.T.M.	SAMPLE DESCRIPTION Rock type, lithology, character of soil, stream silt, etc. Formation Mineralization, etc.	RESULTS (ppm. / % / oz. per ton)							
	RX Rock, Talus	SX Stream Silt, Silt	Grab, Chip, Channel				Au (ppb)							
143784	Rock	JJ-6	Grab			Green, fine grain, possible sericite giving green color, quartz + feldspathic(?) components  Arkose	<5							
143785	Rock	JJ-7	Grab			GRABRO, SAME AS 143781	<5							
143786	Rock	JJ-8	Grab			GRABRO, SAME AS 143781	10							
143787	Rock	JJ-9	Grab			Coarse grain, pinkish, possibly a Na rich feldspar, considerable components of IRON carbonate, minor quartz ± plagioclase  Sodium Feldspar carbonate alteration Rock	55							
143788	Rock	JJ-10	Grab			coarse grain, white/beige, quartz iron carbonate with Na rich (??) feldspar. Pyrite mineralization, anhedral to subhedral ± 1/2mm within carbonate and/or feldspar ± 1%  Sodium Feldspar (??) Carbonate, quartz alteration Rock	315							





TRAVERSE NUMBER 6210  
 N.T.S. 41-1-10

PROJECT McWittie  
 AREA MACLENNAN TWP.

GEOLOGIST(S) J. JACKSON  
 DATE JUNE 8, 1989

SAMPLE NUMBER RX	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, AREA	LATITUDE, LONGITUDE and/or U.T.M.	SAMPLE DESCRIPTION Rock type, lithology, character of soil, stream silt, etc. Formation Mineralization, etc.	RESULTS (ppm. / % / oz. per ton)							
	RX Rock, Talus	SX Stream Silt, Silt	Grab, Chip, Channel				AU (ppb)							
143790	Rock	JJ-12	Grab			GABBRO, AS 143781	<5							
143791	Rock	JJ-13	Grab			light grey with green "freckles", fine grain with feldspathic component, quartz rich  ARKOSE	<5							
143792	Rock	JJ-14	Grab			GABBRO, AS 143781, crystals are not as developed and finer grained, sulphide mineralization, trace, pyrite.	<5							
143793	Rock	JJ-15	Grab			Milky white, Quartz UGW, medium grain with local surface iron staining	<5							
143794	Rock	JJ-16	Grab			fine grain, grey, massive silica rich  ARKOSE	<5							

TRAVERSE NUMBER Grid  
 N.T.S. 41-1-10

PROJECT McVittie  
 AREA MACLENNAN TWP.

GEOLOGIST(S) J. JACKSON  
 DATE JUNE 8, 1989

SAMPLE NUMBER Rx	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, AREA	LATITUDE, LONGITUDE and / or U.T.M.	SAMPLE DESCRIPTION Rock type, lithology, character of soil, stream silt, etc. Formation Mineralization, etc.	RESULTS (ppm. / % / oz. per ton)							
	RX Rock, Talus	<del>SX</del> Stream Silt, S&H	Grab, Chip, Channel				AU (ppb)							
143795	Rock	JJ17	Grab			fine grain, pinkish, quartz rich, staining reveals minor K-rich feldspar	<5							
						ARGOSE (SHEPARED)								
143796	Rock	JJ18	Grab			fine to medium grain, green, GABBRO with quartz, NA! minor K Feldspar materials (sample near contact w felsic dyke)	<5							
143797	Rock	JJ19	Grab			medium grain, grey black and pink, GABBRO AS 143781 with a significant NA/K Feldspar component sulphide mineralization, trace, very very fine spers	<5							
143798	Rock	JJ20	Grab			GABBRO AS <del>143781</del> 143781	<5							
143799	Rock	JJ21	Grab			GABBRO AS 143781, finer grain	10							

TRAVERSE NUMBER Grid  
 N.T.S. 41-1-10

PROJECT McUithe  
 AREA Maclean TWP.

GEOLOGIST(S) J. JACKSON  
 DATE JUN 8, 1989

SAMPLE NUMBER	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, AREA	LATITUDE, LONGITUDE and / or U.T.M.	SAMPLE DESCRIPTION Rock type, lithology, character of soil, stream silt, etc. Formation Mineralization, etc.	RESULTS (ppm. / % / oz. per ton)						
	RX Rock, Talus	SX Stream Silt, Soil	Grab, Chip, Channel				Au (ppb)						
<del>143800</del> 143800	Rock	JJ22	Grab			ARKOSE AS 143795	<5						
<del>145002</del> 155001	Rock	JJ23	Grab			ARKOSE AS 143795	<5						
<del>145003</del> 155002	Rock	JJ24	Grab			ARKOSE AS 143795, trace sulphide	<5						
<del>145004</del> 155003	Rock	JJ25	Grab			ARKOSE AS 143795	<5						
155004	Rock	JJ26	Grab			Green, fine grain, quartz rich Arkose	5						

TRAVERSE NUMBER 6R1D  
 N.T.S. 41-1-10

PROJECT McU. Hig  
 AREA MACLENNAN TWP.

GEOLOGIST(S) J. JACKSON  
 DATE JUNE 8, 1989

SAMPLE NUMBER Rx	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, AREA	LATITUDE, LONGITUDE and/or U.T.M.	SAMPLE DESCRIPTION Rock type, lithology, character of soil, stream silt, etc. Formation Mineralization, etc.	RESULTS (ppm. / % / oz. per ton)							
	RX Rock, Talus	SX Stream Silt, Soil	Grab, Chip, Channel				Au (ppb)							
155005	Rock	JJ27	Grab			ARKOSE AS 143779	<5							
155006	Rock	sm1	Grab			FINE GRAIN, grey, quartz rich, massive <del>ARKOSE</del> weak rock cleavage ARKOSE	<5							
155007	Rock	sm2	Grab			GABBRO, AS 143781	5							
155008	Rock	sm3	Grab			FINE to medium grain, grey green, GABBRO As Previous, K/Na Feldspar along fracture planes Pyrite, $\approx 1/4$ mm, subhedral to euhedral, trace	25							
155009	Rock	sm4	Grab			ARKOSE AS 155006	10							

TRAVERSE NUMBER 6210

 N.T.S. 41-1-10

 PROJECT McUffie

 AREA MACLENNAN TWP.

 GEOLOGIST(S) J. JACKSON

 DATE JUNE 8, 1989

SAMPLE NUMBER	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, AREA	LATITUDE, LONGITUDE and/or U.T.M.	SAMPLE DESCRIPTION Rock type, lithology, character of soil, stream silt, etc. Formation Mineralization, etc.	RESULTS (ppm. / % / oz. per ton)					
	RX Rock, Talus	SX Stream Silt, Soil	Grab, Chip, Channel				AU (ppb)					
155010	Rock	sm5	Grab			milky white, medium grain, quartz vein	<5					
155011	Rock	sm6	Grab			ANORSE AS 143779, pyrite ±1%	5					
155012	Rock	sm7	Grab			GABBRO (?) AS Previous, but has a much finer grain	<5					
155013	Rock	sm8	Grab			white with green crystals, coarse grain ±10mm Plagioclase (?) twinning, striations (?), NA Plagioclase Hornblende, sulphide mineralization, pyrite?, trace to 1%	<5					
155014	Rock	sm9	Grab			GABBRO AS 143781	5					

TRAVERSE NUMBER GRID  
 N.T.S. 41-1-10

PROJECT M<sup>c</sup>U. Hic  
 AREA MACLENNAN TWP.

GEOLOGIST(S) J. JACKSON  
 DATE JUNE 8, 1989

SAMPLE NUMBER	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, AREA	LATITUDE, LONGITUDE and/or U.T.M.	SAMPLE DESCRIPTION Rock type, lithology, character of soil, stream silt, etc. Formation Mineralization, etc.	RESULTS (ppm. / % / oz. per ton)							
	RX Rock, Talus	Stream Silt, Soil	Grab, Chip, Channel				Au (ppb)							
155015		sm10	Grab			GABBRO, AS 143781	5							
155016		sm11	Grab			Pink, coarse grain, with green speckles staining situated a considerable amount of K-spar with less but significant NA feldspar green speckles hornblende (?)	<5							
<del>155017</del> 155018		<del>sm12</del> sm13	Grab			Alteration Rock Milky white quartz vein	<5							
<del>155019</del> 155017		<del>sm13</del> sm12	Grab			ARKOSE AS <del>143781</del> 143779 no sulphide	<5							

TRaverse NUMBER 6E117N.T.S. 41-1-10PROJECT McVittieAREA MACLENNAN TWP.GEOLOGIST(S) J. E. JacksonDATE June 13 / 89

SAMPLE NUMBER	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, AREA	LATITUDE, LONGITUDE and/or U.T.M.	SAMPLE DESCRIPTION Rock type, lithology, character of soil, stream silt, etc. Formation Mineralization, etc.	RESULTS (ppm. / % / oz. per ton)							
	RX Rock, Talus	SX Stream Silt, Soil	Grab, Chip, Channel				Au (PPB)	Ag	Pb	Cu (PPM)	Ni (PPM)			
155019	RX	JJ28	Grab			arkose sheared gabbro - rusty, grey - fine to med grained - trace disseminated sulphides	<5			20	65			
155020	RX	JJ29	Grab			Moderately sheared - very fine grained - grey - moderately carbonatized - <del>gabbro</del> arkose (near contact)	<5			70	60			
155021	RX	JJ30	Grab			Fine to med grained - grey - massive - no visible sulphides present. - Gabbro	<5			50	60			
155022	RX	JJ31	Grab			Med grained - greenish grey - massive - no visible sulphides - Gabbro	5			80	55			
155023	RX	JJ32	Grab			- Fine grained - massive - grey - no visible sulphides - Arkose	<5			<5	25			
155024	RX	JJ33	Grab			Silicified arkose with Qtz vein - massive - fine grained - greenish	<5			5	30			
155025	RX	JJ34	Grab			Pinkish - trace sulphide (pyrite) - fine grained - silicified - silicified arkose	15			<5	10			
155026	RX	JJ35	Grab			- Pinkish, rusty, fine grained, silicified, trace weathered sulphides, massive, thin fracturing thru rock - silicified arkose	20			5	40			

TRaverse NUMBER GRDPROJECT McVittieGEOLOGIST(S) J.E. JACKSONN.T.S. 41:1-10AREA MACLENNAN TWP.DATE June 14/89

SAMPLE NUMBER	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, AREA	LATITUDE, LONGITUDE and/or U.T.M.	SAMPLE DESCRIPTION Rock type, lithology, character of soil, stream silt, etc. Formation Mineralization, etc.	RESULTS (ppm. /% /oz. per ton)							
	RX Rock, Talus	SX Stream Silt, Soil	Grab, Chip, Channel				Au (PPB)	Pt	Pd	Cu (PPM)	Ni (PPM)			
155027	Rx	JJ36	Grab			Fine grained, light gray moderately sheared or foliated, - Arkose	20			10	25			
155028	Rx	JJ37	Grab			Fine grained massive, dark grey, trace sulphides, Fe carb pods/stringers - Arkose	30			10	110			
155029	Rx	JJ38	Grab			Silicified arkose, light grey, fine grained, trace sulphides, massive	25			15	60			
155030	Rx	JJ39	Grab			Silicified <del>arkose</del> arkose with qtz. veining, trace - 1% sulphides, fine grained, massive, pinkish to light gray	25			25	45			
155031	Rx	JJ40	Grab			Fine to med. grained gabbro, massive, dark gray	23			110	53			
155032	Rx	JJ41	Grab			Arkose, fine grained, dark gray massive	25			15	33			
155033	Rx	JJ42	Grab			Gabbro, dark grey, trace sulphides, massive, fine to med grained	15			145	75			
155034	Rx	JJ43	Grab			Gabbro fine to med grained, silicified in parts, dark to light gray	5			75	35			



TRaverse NUMBER 6210N.T.S. 41-1-10PROJECT McVittieAREA MACLENNAN TWP.GEOLOGIST(S) J. E. JacksonDATE June 14/89

SAMPLE NUMBER	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, AREA	LATITUDE, LONGITUDE and / or U.T.M.	SAMPLE DESCRIPTION Rock type, lithology, character of soil, stream silt, etc. Formation Mineralization, etc.	RESULTS (ppm. /% /oz. per ton)						
	RX Rock, Talus	SX Stream Silt, Soil	Grab, Chip, Channel				Au (PPB)	Pt	Pd	Cu (PPM)	Ni (PPM)		
155035	Rx	JJ44	Grab			Gabbro fine to med grained, massive, dark gray.	<5			75	80		
155036	Rx	JJ45	Grab			Matrix for Sudbury Bx (?) Gray waste very fine grained, trace sulphide, massive, dark gray	<5			25	55		
155037	Rx	JJ46	Grab			Arkose, pinkish & dark gray, massive, fine grained	<5			10	25		
155038	Rx	JJ47	Grab			Same as 155035 except med grained	15			50	50		
155039	Rx	JJ48	Grab			Same as 155035	<5			215	105		
155040	Rx	JJ48A	Grab			Fine grained arkose, trace sulphide, massive, dark gray	<5			5	20		
155041	Rx	JJ49	Grab			Same as above	<5			5	20		
155042	Rx	JJ50	Grab			Fine grained arkose, dark gray, massive, trace sulphides	5			10	15		
155043	Rx	JJ51	Grab			Qtz. vein, light gray to blue, vuggy	5			5	10		
155044	Rx	JJ52	Grab			Light gray, fine grained, arkose, massive	<5			10	15		
155045	Rx	JJ53	Grab			Same as above	<5			5	20		

TRAVERSE NUMBER GRID  
 N.T.S. 41-1-10

PROJECT McVittie  
 AREA MACLENNAN TWP.

GEOLOGIST(S) J.E. Jackson  
 DATE June 17/89

SAMPLE NUMBER	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, AREA	LATITUDE, LONGITUDE and/or U.T.M.	SAMPLE DESCRIPTION Rock type, lithology, character of soil, stream silt, etc. Formation Mineralization, etc.	RESULTS (ppm. /% /oz. per ton)						
	RX Rock, Talus	SX Stream Silt, Soil	Grab, Chip, Channel				Au (PPb)	PE	Pd	Cu (PPM)	Ni (PPM)		
155046	RX	JJ54	Grab			Altered arkose(?) - fine grained - Pink, massive -	<5			10	20		
155047	RX	JJ55	Grab			Same as above	<5			5	15		
155048	RX	JJ56	Grab			Silicified arkose - light gray to pink, fine grained, massive	<5			<5	15		
155049	RX	JJ57	Grab			Qtz vein - white - fine carb stringers - trace sulphide	<5						
155050	RX	JJ58	Grab			Quartzite with some qtz. veining - fine grained - massive - trace to 1% sulphide - pinkish to light gray	<5						
155051	RX	JJ59	Grab			Arkose - dark gray, fine grained - trace sulphide, massive	<5			15	20		
155052	RX	JJ60	Grab			Pinkish gray arkose, fine grained, moderately sheared?	<5			5	25		
155053	RX	JJ61	Grab			As above	<5			<5	15		
155054	RX	JJ62	Grab			Arkose - dark gray - fine grained - trace sulphide - massive	<5			5	20		
155055	RX	JJ63	Grab			Med. grained gabbro - dark grey - massive - trace sulphide	<5			55	70		



TRAVERSE NUMBER GR10  
 N.T.S. 41-I-10

PROJECT MOVITTIE  
 AREA MACLENNAN TWP.

GEOLOGIST(S) J. E. Jackson  
 DATE JUNE 13/89

SAMPLE NUMBER	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, AREA	LATITUDE, LONGITUDE and/or U.T.M.	SAMPLE DESCRIPTION Rock type, lithology, character of soil, stream silt, etc. Formation Mineralization, etc.	RESULTS (ppm. /% /oz. per ton)						
	RX Rock, Talus	SX Stream Silt, Soil	Grab, Chip, Channel				Au (PPB)	PE	Pd	Cu (PPM)	Ni (PPM)		
RXISS058		SM-14	GRAB			FINE GRAINED, DARK GREY GABBRO MASSIVE TEXTURE, NO VISIBLE SULPHIDE	25			25	50		
59		SM-15	GRAB			FINE GRAINED, GREENISH GREY ROCK FROM SILICIFIED(?) VEIN WITHIN GABBRO ABOVE. CALCITE PRESENT 1-2% SULPHIDE VEINLET SOME Fe-CARB IN CARB	35			395	60		
62		SM-18	GRAB			FINE <sup>TO MED</sup> GRAINED GABBRO, AS SM-14	25			50	60		
60		SM-16	GRAB			FINE GRAINED QUARTZITE, TRACE SULPHIDE OR ARKOSE	25			35	25		
61		SM-17	GRAB			FINE GRAINED, GREY TO DARK GREEN SILICIFIED SHEAR ZONE MATERIAL <del>NO VISIBLE</del> <sup>TRACE</sup> MINERALIZATION.	5			130	75		
		<del>SM-18</del>	<del>GRAB</del>			<del>FINE GRAINED GABBRO, MASSIVE, NO SULPHIDE</del>							
63		SM-19	GRAB			ARKOSE, FINE TO MEDIUM GRAINED, YELLOW STAINING (KSPAR?) APPEARING IN SMALL FRACTURES.	25			10	15		
64		SM-20	GRAB			SHEAR ZONE IN QUARTZITE, WITH SOME CARBONATE, TRACE TO 1% SULPHIDE	25			15	50		
65		SM-21	GRAB			ARKOSE, FINE TO MEDIUM GRAINED, TRACE SULPHIDE, GREY	25			5	20		
66		SM-22	GRAB			FINE GRAINED, DARK GREY ARKOSE NO MINERALIZATION	25			20	35		
67		SM-23	GRAB			FINE GRAINED MASSIVE GABBRO, NEAR CONTACT WITH ARKOSE (SM 22) NO MINERALIZATION	25			80	60		

TRaverse NUMBER 6212N.T.S. 41-I-10PROJECT MCVITTIEAREA MCLENNAN TWP.GEOLOGIST(S) J. E. JohnsonDATE JUNE 14/89

SAMPLE NUMBER	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, AREA	LATITUDE, LONGITUDE and / or U.T.M.	SAMPLE DESCRIPTION Rock type, lithology, character of soil, stream silt, etc. Formation Mineralization, etc.	RESULTS (ppm. /% /oz. per ton)						
	RX Rock, Talus	SX Stream Silt, Soil	Grab, Chip, Channel				Au (ppb)	Pb	Pd	Cu (ppm)	Ni (ppm)		
68		SM24	GRAB			FINE TO MED. GRAINED ARKOSE, TRACE PYRITE	<5				10	25	
69		SM25	GRAB			MED. GRAINED QUARTZITE LIGHT TO MODERATE GREY, ONE SPECK OF SULPHIDE	<5				<5	10	
70		SM26	GRAB			FINE GRAINED, DARK GREY ARKOSE, NEAR CONTACT WITH GABBRO (SM27)	<5				30	25	
71		SM27	GRAB			FINE GRAINED GABBRO, NEAR CONTACT WITH ARKOSE (SM26).	5				55	50	
72		SM28	GRAB			FINE TO MED GRAINED GABBRO, MASSIVE, NEAR GABBRO - QUARTZITE (ARKOSE) CONTACT	<5				75	80	
73		SM-29	GRAB			VERY FINE GRAINED ARKOSE FROM SHEAR ZONE AT CONTACT BETWEEN ARKOSE AND GABBRO. DARK GREY 1-2% BLEBBY SULPHIDE (PYRITE); SILICIFIED	<5				35	60	
74		SM-30	GRAB			DARK GREY, FINE GRAINED ARKOSE NO VISIBLE MINERALIZATION	<5				5	20	
75		SM-31	GRAB			QTZ VEIN FOUND IN QUARTZITE (ARKOSE) GREEN CHROME MICA FLAKES SCATTERED THROUGHOUT. ONE GRAIN (2mm) OF WEATHERED SULPHIDE	<5				10	10	
76		SM-32	GRAB			FINE TO MED GRAINED GABBRO; NO VISIBLE MINERALIZATION	<5				90	80	
77		SM-33	GRAB			FINE GRAINED ARKOSE, NO MINERALIZATION	<5				<5	15	
78		SM-34	GRAB			1cm WIDE QTZ VN IN QUARTZITE VN SLIGHTLY VUGGY NO MINERALIZATION	<5				10	20	



# INCO GOLD

TRAVERSE NUMBER GRID  
 N.T.S. 41-I-10

PROJECT MCVITTIE  
 AREA MACLENNAN TWP.

GEOLOGIST(S) J.E. JACKSON  
 DATE JUNE 19/89

SAMPLE NUMBER	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, AREA	LATITUDE, LONGITUDE and/or U.T.M.	SAMPLE DESCRIPTION Rock type, lithology, character of soil, stream silt, etc. Formation Mineralization, etc.	RESULTS (ppm. /% /oz. per ton)					
	RX Rock, Talus	SX Stream SN, Soil	Grab, Chip, Channel				Au (PPB)	Pt	Pd	Cu	Ni	
RX155082		JJ-65	CHIP			QUARTZ POD, 33 cm WIDE, MILKY WHITE NO VISIBLE MINERALIZATION	10					
RX155083		JJ-66	GRAB			QZ - FELDSPAR, VERY RUSTY AND VERY VUGGY COARSE GRAINED, ALTERED ARKOSE?	10					
RX155084		JJ-67	CHIP			0.5 CHIP COARSE GRAINED, QUARTZ-FELD BX. ZONE, EXTENSIVE MILKY QUARTZ PINK FELDSPAR (ALTERATION?) 1-2% FINE TO MED. GRAINED EUBEDRAL TO SUBHEDRAL PYRITE. (NO METASOMATISM?)	<5					
RX155085		JJ-68	CHIP			VERY FINE GRAINED DARK GREY TO BROWN, BANDED (CHERTY) 1% BX. 27 cm CHIP MATRIX DOMINATED, FEW FRAGMENTS. AREA IS BXD. WITH VUGGY QZ HEALED MATRIX	5					
RX155086		JJ-69	CHIP			SAME AS JJ-67	<5					
RX155087		JJ-70	CHIP			SAME AS JJ-67 ONLY LESS PYRITE	<5					
RX155088		JJ-71	CHIP			SAME AS JJ-70	<5					
RX155089		JJ-72	CHIP			SAME AS JJ70, ONLY LESS QZ (MOSTLY GREY, PINK)	5					
RX155090		JJ-73	CHIP			SAME AS JJ-67 (TRACE PYRITE)	5					

TRAVERSE NUMBER GRID  
 N.T.S. 41710

PROJECT MCVITTE  
 AREA MACLENNAN TWP.

GEOLOGIST(S) J.E. JACKSON  
 DATE JUNE 21/89

SAMPLE NUMBER	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, AREA	LATITUDE, LONGITUDE and/or U.T.M.	SAMPLE DESCRIPTION Rock type, lithology, character of soil, stream silt, etc. Formation Mineralization, etc.	RESULTS (ppm. / % / oz. per ton)						
	RX Rock, Talus	SX Stream Silt, Soil	Grab, Chip, Channel				As (ppb)						
RX155091		JJ-74	CHIP			QTZ VEIN, COARSE GRAINED, SOME CARBONATE, 0.5 metre CHIP NO MINERALIZATION	25						
RX155092		JJ-75	GRAB			ALTERED GABBRO, PINKISH-GREY, WITH TRACE SULPHIDE	15						
RX155093		JJ-76	CHIP	0.5m		QTZ VEIN, 0.5m. CHIP NO VISIBLE MINERALIZATION	25						
RX155094		JJ-77	GRAB			ALTERED GABBRO, LIGHT TO MEDIUM GRAY FINE TO MED. GRAINED, TRACE SULPHIDE	15						
RX-155095	ROCK	JJ-80	GRAB			V.F. gr. mass, LT GREENISH-GRAY, CALCAREOUS SILTSTONE.	25						
RX-155096	ROCK	JJ-81	GRAB			C. gr. GRAY, MASSIVE, SALTY PEPPER TEXTURED GABBRO.	25						
RX-155097	ROCK	JJ-82	GRAB			F. gr. LT. GREENISH-GRAY, WEAKLY BANDED, CALCAREOUS, LIMESTONE.	25						
RX-155098	ROCK	JJ-83	GRAB			F. gr. LT. GREENISH-GRAY, MASS, CALCAREOUS SILTSTONE?	25						
RX-155099	ROCK	JJ-84	GRAB			AS FROM TO RX-155098	<5						



**APPENDIX 2**

**Specifications of Geophysical Instruments**

# OMNI IV "Tie-Line" Magnetometer



## Specifications

Dynamic Range	18,000 to 110,000 gammas. Roll-over display feature suppresses first significant digit upon exceeding 100,000 gammas.
Tuning Method	Tuning value is calculated accurately utilizing a specially developed tuning algorithm
Automatic Fine Tuning	± 15% relative to ambient field strength of last stored value
Display Resolution	0.1 gamma
Processing Sensitivity	± 0.02 gamma
Statistical Error Resolution	0.01 gamma
Absolute Accuracy	± 1 gamma at 50,000 gammas at 23°C ± 2 gamma over total temperature range
Standard Memory Capacity	
Total Field or Gradient	1,200 data blocks or sets of readings
Tie-Line Points	100 data blocks or sets of readings
Base Station	5,000 data blocks or sets of readings
Display	Custom-designed, ruggedized liquid crystal display with an operating temperature range from -40°C to +55°C. The display contains six numeric digits, decimal point, battery status monitor, signal decay rate and signal amplitude monitor and function descriptors.
RS 232 Serial I/O Interface	2400 baud, 8 data bits, 2 stop bits, no parity
Gradient Tolerance	6,000 gammas per meter (field proven)
Test Mode	A. Diagnostic testing (data and programmable memory) B. Self Test (hardware)
Sensor	Optimized miniature design. Magnetic cleanliness is consistent with the specified absolute accuracy.
Gradient Sensors	0.5 meter sensor separation (standard), normalized to gammas/meter. Optional 1.0 meter sensor separation available. Horizontal sensors optional.
Sensor Cable	Remains flexible in temperature range specified, includes strain-relief connector
Cycling Time (Base Station Mode)	Programmable from 5 seconds up to 60 minutes in 1 second increments
Operating Environmental Range	-40°C to +55°C; 0-100% relative humidity; weatherproof
Power Supply	Non-magnetic rechargeable sealed lead-acid battery cartridge or belt; rechargeable NiCad or Disposable battery cartridge or belt; or 12V DC power source option for base station operation.
Battery Cartridge/Belt Life	2,000 to 5,000 readings, for sealed lead acid power supply, depending upon ambient temperature and rate of readings
Weights and Dimensions	
Instrument Console Only	2.8 kg, 238 x 150 x 250mm
NiCad or Alkaline Battery Cartridge	1.2 kg, 235 x 105 x 90mm
NiCad or Alkaline Battery Belt	1.2 kg, 540 x 100 x 40mm
Lead-Acid Battery Cartridge	1.8 kg, 235 x 105 x 90mm
Lead-Acid Battery Belt	1.8 kg, 540 x 100 x 40mm
Sensor	1.2 kg, 56mm diameter x 200mm
Gradient Sensor (0.5 m separation - standard)	2.1 kg, 56mm diameter x 790mm
Gradient Sensor (1.0 m separation - optional)	2.2 kg, 56mm diameter x 1300mm
Standard System Complement	Instrument console; sensor; 3-meter cable, aluminum sectional sensor staff, power supply, harness assembly, operations manual.
Base Station Option	Standard system plus 30 meter cable
Gradiometer Option	Standard system plus 0.5 meter sensor

EDA Instruments Inc.  
4 Thorncliffe Park Drive  
Toronto, Ontario  
Canada M4H 1H1  
Telex: 06 23222 EDA TOR  
Cable: Instruments Toronto  
(416) 425 7800

In U.S.A.  
EDA Instruments Inc.  
5151 Ward Road  
Wheat Ridge, Colorado  
U.S.A. 80033  
(303) 422 9112

Printed in Canada



## GEONICS LIMITED

2 Thorncliffe Park Drive, Toronto 17, Ontario, Canada. Tel. (416) 425-1821, Cables: Geonics

# EM 16

## VLF ELECTROMAGNETIC UNIT

Pioneered exclusively by Geonics Limited the VLF-method of electromagnetic surveying by utilization of the uniform horizontal fields generated by an existing network of reliable, fully operational Very Low Frequency transmitting stations has proved to be a major advance in geophysical exploration.

Very extensive world-wide experience since the beginning of 1965 by a large and rapidly increasing number of users, including a high proportion of major mining and exploration companies, has provided conclusive evidence of the effectiveness of the technique and the EM 16 has gained general acceptance as a basic electromagnetic tool. This evidence has also indicated the response of disseminated bodies to the VLF-method.

The unique self-contained EM 16 offers the unrivalled combination of **LIGHT WEIGHT, ONE-MAN OPERATION** and **DEEP PENETRATION** allowing rapid, economical surveys. Assessing the data is simplified due to the use of the uniform horizontal primary field. The patented design feature of the measurement of both the in-phase and out-of-phase (quadrature) component of the vertical field provides the information necessary for comprehensive interpretation of the field results.



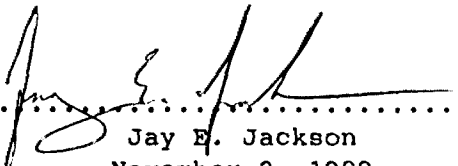
### SPECIFICATIONS

Source of primary field:	VLF transmitting stations.	Scale range:	In-phase $\pm 150\%$ ; Out-of-phase $\pm 40\%$ .
Transmitting stations used:	Any desired station frequency supplied with the instrument in the form of plug-in tuning units. Two tuning units can be plugged in at one time. A switch selects either station.	Readability:	$\pm 1\%$
Operating frequency range:	About 15 – 25 kHz	Reading time:	10 – 40 seconds depending on signal strength.
Parameters measured:	(1) The vertical in-phase component (tangent of the tilt angle of the polarization ellipsoid). (2) The vertical out-of-phase (quadrature) component of the short axis of the polarization ellipsoid compared to the long axis).	Operating temperature range:	$-40$ to $50^{\circ}\text{C}$
Method of reading:	In-phase from a mechanical inclinometer; out-of-phase from a calibrated dial. Nulling by audio tone.	Power Supply:	6 size AA (penlight) alkaline cells. Life about 200 hours.
		Dimensions:	16 x 5.5 x 3.5 in (42 x 14 x 9 cm)
		Weight:	2.5 lbs (1.1 kg)
		Instrument supplied with:	Monotonic speaker, carrying case, manual of operation, 3 station selector plug-in tuning units (additional frequencies are optional), set of batteries.
		Shipping weight:	10 lbs (4.5 kg)

CERTIFICATE OF QUALIFICATIONS

I, Jay E. Jackson of 354 Wembley Drive, Sudbury, Ontario certify that:

1. I am a 1987 graduate of Laurentian University with an Honours Bachelor of Science Degree in Geology.
2. I have practiced my profession in Ontario continuously since graduation from university.
4. I am currently employed as a Geologist by Inco Exploration and Technical Services, Inc.

.....  
  
.....  
Jay E. Jackson  
November 2, 1989

Qual. this report.



Ministry of Northern Development and Mines

Report of Work

(Geophysical, Geological, Geochemical and Expenditures)

DOCUMENT

W8907- (



41110NW0027 2.12866 MACLENNAN

900

8709-045

Mining A

Type of Survey(s) **Geological and Geophysical (Mag & EM)** MacLennan

Claim Holder(s) **Inco Limited** Prospector's Licence No. **A-19231**

Address **c/o Inco Exploration and Technical Services, Inc. Hwy 17W. Copper Cliff, Ont. POM1NO**

Survey Company **Inco Exploration and Technical Services, Inc.** Date of Survey (from & to) **07 May 89 to 06 May 89** Total Miles of line Cut **19.2 km**

Name and Address of Author (of Geo-Technical report) **J. Jackson/E.K. Berrer c/o Inco Expl. & Tech. Services, Inc. Copper Cliff, Ont. POM 1NO**

**2.12866**

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	20
	- Magnetometer	40
	- 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)		
Prefix	Mining Claim Number	Expend. Days Cr.
S	994014	
	994015	
	994016	
	1076202	
	1076203	
	1076204	
	1076205	
	1076206	
	1076207	

ONTARIO GEOLOGICAL SURVEY  
ASSESSMENT FILES  
OFFICE  
FEB 5 1990  
RECEIVED

SUBBURY MINING DIV.  
RECEIVED  
SEP 13 1989  
A.M. 7 8 9 10 11 12 1 2 3 4 5 6 P.M.  
1:45

RECEIVED  
1 1989  
MINING LANDS SECTION

Total number of mining claims covered by this report of work. **9**

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures  $\div$  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.

For Office Use Only

Total Days Cr. Recorded **1920** Date Recorded **Sept 15/89**

Date Approved by Recorder **2 Feb 90** Branch Director

Date **Sept. 11, 1989** Recorded Holder or Agent (Signature)

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 **Ian McCaskill c/o Inco Exploration and Technical Services, Inc.**

Date Certified **Sept 11 1989** Certified by (Signature)

RECEIVED

November 8, 1989

NOV 09 1989

MINING LANDS SECTION

Ministry of Northern Development  
and Mines  
Mining Lands Section  
Mineral Development and Lands Branch  
880 Bay Street, 3rd. Floor  
Toronto, Ontario  
M5S 1Z8

Attention: W. R. Cowan, Provincial Manager

Dear Sir:

2. 12866

Re: McVittie Project; NTS: 41-I-10.43

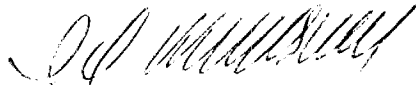
Enclosed is a geological and geophysical (mag and EM) report in duplicate being submitted as assessment work on the following claims located in MacLennan Township, Sudbury Mining Division.

S994014 - 016 inclusive  
S1076202 - 207 inclusive

The report of work covering this submission was forwarded to the Mining Recorder in Sudbury and subsequently recorded on September 15, 1989.

I trust this will be considered satisfactory.

Yours truly,



*for:* W. V. Rodney  
Senior Landman

IDM/mcb

Enclosure:

INCO EXPLORATION AND TECHNICAL SERVICES INC.

Field Exploration Office  
Highway 17 West, Copper Cliff, Ontario P0M 1N0 • (705) 682-8451



Ministry of Northern Development and Mines

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

DOCUMENT No.  
**W8907-095**

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.

Mining Act

Type of Survey(s): **Geological and Geophysical (Mag & EM)** Township or Area: **MacLennan**

Claim Holder(s): **Inco Limited** Prospector's Licence No.: **A-19231**

Address: **c/o Inco Exploration and Technical Services, Inc. Hwy 17W. Copper Cliff, Ont. POM1NO**

Survey Company: **Inco Exploration and Technical Services, Inc.** Date of Survey (from & to): **07 Day | 06 Mo | 89 | 06 Day | 09 Mo | 89** Total Miles of line Cut: **19.2 km**

Name and Address of Author (of Geo-Technical report): **J. Jackson/E.K. Berrer c/o Inco Expl. & Tech. Services, Inc. Copper Cliff, Ont. POM 1NO**

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	20
	- Magnetometer	40
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
	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			Mining Claim		
Prefix	Number	Expend. Days Cr.	Prefix	Number	Expend. Days Cr.
S	994014	✓			
	994015	✓			
	994016	✓			
	1076202	✓			
	1076203	✓			
	1076204	✓			
	1076205	✓			
	1076206	✓			
	1076207	✓			

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1 1989

MINING LANDS SECTION

SUDBURY MINING DIV.  
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7 8 9 10 11 12 1 2 3 4 5 6  
1:45

Expenditures (excludes power stripping)

Type of Work Performed: \_\_\_\_\_

Performed on Claim(s): \_\_\_\_\_

Calculation of Expenditure Days Credits

Total Expenditures: \$ \_\_\_\_\_ ÷ 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: **9**

Date: **Sept. 11, 1989**

Recorded Holder or Agent (Signature): *[Signature]*

For Office Use Only

Total Days Cr. Date Recorded: **1990**

Date Approved as Recorded: **Sept 15/89**

Branch Director: *[Signature]*

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.



Ministry of Northern Development and Mines

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

DOCUMENT No.  
W8907-095

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Note: - Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.  
- Do not use shaded areas below.

Mining Act

Type of Survey(s) Geological and Geophysical (Mag & EM)	Township or Area MacLennan
Claim Holder(s) Inco Limited	Prospector's Licence No. A-19231
Address c/o Inco Exploration and Technical Services, Inc. Hwy 17W. Copper Cliff, Ont. POM1N0	
Survey Company Inco Exploration and Technical Services, Inc.	Date of Survey (from & to) 07   06   89   06   09   89
Name and Address of Author (of Geo-Technical report) J. Jackson/E.K. Berrer c/o Inco Expl. & Tech. Services, Inc. Copper Cliff, Ont. POM 1N0	

Credits Requested per Each Claim in Columns at right

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

Mining Claims Traversed (List in numerical sequence)

Mining Claim			Mining Claim		
Prefix	Number	Expend. Days Cr.	Prefix	Number	Expend. Days Cr.
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	994015	✓			
	994016	✓			
	1076202	✓			
	1076203	✓			
	1076204	✓			
	1076205	✓			
	1076206	✓			
	1076207				

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MINING LANDS SECTION

SUDBURY MINING DIV.  
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SEP 13 1989  
A.M. P.M.  
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1:45

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures \$  ÷ 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.

Date  
Sept. 11, 1989

Recorded Holder or Agent (Signature)  
*[Signature]*

For Office Use Only

Total Days Cr. Recorded

Date Recorded  
Sept 15/89

Date Approved as Recorded

Mining Recorder  
*[Signature]*

Branch Director

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.





Ministry of Northern Development and Mines

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

DOCUMENT No.  
W8907-095

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Note: -- Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.  
-- Do not use shaded areas below.

Nov 04, 1989

Mining Act

Type of Survey(s): **Geological and Geophysical (Mag & EM)** Township or Area: **MacLennan**

Claim Holder(s): **Inco Limited** Prospector's Licence No.: **A-19231**

Address: **c/o Inco Exploration and Technical Services, Inc. Hwy 17W. Copper Cliff, Ont. POM1N0**

Survey Company: **Inco Exploration and Technical Services, Inc.** Date of Survey (from & to): **07 | 06 | 89 | 06 | 09 | 89** Total Miles of line Cut: **19.2 km**

Name and Address of Author (of Geo-Technical report): **J. Jackson/E.K. Berrer c/o Inco Expl. & Tech. Services, Inc. Copper Cliff, Ont. POM 1N0**

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

Mining Claims Traversed (List in numerical sequence)

Mining Claim			Mining Claim		
Prefix	Number	Expend. Days Cr.	Prefix	Number	Expend. Days Cr.
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	994015	✓			
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	1076202	✓			
	1076203	✓			
	1076204	✓			
	1076205	✓			
	1076206	✓			
	1076207	✓			

RECEIVED  
1 1989  
MINING LANDS SECTION

SUDBURY MINING DIV.  
RECEIVED  
SEP 13 1989  
A.M. P.M.  
7 8 9 10 11 12 1 2 3 4 5 6  
1:45 J.R.

Expenditures (excludes power stripping)

Type of Work Performed: \_\_\_\_\_

Performed on Claim(s): \_\_\_\_\_

Calculation of Expenditure Days Credits

Total Expenditures: \$ \_\_\_\_\_ ÷ 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: **9**

Date: **Sept. 11, 1989** Recorded Holder or Agent (Signature): *[Signature]*

For Office Use Only

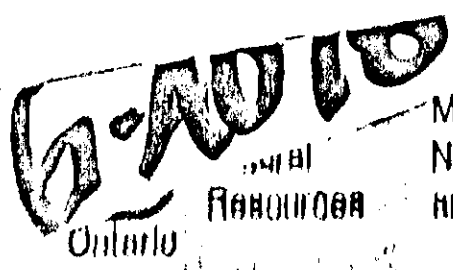
Total Days Cr. Recorded: **1920** Date Recorded: **Sept 15/89** Mining Recorder: *[Signature]*

Date Approved as Recorder: \_\_\_\_\_ Branch Director: \_\_\_\_\_

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.





Ministry of Northern Development and Mines

SYMBOLS

DISPOSITION OF CROWN LANDS

AREAS WITHDRAWN FROM DISPOSITION

INDEX TO LAND DISPOSITION

PLAN G-4078 TOWNSHIP MACLENNAN

M.N.R. ADMINISTRATIVE DISTRICT SUDBURY MINING DIVISION SUDBURY LAND TITLES/REGISTRY DIVISION SUDBURY

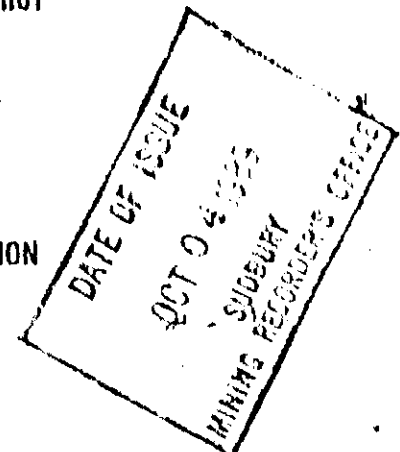
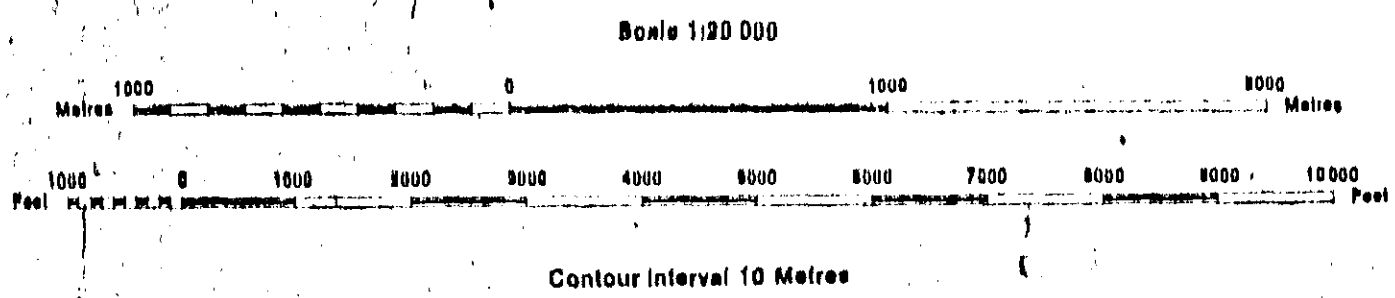


Table of symbols for boundaries, roads, railways, and other features.

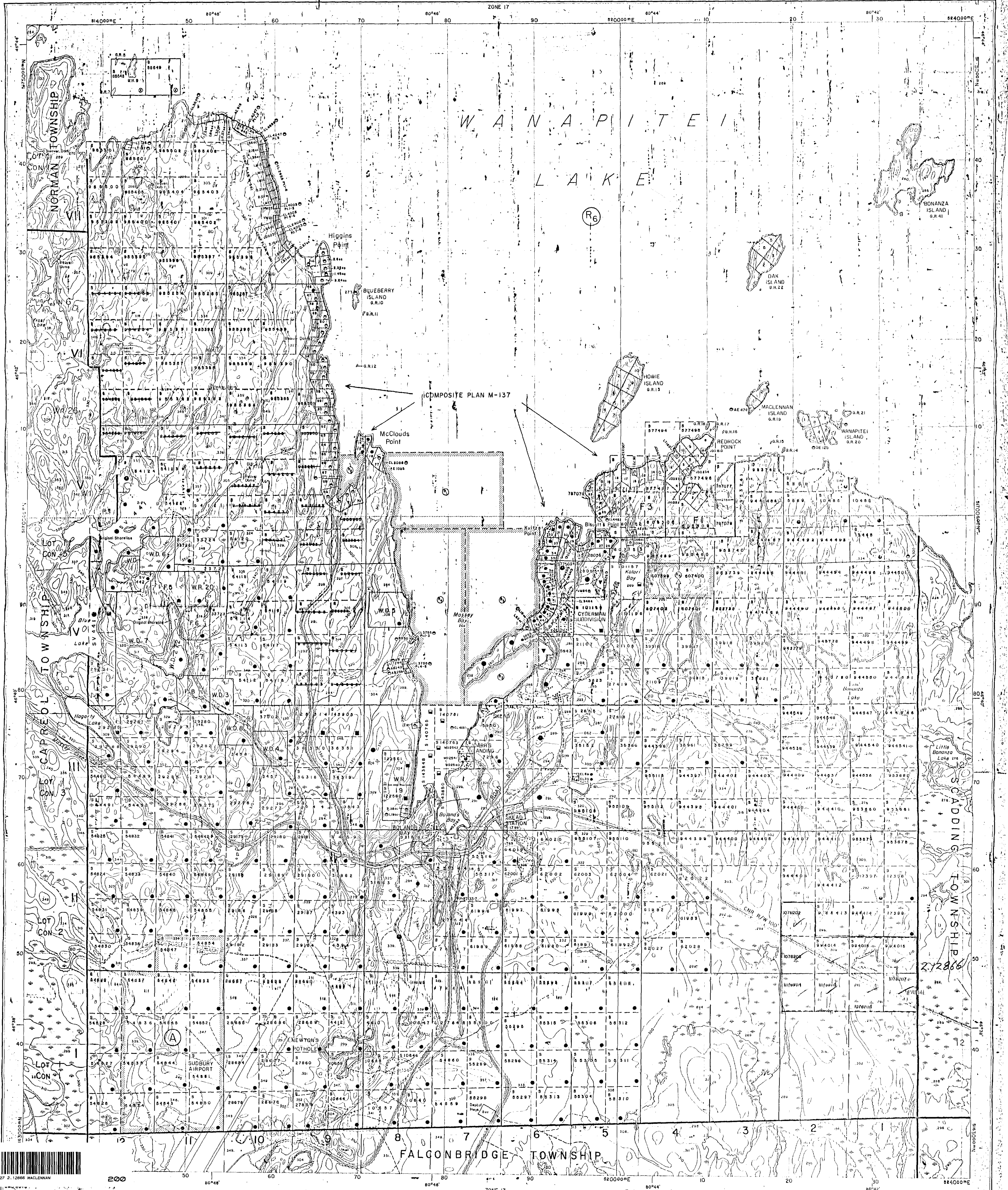
Table of symbols for crown land dispositions: Surface & Mining Rights, Surface Rights Only, Mining Rights Only, Licence of Occupation, etc.

Table of areas withdrawn from disposition: MHO - Mining Rights Only, MLO - Surface Rights Only, MLI - Mining and Surface Rights.



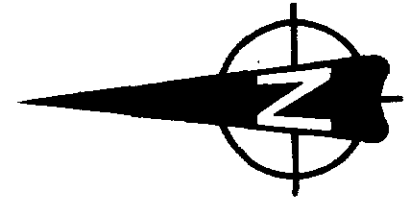
Map base and land disposition drafted by Surveys and Mapping Branch, Ministry of Natural Resources. The disposition of land, location of lot fabric and parcel boundaries on this index was compiled for administrative purposes only.

NOTES: RESERVE FLOODING RIGHTS ALONG THE SHORE OF WANAPITTEI LAKE AND ISLANDS THEREIN TO THE ELEVATION OF CREST OF DAM AT OUTLET OF LAKE, FILE #0004. ISLANDS IN WANAPITTEI LAKE WITHDRAWN FROM TAKING SEC. 35(C) OF MINING ACT, (R.S.O. 1970).



4117000027 2.12866 MACLENNAN



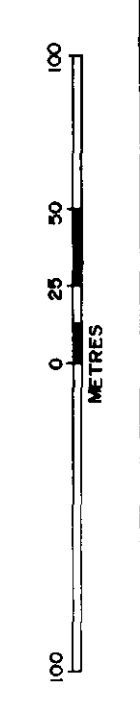


**LEGEND**

- MIDDLE PRECAMBRIAN
  - INTRUSIVE
  - 3 341 MEDIUM TO COARSE GRAINED, MASSIVE, DARK GRAY GABBRO - TRACE OF PYRITE
- HURONIAN SUPERGROUP
  - 2 244 QUIRRE LAKE GROUP
  - ESPANOLA FORMATION
  - ALTERNATING BEDS OF FINE GRAINED, LIGHT GREEN TO CREAM CALCAREOUS SLTSTONE AND VERY FINE GRAINED, DARK GRAY, CALCAREOUS MUDSTONE - POSSIBLE LIMESTONE
  - HOUGH LAKE GROUP
  - MISSISSAUG FORMATION
- 1 045 FINE GRAINED, DARK TO LIGHT GRAY, EQUIGRANULAR ANROSE

**SYMBOLS**

- Outcrop
- Geological Contact - Inferred
- Breccia
- Sill
- Foliation
- Slope Direction - Flat, Slight, Moderate, Steep
- Claim Boundary
- Barrier Dam
- Trail
- Knobcase
- C.N.R. Railway Tracks
- Vertical Jointing
- Bedding
- Tops Unknown
- Shear



**INCO GOLD**  
INCO GOLD COMPANY, A UNIT OF INCO LIMITED

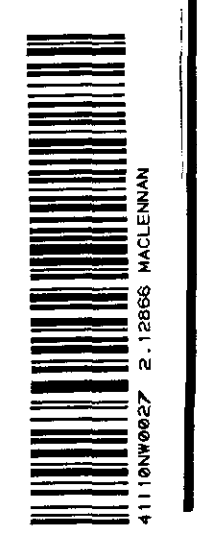
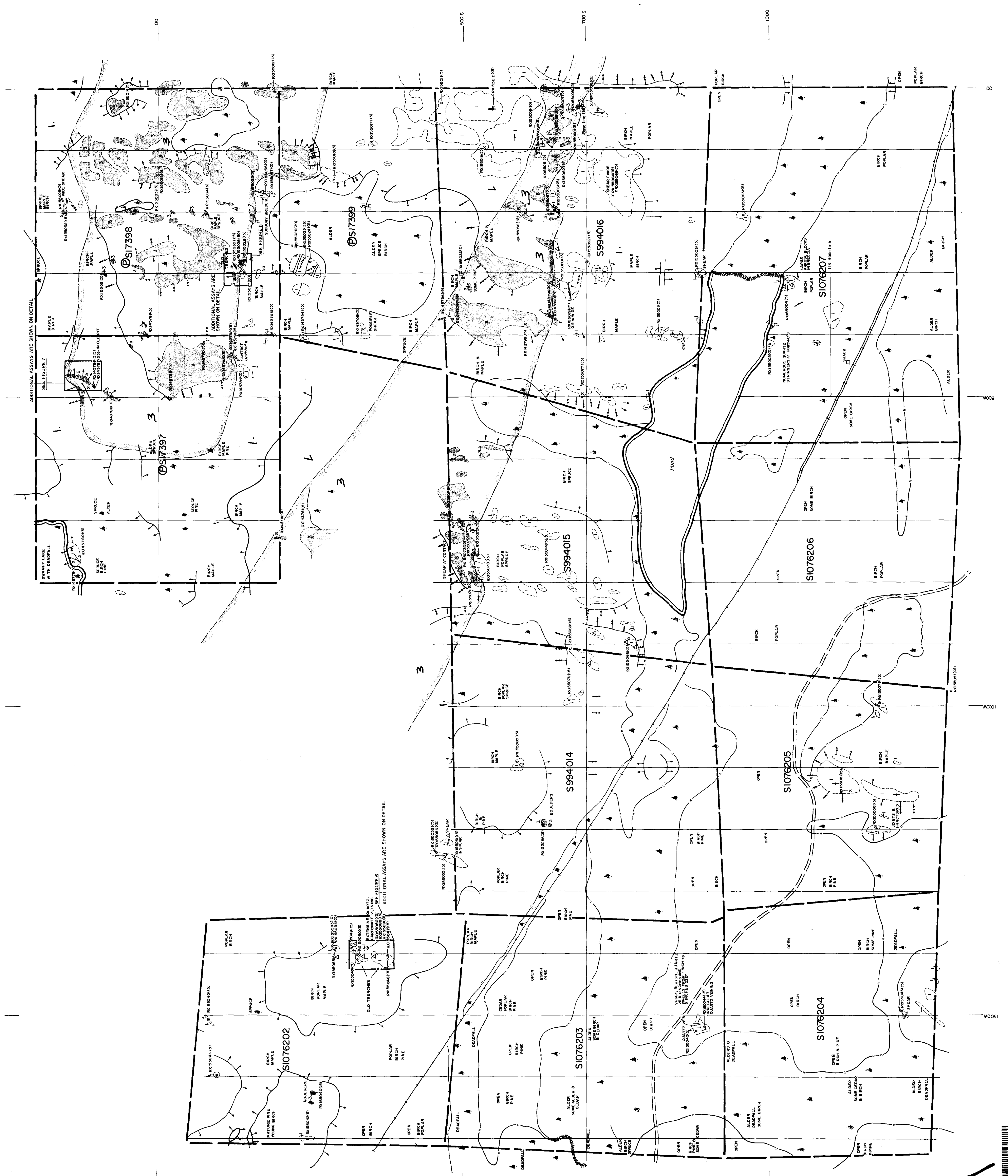
Project: MCVITTIE OPTION Area: MCLENNAN TWP.

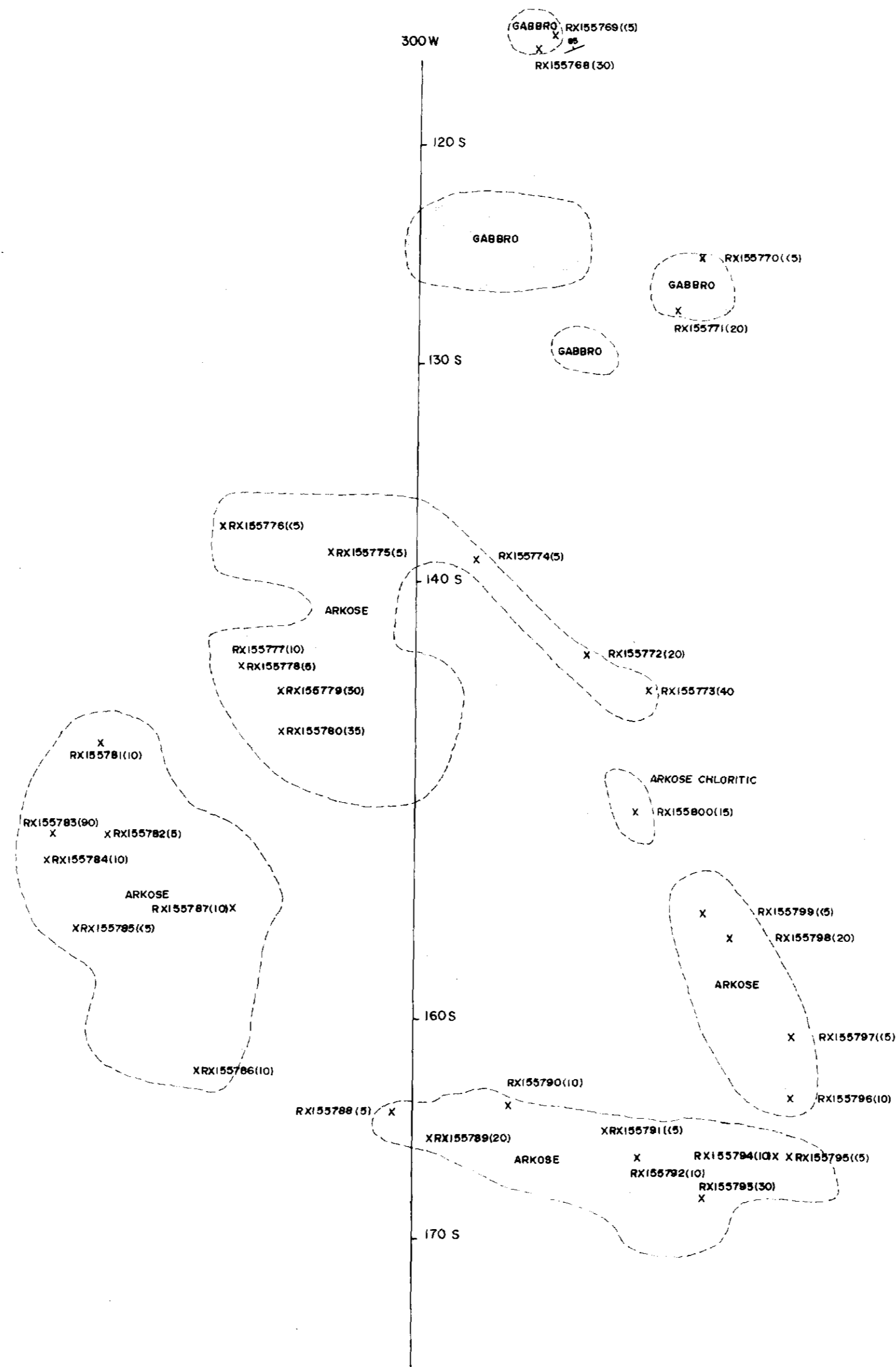
**GEOLOGICAL SURVEY**

Sheet: 1 of 4

Survey date: JUNE 1989  
Compiled by: J. JACKSON  
Scale: 1:2500

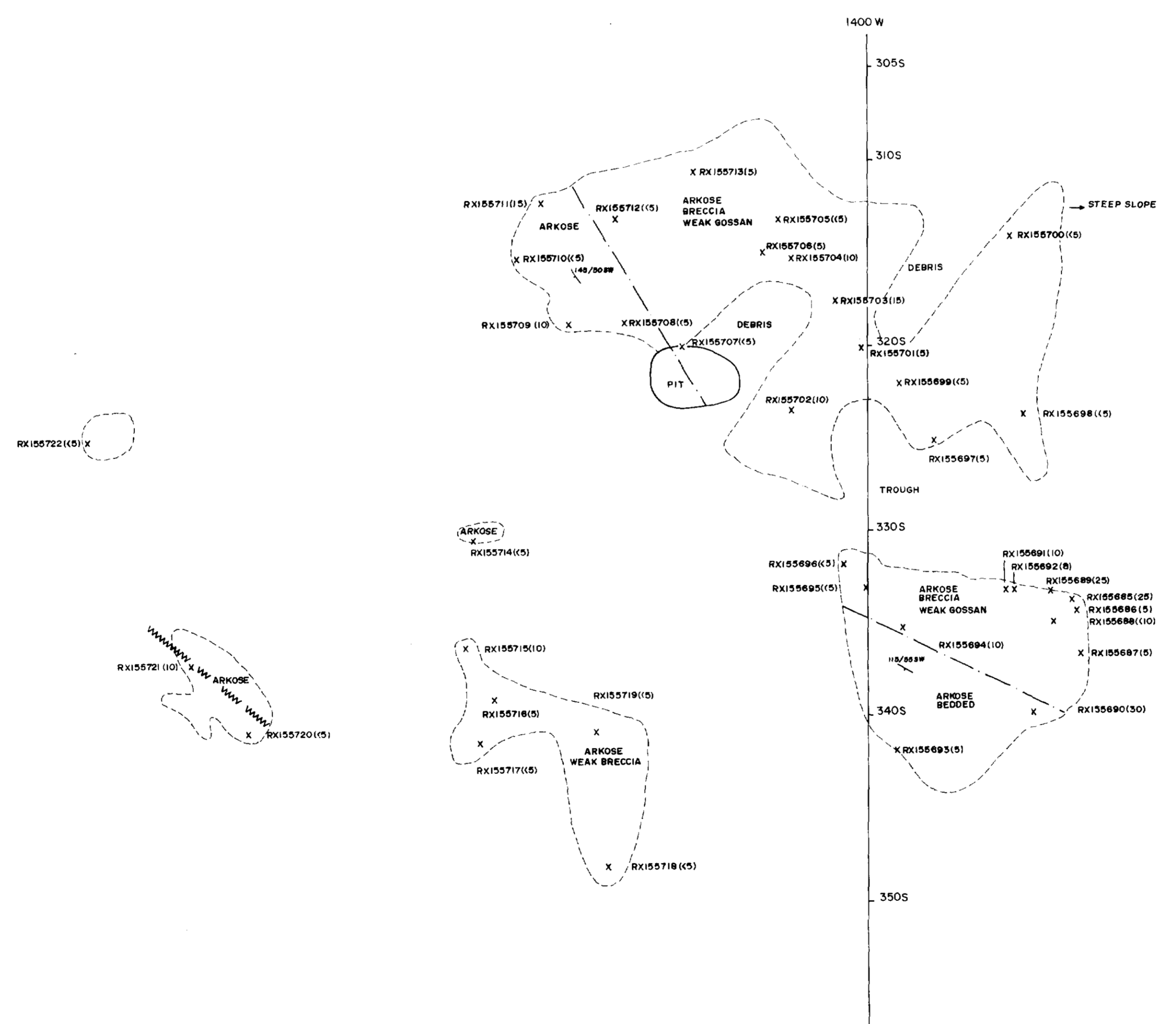
Instrument: DIALY 1989  
Drawn by: B. HALBERT  
N.T.S. 4/1/70



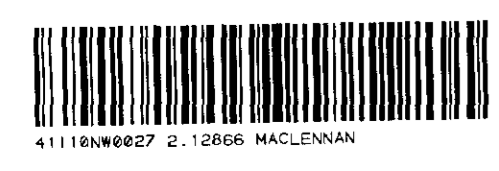


<b>INCO GOLD</b>		Copper Cliff, Ontario	
INCO GOLD COMPANY, A UNIT OF INCO LIMITED		<b>2.12866</b>	
Project: McVITTIE OPTION		Area: MacLENNAN TWP.	
DETAIL GEOLOGY - 300W SECTION		SHEET 1	FIGURE 5
Supervisor: J. PERRY	Instrument:	Survey date:	
Compiled by: K. HANNILA	Drawn by: B. HALBERT	Date drawn: OCT. 1989	Revised:
Scale: 1:200	File:	N.T.S. 41   10	





<b>INCO GOLD</b> 2.12866 <small>Copper Cliff, Ontario</small>	
<small>INCO GOLD COMPANY, A UNIT OF INCO LIMITED</small>	
Project: McVITTIE OPTION	Area: MacLENNAN TWP.
<b>DETAIL GEOLOGY - 1400W SECTION</b>	
SHEET	FIGURE
1	6
Supervisor: J. PERRY	Instrument:
Compiled by: K. HANNILA	Drawn by: B. HALBERT
Scale: 1:200	File:
Survey date:	Date drawn: OCT. 1989
	Revised:
	N.T.S. 41 1 10



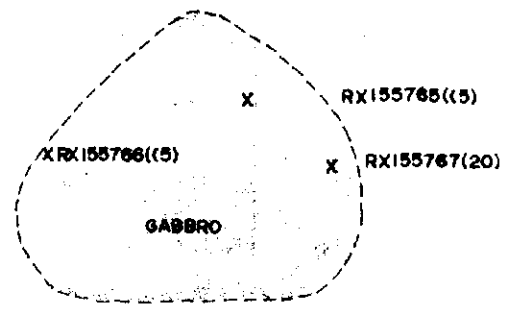
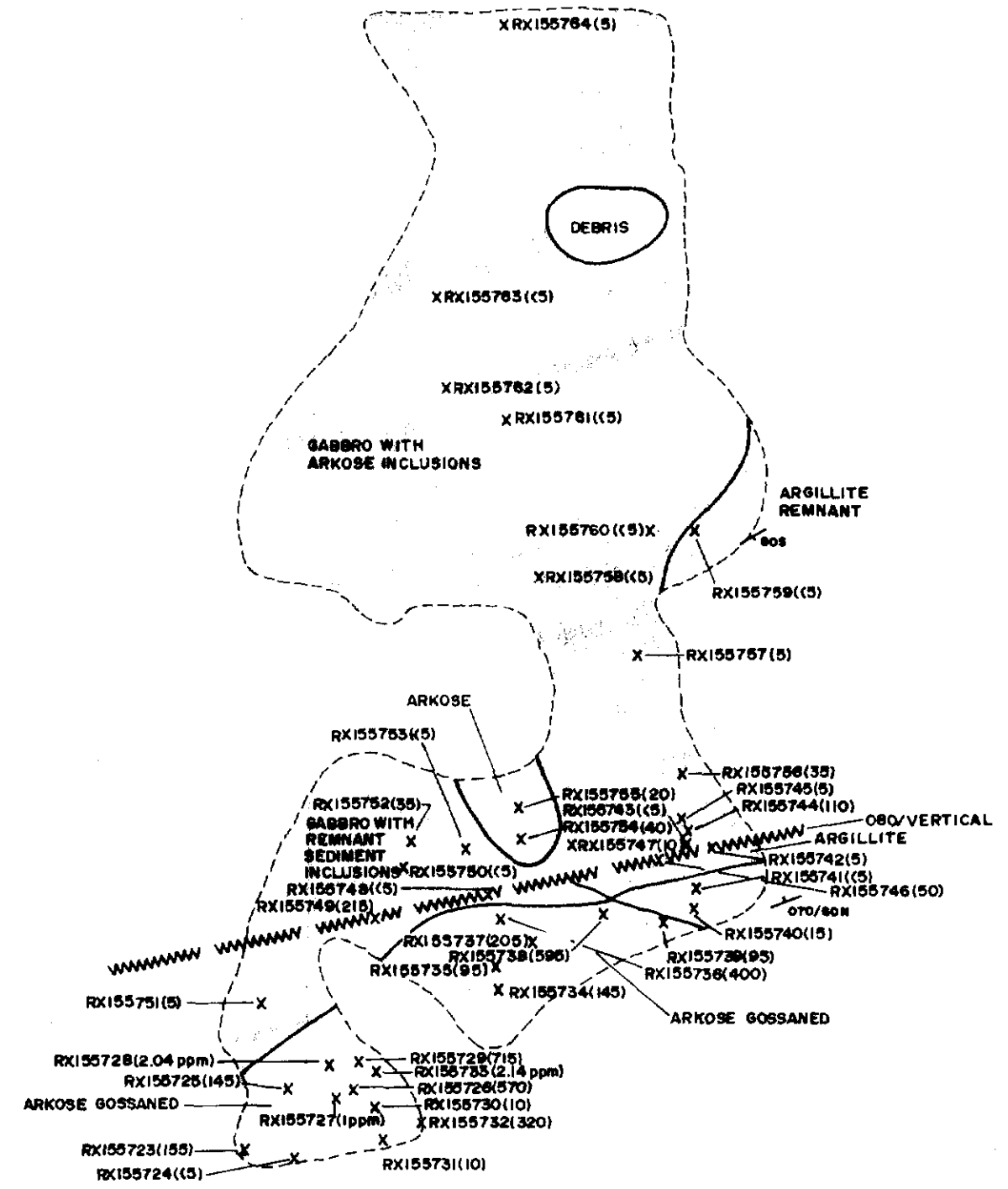
500W

125N

115N

105N

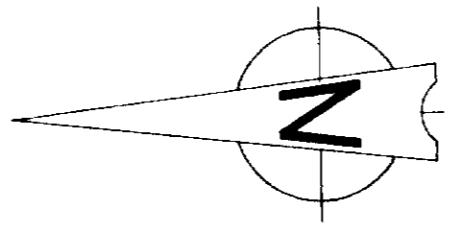
95N



240

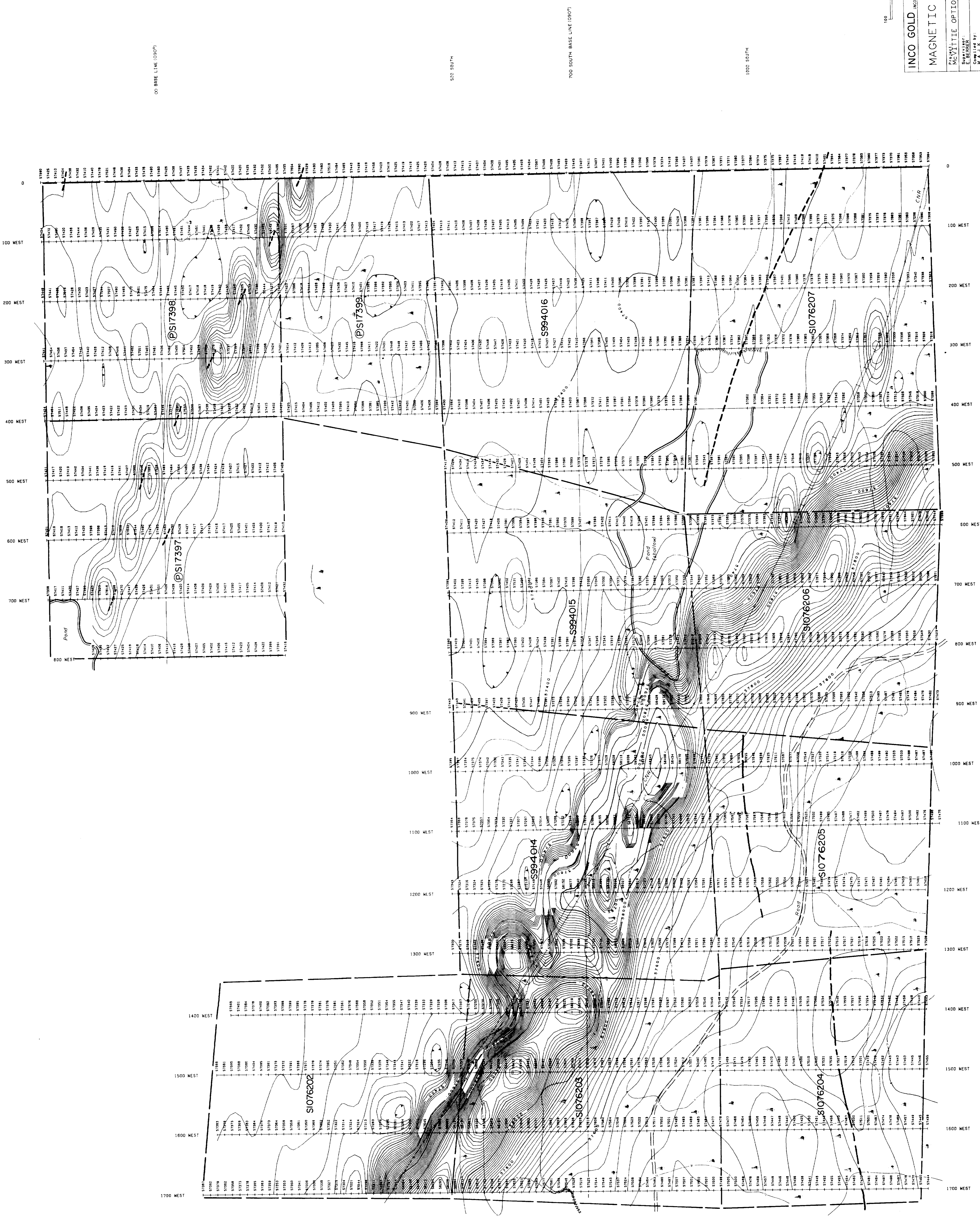
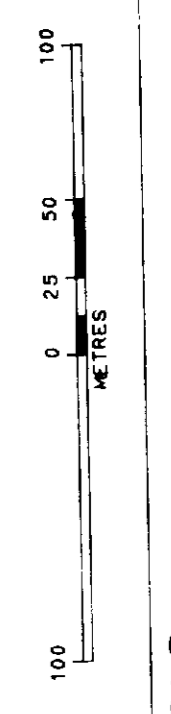
INCO GOLD <b>2.12866</b>		Copper Cliff, Ontario POM INO	
DETAIL GEOLOGY - 500W SECTION		SHEET 1	FIGURE 7
Project: McVITTIE OPTION		Area: MacLENNAN TWP.	
Supervisor: J. PERRY	Instrument:	Survey date:	
Compiled by: K. HANNILA	Drawn by: B. HALBERT	Date drawn: OCT. 1989	Revised:
Scale: 1:200	File:	N.T.S. 41   10	



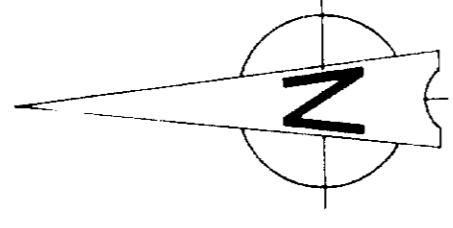


### LEGEND

- Magnetometer Readings in nanotesla
- Filtered Contours
- Station Spacing : 12.5 m
- Contour Interval : 20 nT
- 20 nT contours
- 200 nT contours
- 2000 nT contours
- Relative Low
- Annotated Low
- VLFEM CONDUCTORS:







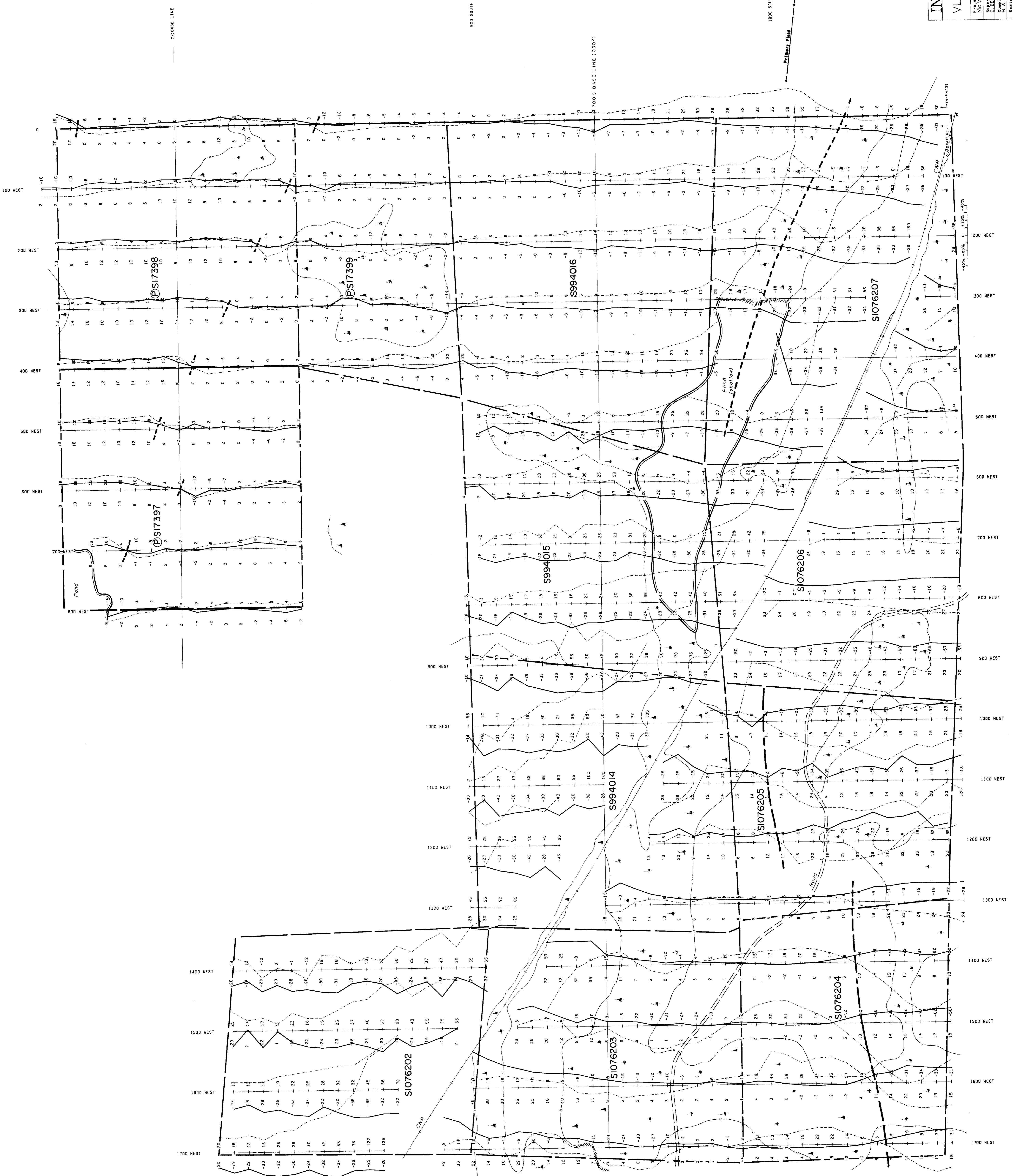
### LEGEND

Transmitter Station :  
NAA - Cutler, Maine (24.0 MHz)  
Station Spacing : 25.0 m  
In-Phase Profile : - - - - -  
Quadrature Profile : - · - · -  
Profile Scale 1cm = 20%  
CONDUCTOR : - - - - -  
STATION : - - - - -  
MEAN : - - - - -  
MAX : - - - - -



**INCO GOLD** (IND. GOLD COMPANY, A UNIT OF BCL LTD.)  
Copper Cliff, Ontario  
SHEET NO. 100  
FIGURE  
**2.12866**  
D4  
9

Area: MACLENNAN TWP.  
Project: MEVITTE OPTION  
Scale: 1 : 2500  
Date: 06/1989  
Drawn by: ZETA  
Checked by: M.J.M.  
File: MOY1009.VLF



260