



42A02SE0102 2.14122 ALMA

010

1990 ASSESSMENT REPORT  
GEOLOGICAL SURVEY  
CAIRO PROJECT  
CAIRO AND ALMA TOWNSHIPS, ONTARIO

NTS: 41-P-15 / 42-A-2

2.14122

J.E. Jackson  
Inco Exploration and  
Technical Services, Inc.  
Copper Cliff, Ontario  
December, 1990

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42A02SE0102 2.14122 ALMA

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	<u>Page</u>
SUMMARY	
1.0 INTRODUCTION	1
1.1 Location and Access	1
1.2 Property	1
1.3 History	1
1.4 Summary of Inco Exploration	2
2.0 REGIONAL GEOLOGY	2
3.0 PROPERTY GEOLOGY	2
3.1 Mafic and Intermediate Volcanic Rocks	2
3.2 Archean Sedimentary Rocks	3
3.3 Syenite Porphyry	3
3.4 Feldspar Porphyry	3
3.5 Matachewan Diabase Dikes	3
3.6 Structural Geology	3
3.7 Mineralization	4
4.0 CONCLUSIONS	5
5.0 RECOMMENDATIONS	5
6.0 BIBLIOGRAPHY	6
7.0 CERTIFICATE OF QUALIFICATIONS	7

#### Appendices

Appendix 1	Sample Description Sheets
Appendix 2	Assay Sheets

#### List of Figures

		<u>Scale</u>
Figure 1	Location Map	1:250,000
Figure 2	Claim Location Map	1:50,000
Figure 3	Grid Location Map	1:50,000
Figure 4 (Back Pockets)	Geological Survey (Sheets D4-D9, E4-E9)	1:2,500

## **SUMMARY**

The Cairo property consists of 87 contiguous claims located in Alma and Cairo Townships, about 8 km northeast of Matachewan, Ontario. The ground was staked in the summer of 1990 and is wholly owned by Inco Limited. The property was the subject of a geological mapping program conducted in the fall of 1990.

The claim group is underlain by syenite porphyry of the Cairo Stock. Archean volcanic and sedimentary rocks outcrop along the eastern shore of the Montreal River in the western portion of the property. All of these units are intruded by north trending Matachewan diabase dikes. The Galer Lake Fault strikes southwest through the claim group and is interpreted to represent the western extension of the Larder Lake Fault Zone.

Previous work on the property consisted of trenching and sampling the small felsic intrusive bodies within the mafic volcanic rocks, and the sulphide showings within the sedimentary rocks. An assay of 2.05 g/t gold was obtained from this work. The mapping program completed by Inco Exploration succeeded in delineating areas of potential interest. Assays of 28.38 g/t gold and 1.02 g/t gold were obtained from samples collected and the source areas will be the subject of further exploration activities.

It is recommended that geophysical surveys consisting of ground magnetometer and horizontal loop EM be conducted on the property during the winter. A spring mapping program should be conducted to explore, in detail, the Galer Lake Fault Zone and small felsic intrusions.

## 1.0 INTRODUCTION

The Cairo Property covers a 10 km strike length of the Galer Lake Fault in Cairo Township. The Galer Lake Fault may be the western continuation or a parallel fault associated with the Larder Lake Fault Zone.

### 1.1 Location and Access

The property consists of 87 contiguous, unpatented mining claims in the southeastern portion of Alma and the northern portion of Cairo Townships (Figure 1) about 50 km southwest of Kirkland Lake, Ontario, Larder Lake Mining Division, NTS: 42-A-2/41-P-15.

Access to the property is easily gained via an all weather gravel road (The Matachewan Reserve Road) and various other logging roads that extend north from Highway 66.

### 1.2 Property

The claims (Figure 2) were staked and recorded in July 1990. The claims are wholly owned by Inco Limited and are listed below:

<u>Claims</u>	<u>Recording Date</u>
L 1152284-303 inclusive	July 13, 1990
L 1152306-318 inclusive	July 13, 1990
L 1152340-342 inclusive	July 13, 1990
L 1152344-355 inclusive	July 13, 1990
L 1152374-386 inclusive	July 13, 1990
L 1152389-401 inclusive	July 13, 1990
L 1152404-416 inclusive	July 13, 1990

### 1.3 History

The property has been the subject of limited exploration activity in the past. Most of this prospecting has been confined to the western portion of the property where a few overgrown pits and trenches are located.

- 1961: Fort Matachewan Gold Mining Syndicate held twenty-five claims along the eastern shore of the Montreal River in the western portion of Cairo Township. The work consisted of stripping and sampling. One assay of 2.05 g/t gold was obtained from a porphyry/greenstone contact.
- 1975: Noranda Exploration Company Ltd. conducted a reconnaissance geological mapping program on 54 claims located on the western portion of the Cairo Stock in north central Cairo Township.
- 1975-76: Majestic Wiley Contractors Ltd. conducted a soil sampling program and a geological survey on the same claims previously held by Noranda Exploration.
- 1986: McGarry Minerals Inc. held 16 claims in the western portion of Cairo Township over the same ground previously explored by The Fort Matachewan Gold Mining Syndicate. McGarry Minerals established a grid on the property and conducted soil sampling, ground geophysical and geological surveys.

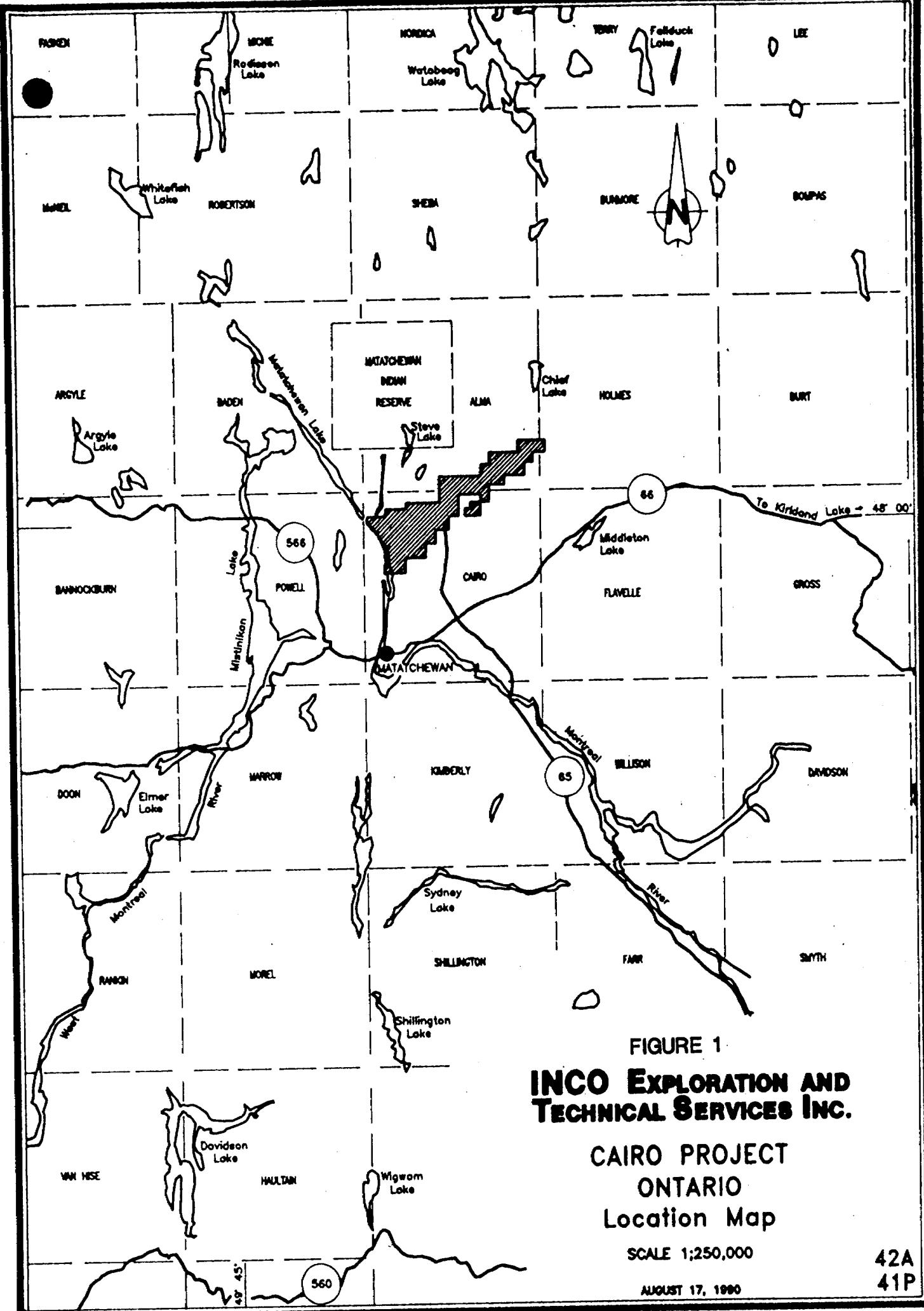


FIGURE 1

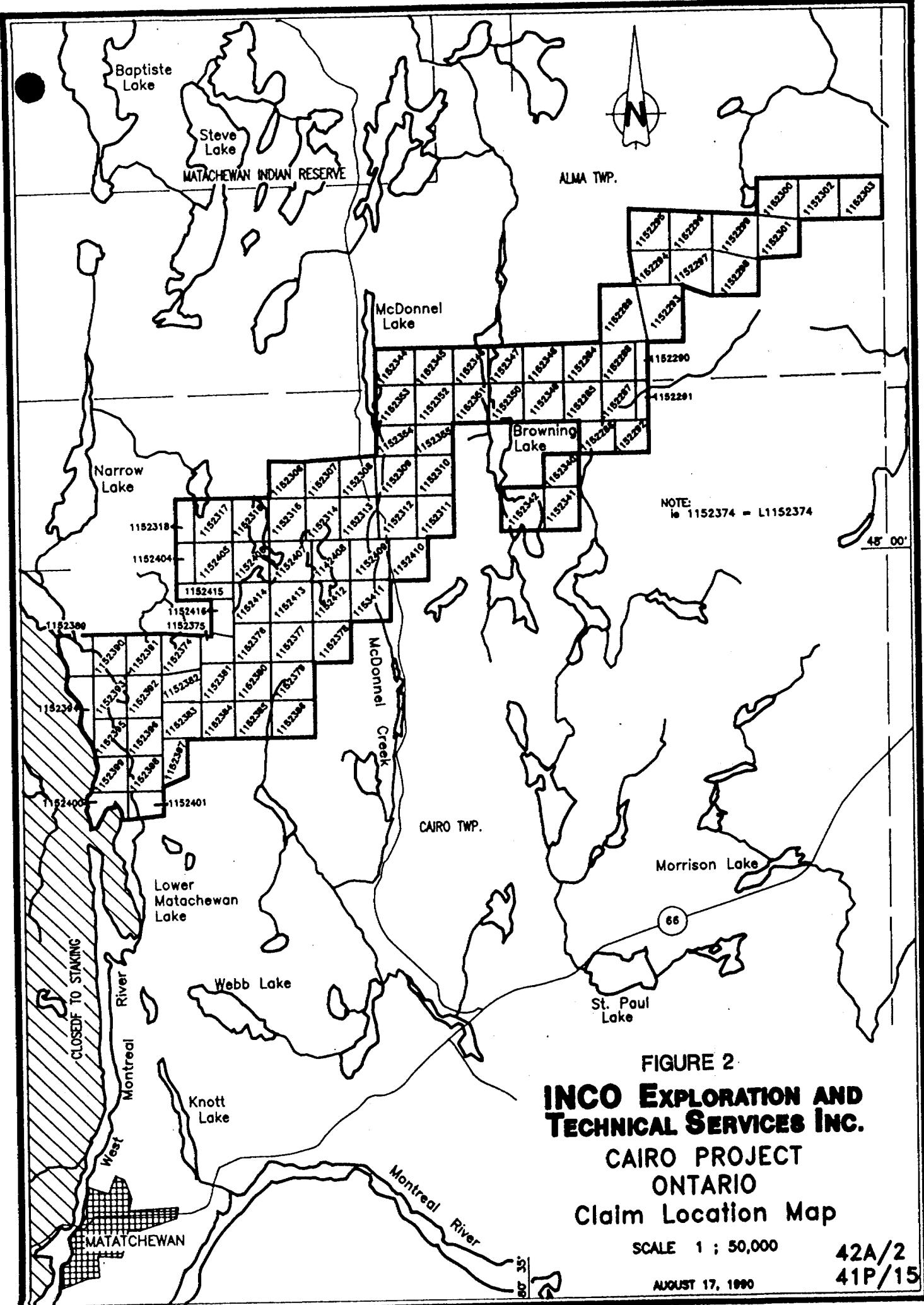
## INCO EXPLORATION AND TECHNICAL SERVICES INC.

CAIRO PROJECT  
ONTARIO  
Location Map

SCALE 1:250,000

AUGUST 17, 1990

42A  
41P



A limited amount of exploration activity has been carried out to the north and south of the Cairo property near the Montreal River.

Diamond drilling was completed by Texasgulf Canada Ltd. In 1976 and by Regent Rock Resources Inc. In 1988 immediately north of the property, adjacent to the eastern shore of the Montreal River. Both drilling programs were designed to test geophysical anomalies. No significant gold assays were reported and the presence of graphite was determined to be the cause of the geophysical responses.

Diamond drilling has also been completed on the ground immediately south of the property, adjacent to the eastern shore of the Montreal River. Jacaranda Gold Mines Ltd. drilled 5 holes in 1953, apparently, to test a geophysical anomaly. Rare 3 foot sulphide intersections of up to 25% pyrite and pyrrhotite were sampled, but no nickel values were obtained and gold assays are not reported.

#### **1.4 Summary of Inco Exploration**

Inco Exploration staked the ground in Cairo and Alma Townships during July 1990. Following the acquisition of the claims, a line cutting contract was awarded to Natives Exploration Services of Chibougamau, Quebec. Baselines (Figure 3) were cut on an azimuth of 058° and crosslines were turned every 100 metres. A total of 11.1 kilometres of baseline and 124.7 kilometres of cross and tie lines was cut. A three man geological crew began mapping the property on October 9, 1990, and completed the work on November 6, 1990. The property was mapped at a scale of 1:2,500.

### **2.0 REGIONAL GEOLOGY**

The Matachewan area is comprised of Archean metavolcanic, metasedimentary and intrusive rocks which are part of the Abitibi Greenstone Belt. The Alma and Cairo Township areas are underlain by tholeiitic flows of the Kinojevis group and calc-alkaline flows and pyroclastic rocks of the Blake River Group. Archean sedimentary rocks unconformably overlie the volcanic rocks. This volcano-sedimentary assemblage is intruded by Archean mafic sills, dikes and felsic plutons. Proterozoic sedimentary rocks of the Huronian Super Group unconformably overlie the Archean rocks in many parts of the map area.

Numerous north-trending faults cut across the region and many of these have been intruded by diabase dikes. A major fault zone (The Galer Lake Fault) trends northeast across the property and may be an extension of the Larder Lake Fault Zone. Several other parallel northeast trending faults also occur in the map area.

### **3.0 PROPERTY GEOLOGY**

A large portion of the Cairo property is underlain by syenite porphyry of the Cairo stock. Archean volcanic and sedimentary rocks outcrop in the extreme western portion of the claim group and north-trending Matachewan diabase dikes intrude all of the above rock types. The Galer Lake Fault trends southwest through Alma and into Cairo Townships and parallels the long axis of the claim group.

#### **3.1 Mafic and Intermediate Volcanic Rocks**

Basaltic and andesitic rocks outcrop in the western portion of the property. The basalt is fine grained, dark greenish-grey, chloritic, weakly to moderately magnetic and massive with a pyrite

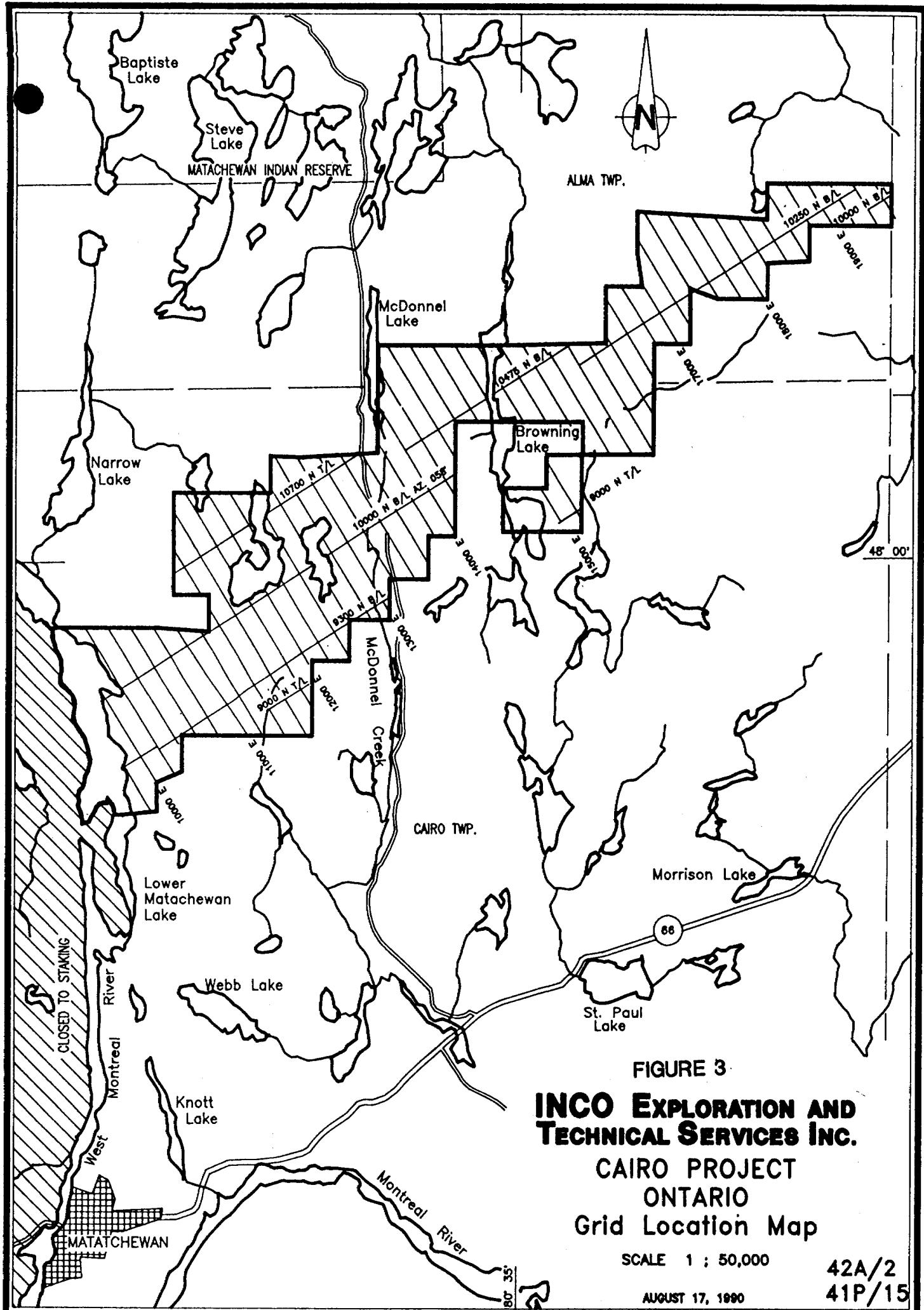


FIGURE 3

**INCO EXPLORATION AND  
TECHNICAL SERVICES INC.  
CAIRO PROJECT  
ONTARIO  
Grid Location Map**

SCALE 1 : 50,000

AUGUST 17, 1980

42A/2  
41P/15

content ranging from a trace to 2%. Locally, flow breccias, pillows and amygdalites were observed. The andesitic rocks were distinguished from the basalts by a lighter green colour, greater hardness and local phenocrysts of white feldspar crystals up to 2 millimetres in diameter.

### **3.2 Archean Sedimentary Rocks**

Siltstones and sandstones outcrop along the Montreal River in the extreme western portion of the property and are bounded to the east by the mafic volcanic rocks. The siltstones are very fine grained, soft, dark grey and locally contain up to 2% pyrite and pyrrhotite. Bedding strikes  $020^{\circ}$  and dips approximately  $46^{\circ}$  to the south. The sandstone is commonly medium grained, well sorted, red to pink in colour with rare mafic volcanic fragments to 5 mm in diameter. Bedding measurements varied from  $153^{\circ}/67^{\circ}$  east to  $090^{\circ}/60^{\circ}$  south.

Several small trenches and pits were located within the sediments. The trenches are oriented in a northerly direction, contain gossan zones up to 5 metres wide and samples collected contained up to 20% pyrite and pyrrhotite.

### **3.3 Syenite Porphyry**

The Cairo property is predominantly underlain by a massive syenite stock. The syenite is coarse grained to very coarse grained, pink to red, massive to locally foliated, locally weakly magnetic, with up to 5 to 10% hornblende and a minor amount of quartz. The syenite is porphyritic with individual feldspar phenocrysts ranging from 5 mm to 30 mm in length. The larger phenocrysts are found near the edge of the syenite intrusion.

### **3.4 Feldspar Porphyry**

Numerous small outcrops of feldspar porphyry were found within the mafic volcanic rocks. The porphyry is medium grained, pink, massive and sugary textured with up to 5% disseminated pyrite. Phenocrysts of feldspar commonly occur up to 1 to 2 mm in size.

Several old trenches were located and found to contain quartz flooded and brecciated feldspar porphyry. Some of these trenches were located at or near outcrops of diabase dikes or along the Montreal River-Whiskeyjack Creek Fault.

### **3.5 Matachewan Diabase Dikes**

These dikes outcrop across the length of the property and commonly range from about 20 metres to 75 metres wide and strike from  $356^{\circ}$  to  $010^{\circ}$  with very steep to vertical dips. The dikes are characteristically medium grained, dark grey, massive, moderately magnetic with typical diabasic texture. Many of the dikes are porphyritic with light green feldspar phenocrysts up to 5 cm in length. It is estimated that the dikes comprise from 10% to 20% of the total outcrop area on the claim group.

### **3.6 Structural Geology**

A major northeast-trending fault zone is interpreted to extend across the length of the property. The fault zone varies in strike from  $060^{\circ}$  to  $080^{\circ}$  and is identified by a series of narrow valleys and creek systems and by foliations of  $090^{\circ}$  to  $045^{\circ}$  measured in syenite, diabase and mafic volcanic rocks. The fault zone or The Galer Lake Fault may be a western extension of the Larder Lake Fault Zone.

Several north trending faults were observed on the property. The faults were identified by topographic depressions and foliations in adjacent host lithologies. The Matachewan diabase dikes may have intruded along this set of north-trending fault systems.

A northwest-trending fault zone, the Montreal River-Whiskeyjack Creek Fault, is interpreted to extend across the western part of the property. Several small feldspar porphyry intrusions appear to occur along its length. McGarry Minerals sampled many of these feldspar porphyry intrusions and considered them to be spatially associated with the Montreal River-Whiskeyjack Creek Fault.

### 3.7 Mineralization

Anomalous gold mineralization was found in almost all lithologies on the Cairo property. One significant assay of 28.38 g/t gold was obtained from an angular syenite boulder (16,000E/9,425N) located 200 metres south of the interpreted location of the Galer Lake Fault. The syenite boulder is brecciated, quartz flooded and contains up to 3% fine grained pyrite mineralization. A second assay from the same boulder returned a value of 17.5 g/t gold.

Anomalous assays ranging up to 57 ppb gold were obtained from trenches that contain feldspar porphyry. The porphyry is locally quartz flooded and contains a trace to 15% pyrite mineralization and rare tourmaline crystals. These pits are probably the same pits originally worked by The Fort Matachewan Gold Syndicate in 1961. One of their grab samples from a porphyry-greenstone contact near a fault zone striking 075°, assayed 2.05 g/t gold. The trench where this sample was taken is located near 10,600E/9,475N.

McGarry Minerals (1986) cleaned out many of the trenches and resampled the feldspar porphyry. All gold assays returned 20 ppb or less.

During the 1990 mapping program, an assay of 1.02 g/t gold was obtained within syenite at the contact with a diabase dike (13,300E/10,050N). The syenite is quartz flooded and contains up to 10% very fine grained pyrite and a trace of galena. Similar quartz flooding and veining was encountered in the syenite from various parts of the property. The veins range from a few millimetres to about 20 centimetres wide and are parallel to jointing in the syenite. They contain up to 5% pyrite, with rare chalcopyrite, fluorite and barite. Base metal values of 0.176% Cu, 0.188% Cu, 0.108% Zn, 0.203% Zn and 0.888% Zn were obtained from various localities on the claim group. Samples included quartz-carbonate veining within syenite or at syenite and diabase dike contacts. One assay of 0.258% Cu was collected from a syenite boulder.

A gossan zone was located in the western portion of the property near 9,800E/9,075N. The zone is hosted in slatestone, trends north and contains old trenches. Assays of 12 ppb, 25 ppb and 47 ppb Au were obtained from samples containing up to 20% pyrite and pyrrhotite mineralization. McGarry Minerals (1986) cleaned out the trenches and collected four samples. All assays returned between 30 and 70 ppb gold. A similar gossan zone is located near 10,000E/9,400N and is hosted by mafic volcanic rocks. Assays from this trench returned 20 ppb and 29 ppb gold. Assays from nearby mafic volcanic rocks returned assays of 67 ppb, 75 ppb and 758 ppb gold. Samples collected from the gossan zone and assayed for base metals returned low to anomalous copper, zinc and nickel values. The assays range from 35 ppm to 500 ppm for copper, 35 ppm to 660 ppm for nickel and 25 ppm to 360 ppm for zinc.

Both of the trench areas lie about 30 metres east of a Matachewan diabase dike and parallel the strike of the dike. The gossan zone may be related to the intrusion of the diabase dike.

#### 4.0 CONCLUSIONS

The 1990 mapping program conducted on the Cairo property was successful in delineating areas of potential interest. An assay of 28.38 g/t gold was obtained from an angular syenite boulder 200 metres south of the unexposed Galer Lake Fault. A sample collected from a quartz flooded syenite containing 10% pyrite and a trace of galena assayed at 1.02 g/t gold. Numerous anomalous gold assays were obtained from old trenches that contained small feldspar porphyry intrusions. Historical grab samples from these trenches assayed up to 2.05 g/t gold.

#### 5.0 RECOMMENDATIONS

It is recommended that a geophysical program consisting of a ground magnetometer survey and a horizontal loop EM survey be completed during the winter. Following this, a detailed prospecting program should be conducted in the spring along the strike length of the Galer Lake Fault Zone, concentrating on both bedrock and boulder sampling.

The results of the geophysical survey and the prospecting program will outline areas to be stripped and drilled.

Additional prospecting and sampling of the feldspar porphyry and sulphide showings is also recommended.

## 6.0 BIBLIOGRAPHY

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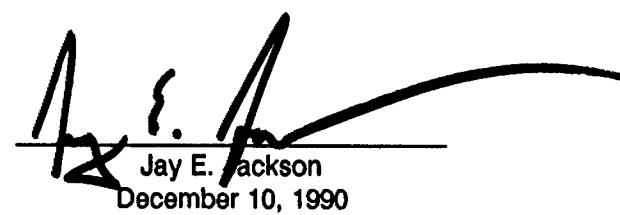
Tindale, J.L.

1989: Summary Report on the Regent Rock Resources Inc. 1988 Diamond Drill Program, Cairo Township Property, Matachewan, Ontario, for Excalibur International Consultants Ltd. Kirkland Lake Resident Geologists' Assessment Files.

#### 7.0 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.
3. I am currently employed as a Geologist by Inco Exploration and Technical Services, Inc.
4. I have visited the area discussed in this report and that the work described in this report was carried out under my supervision.



Jay E. Jackson  
December 10, 1990

Qual 2.12866

**APPENDIX 1**

**SAMPLE DESCRIPTION SHEETS**

PROJECT  
AREA

Cairo

GEOLOGIST(S)

DT

DATE EXT.

11/17, 1990

TRAVERSE NUMBER  
N.T.S. 42-A-2 / 41-P-15

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				An ppb	Cu ppm	Ni ppm	Zn ppm	Ag ppm
Z10601	Rock	Grab				Pyroclastic: fine to medium - elongated; vesicular, vesicul, v. wavy, shaggy; tr. fine - elongated pyrite	<5	40	20	10	<0.5
Z10602	"	"		6134E W45S N		strongly fissile, coarse-grained pinkish hydroxylic pyrite; moderately to strongly elongated lenticular; bands of pyrophyte/galena to 2%.	12	25	35	620	<0.5
Z10603	"	"				fusiform grey to white quartz vein to 10 cm wide in fissile portion of "contact zone"; v. fol- iation - parallel to locally Fe- stained along fractures	<5	30	50	45	<0.5
Z10604	"	"				dark brown portion of "contact zone"; moderately siliceous breccia; trace to 10% pyrite in intercalation with fractured fol- iation; v. few pyrite to 2%; tr. sphalerite (?)	1021	195	60	450	0.5
Z10605	"	"				bracketed pyrite in "contact zone"; pyrite lenticular with diameters 10-15 mm; fine-grained pyrite throughout	<5	35	40	65	<0.5
Z10606	"	"				low intensity white quartz vein in medium - granular 1-2 mm; white (very) rare veins ca. 1-2 mm (cont > white); tr. to 1-2 mm; white; no mineral	10	45	320	9.5	0.176%

## INCO LIMITED

TRAVERSE NUMBER  
N.T.S. 42-A-2/41-P-15PROJECT: Cairo  
AREA:GEOLOGIST(S) DT  
DATE Oct 13, 1956 1956

SAMPLE NUMBER	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, and/or UT.M.	LATITUDE, LONGITUDE and/or UT.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	Grob, Chip, Channel				Au ppb	Cu PPM	Ni PPM	Zn PPM	Ag PPM	
X 210607 rock	grob					as P x 210606 : float     sub- rounded & upto 2 feet in diameter	21	45	220	22.5	0.258%	
? 210608 rock	grob			13045E 10877N		quartz vein in orange-red, medium-grained pyrite; apparent pyritic texture listing, 3 to 8 cm pyrite clots in white to grey quartz veins; trace to 1% quartz pyrite in small rock; trace pyrite + galena in veins.	8	265	45	140	4.5	
? 210609	"	"		13000E 10655N		diabase / pyrite contact : bright red pyrite, fractured and weakly carbonatized, especially along joint planes; in contact with aphoritic basalt fractured and in vein 10 m E of db 0/c; trace dusty pyrite	6	90	45	280	1.5	
? 210610	"	"		12790E 10850N		diabase : weakly altered and carbonatized with pyroclastic minerals ranging to 4 cm; trace to 3% in pyrite pyrite in small rock; trace to 1% fine-grained pyrite in vein.	9	200	50	110	40.5	

## INCO LIMITED

TRAVERSE NUMBER  
N.T.S. 42-A-2 / H-P-15PROJECT Cassie  
AREAGEOLOGIST(S) R. F. T.  
DATE Oct. 35 27

SAMPLE NUMBER	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, 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			Ba ppb	Cu ppm	Ni ppm	Zn ppm	Ag ppm
210611	TL	"	9		Iron pyrite; close to the surface; scattered occurrences in green shale; development of sand boulders; strong alteration; hematite - feldspar pyroxene. Thennomictic pegmatitic granite; felsic veins along axis of bedrock; talus; sand appearing scarcely silicified; fine feldspatoid	9	5	130	95	20.5
210612	"	"		126E 112-71N	Hematite-feldspar porphyry; very porphyry with K-feldspat; plagioclase (± quartz) phenocrysts; some feldspar - garnet fracture in felsic veins; sh. feldspatoid; & hematite throughout in slightly higher concentrations; a few small, locally-silicified intergrowths	10	35	30	30	25
210613	"	"	"		as above through bedding of dark green to grey silt-like mudrock transverse	11	35	30	35	20.5
210614	"	"	"	126.52E 110.32N	diabase / pyroclastic contact; all slightly weathered; joint fractures; & joints; joint fissures; to breccia; silt & fine-grained magnetite-rich boulders pebbled in contact	45	20	20	95	20.5

## INCO LIMITED

TRAVERSE NUMBER  
N.T.S. 42-A-2/41-P-15PROJECT Cerro  
AREAGEOLOGIST(S) D T  
DATE Oct 27

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	Cu	Ni	Zn	Ag
							ppm	ppm	ppm	ppm	ppm
210615	r.	g		126-E 100145M	my little, low hillside lignite: pinkish-red with NE'ly alternating white to grey quartz veins 1 to 0.5 m Thickness total lignite		55	85	25	30	40.5
210616	"	"		125E 10125N	to top lignite: sulphate pink red @ fine grained, flaky lignite @ sulphate: marginally felspathic with sulphate in felling. @ quartz, flaky charcoal: pink lignite: sulphate; several sulphur cysts. Lignite top 2 to 3 meters to little, pinkish throughout		22	25	40	25	40.5
210617	"	"			felspathic portion @ ~30cm lignite R + D 100% : sulphate marginally, scattered 2-3% dolomite sulphate disseminated throughout		39	25	50	10	40.5
							36				

## NCO GOLD

TRaverse Number  
N.T.S. 42-A-2 1/41-P-15

L125, 124, 123, 103E

PROJECT  
AREA

Carro

GEOLOGIST(S)

D. Truscott

DATE Oct 31 / Nov 1, 59

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				Cu PPM	Ni PPM	Zn PPM	Ag PPM
210618	r	g		L125E 10,670N		green-grey, fg, moderately sorted, stry hairline, fractured int. flow; chalc frac. llt w occ g-c vng to lch; tr fg py 0.5%	90	50	25	4.5%
10619	"	"		L12428E 10,680N		aa, though less clearly fg'd; w wly shrd w 2-3% fg py dark - phasic (fg)	55	50	20	0.5
10620	"	"		L123E 10,680N		lf eff init volc, f to vfg; vary wly fg'd w epid, llt. 1 to 2% py + py; oxy in blebs, stns & diss's; modly to stry int	95	60	70	0.5
10621	"	"		L103E 10,525N		ss; green-grey mature ss w rare 9-12 chsts to 3mm pr fr 10-12 vfg to py diss flint. oxy variations in beds + more oxy; increased ming along hairline fract	10	75	35	0.5
10622	"	"		L103E 10,050N		andls: tr to 2% fg py, lcy w 2.5 25 15 0.5 whisps & blebs, geny diss; stry int, fg loc part of py to 2 cm asoc w carbon though narrow, glassy, 2 mm wide q.v's broken	2.5	25	15	0.5
10623	"	"		"		aa, though stry carb, wly eff'd & heating 2-3% fg py in whisps in, fract, rare	15	25	10	0.5

## INCO GOLD

TRAVERSE NUMBER 1108, 110, 112E  
N.T.S. 42-A-2, 141-P-15PROJECT  
AREA

Cerro

GEOLOGIST(S) D. Tresselt  
DATE Nov 23, 1990

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				Cu	Ni	Zn	Ag
							PPM	PPM	PPM	PPM
210624 r.	"	"	9	1108E 10,275N	grey to blk silt near db (~15 cm); loamy friable w/ gneissic & py. 1-2% py as boulders & whops in vhs; vng to 2 mm		40	20	110	40.5
210625	"	"		1112E 9059N	mat rock: long grn grey tabular; well ind. w/kly frd; w/kly crbd though & fracs; 2-3% py; more so up to 2%; crusty po, 10% m. tot. py & fr po-asoc cp; w/kly mte		100	40	25	40.5
210626	"	"		111,12SE 10,190N	std belt (pass belt twt); blky fracturing & <del>fracture</del> boulders; fr py in c-filled 1-2 mm wide fracs, & crusty chiss's; v. w/kly mte.		75	85	45	40.5
210627	"	"		1110E 9059N	irreg hornflecked mat rock: cut by num orange-pk (potass.) vhs to 1 cm wide; vhs host fr to 1% & forming py in part; rk stry mte, vhs w/kly mte; vhs appear synkinetic in main geological; boulders vary epidotized & hosts fr py		135	35	40	40.5

# INCO GOLD

TRAVERSE NUMBER L 114, 113E  
N.T.S. 42-A-2/41-P-15

PROJECT

Carro

AREA

GEOLOGIST(S)

D. Truscott

DATE

Nov. 5, 1990

SAMPLE NUMBER	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, AREA	LATITUDE, LONGITUDE and/or UT.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	Grob, Chip, Channel				Cu	Ni	Zn	Ag
210628	✓	"	7	L 114E 10,445N	Synt: m-cq, brick red; cast by ~20cm-wide grey-white g.v.; wky feld w tr to py in wall rock; some wky sand	235 25 30 40.5	40.5	20.5	25	Au As
210629	"	"	"	L 114E 10,425N	cb: float from pt of synt/db; relatively "crystine" cb to g.v. cream/white, pegmatitic hosting glassy to blue g.v. f to py; synt shiny white	50 65 40 40.5	40.5	25	25	
210630	"	"	"	L 113E 9377N	cb/synt ct: cb. locy has 1g py aspx; amphib. in synt marginally digested & locy red. locy rare blue g.v. blebs; tr 40.5% py in digested portion of synt	20 90 180 40.5	40.5	25	25	
210631	"	"	"	"	aa though cbld obs only; 2tc 3% py	195 100 1.0 0.188%	1.0	10	10	
210632	"	"	"	L 113E 10,000N	quartz host: cbld cut by narrow cb. chylets; locy mostly epid- itized & Sfcl; wky feld & filled w g.v. & chyletr. epid. narrow sulphide bands hosting g.v. & epid. (tr carb) ctns up to 10g py (over 1-2 mm x 4 cm) tr by py disseminated.	40.5	40.5	25	25	



NCO GOLD

TRAVERSE NUMBER

N.T.S. 42-A-2 1/41-P-15

PROJECT Cairo  
AREAGEOLOGIST(S) T. Froude  
DATE October 10, 1990

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	Grob, Chip, Channel				Au ppb	Cu PPM	Ni PPM	Zn PPM	Ag PPM
10526	RK		Grab	10+653 N	14+800 E	Fine grained red syenite, possibly a dike in contact with coarse grained, red, porphyritic syenite. Up to 1% disseminated pyrite with minor galena(?). Sample cut by 5-10% glassy quartz stringers up to 4 mm wide. No apparent foliation observed.	<5	120	25	70	1.5

**INCO GOLD**

TRAVERSE NUMBER \_\_\_\_\_  
N.T.S. 42-17-2 / 41-P-15

**PROJECT** Cairo  
**AREA** ..

GEOLOGIST(S) T. Froude  
DATE October 11, 1990

SAMPLE NUMBER		SAMPLE TYPE			SAMPLE LENGTH, WIDTH, AREA	LATITUDE, LONGITUDE and/or U.T.M.	SAMPLE DESCRIPTION			RESULTS (ppm. /% /oz. per ton)				
SAMPLE NUMBER	RX	SX	Grab, Chip, Channel	Rock, Talus	Stream Silt, Soil					Au ppb	Cu ppm	Ni ppm	Zn ppm	Ag ppm
Rx 210527	RK	-	Grab	11,000 N		14+57S 5	A 5-10 cm wide bleached zone within red, medium to coarse grained svenite. Thin irregular, glassy quartz stringers are found within the bleached zone. Trace, fine grained pyrite locally. Sample taken about 3 metres from a small %c of diabase. The bleached zone has an orientation of 014°/70°N.			6	190	45	65	20.5
Rx 210528	RK	-	Grab	14,000 N	10+12S N	14+57S E 14+310 E	Locally brecciated, dark coloured, weakly hematized and carbonatized svenite. Minor calcite occupying fractures in the rock. Trace, fine grained pyrite. Possible foliation C 070°.			<5	15	40	60	20.5

NEO GOLD

TRAVERSE NUMBER  
N.T.S. 42-19-2 / 41-P-15PROJECT Cairo  
AREAGEOLOGIST(S) T. Froude  
DATE October 14, 1990

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	Cu ppm	Ni ppm	Zn ppm	Pb ppm
210529	RK	-	Grab	10,635 N	135+25 E	Quartz vein in red, medium to coarse grained syenite. Appears to be a quartz "vein" occupying one of a series of parallel fractures within the syenite. Chlorite is common along the-hairline or thin fractures. Trace pyrite near vein margins. Fracture (vein) orientation is 073°/subvertical.	<5	25	15	30	40.5
210530	RK	-	Grab	1535 N	135+05 E	Reddish-orange, very fine grained, siliceous looking rock. Possibly a F.g. like phase of the syenite. Rusty along fractures and carrying ~ 1% fine grained pyrite distributed throughout the rock. (Possibly a large piece of float.)	6	15	30	10	40.5
210531	RK	-	Grab	~9615 N	~135+05 E	Sample taken ~ 5 metres south of property boundary..	139	86.5	35	40	1.0
210532	RK	-	Grab	9800 N	135+00 E	Moderately foliated, chloritic syenite. Locally with glassy, foliation parallel quartz veins to 10 cm's wide. On-slip dips into swampy ground, possibly a fault or shear zone. No visible sulphides. Foliation 026°/80°W.	<5	20	55	45	40.5



## NCO GOLD

TRAVERSE NUMBER  
N.T.S. 41 P 15 / 42-A-2PROJECT Co. ro  
AREA East half of property.GEOLOGIST(S) Froude  
DATE Oct 26/90

SAMPLE NUMBER	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, AREA	LATITUDE, LONGITUDE and/or U.T.M.	SAMPLE DESCRIPTION	RESULTS (ppm. / % / oz. per ton)				
	RX Rock, Talus	SX Stream Silt, Soil	Grob, Chip, Channel				Au ppb	Cu ppm	Ni ppm	Zn ppm	Pb ppm
210546	RK	-	Grab	10470 N	17600 E	Syenite. Orange-red, medium to coarse grained massive rock. Contains about 10% 1-4 mm euhedral hornblende crystals partially altered (chlorite?). No visible sulphides but contains minor magnetite ± hematite.	~5	15	20	15	40.5
210547	RK	-	Grab	10025 N	16775 E	Diabase. Dark green, fine grained, weakly to moderately foliated rock. Carries r pyrite and cut by occasional glassy qtz veinlets. Sample taken near sheared (faulted?) contact with syenite.	~5	5	110	↓	40.5
210548	RK	-	Grab	9985 N	16755 E	Diabase as above but appears more massive and no qtz veinlets. Along fractures is a blue-grey metallic mineral, possibly specularite.	11	5	150	0.200	40.5
Rx 210549	RK	-	Grab	9985 N	16765 E	Syenite. Generally as Rx 210546. Sample taken near RX 210548.	5	15	20	20	40.5

PROJECT Cairo											
TRAVERSE NUMBER		AREA Whiskey Jack Lake									
N.T.S. 41 P 15 14-2-A-2		GEOLOGIST(S) Froude									
DATE Oct 27/90		RESULTS (ppm. /% /oz. per ton)									
SAMPLE NUMBER	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, AREA	LATITUDE, LONGITUDE and/or U.T.M.	SAMPLE DESCRIPTION	Au	Cu	Ni	Zn	Ag
	RX Rock, Talus	SX Stream Silt, Soil	Grob, Chip, Channel			Rock type, lithology, character of soil, stream silt, etc. Formation Mineralization, etc.	ppb	ppm	ppm	ppm	ppm
10-50	RK	-	Grab	7170N	12225E	Sheared syenite. Pinkish grey, moderately foliated syenite. Weakly magnetic, no visible sulphides. Elevation 156160°N.	10	25	40	70	40.5
10-51	RK	-	Grab	7160' N	12180E	Syenite. Reddish grey, medium to coarse grained massive looking rock. Many irregular quartz stringers. Carries 2-3% fine grained pyrite disseminated throughout. Minor chlorite along fractures.	5	40	30	210	40.5
10-52	RK	-	Grab	9585N	12170E	Quartz vein. 10-15 centimetre wide glassy (locally smoky) quartz vein. Contains fragments of silicified syenite and green chlorite clots. Occasional blob of galena scattered throughout. Trace pyrite.	25	20	35	50	3.5
10-53	RK	-	Grab	9585N	12170E	Syenite. Has 1 ft above a 1/2 vein. Gray-Pink medium grained silicified rock cut in several thin quartz stringers. Silicified zone approximately .6 meters wide. Contains 5% disseminated pyrite.	7	20	35	95	0.5
	RK	-	0.6 mtr.	9585N	12170E	Chip across 1miles at -1/2 section in veining is described in 553 and 52.	6	15	30	55	0.5
							5				

TRAVERSE NUMBER  
N.T.S. 41D15PROJECT CAIRO  
AREA Uhist, east LakeGEOLOGIST(S) Fructus  
DATE Oct 27/70

SAMPLE NUMBER	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, and/or 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	Grob, Chip, Channel				Au ppb	Cu ppm	Ni ppm	Zn ppm	Ag ppm
210555	L	-	(-1,1)	1545 N	12230 E	Syenite. Reddish, coarse grained, rather massive rock. Locally cut by 30-40% irregular thin quartz veins. Trace hematite in the stringers. Minor bleaching of felsic veins.	55	15	25	20	40.5
210556	L	-	(-1,1)	1760 N	12210 E	Syenite. Medium grain, massive, reddish syenite. Possible trachytic texture with coarse (2-3 cm) feldspar laths common. Rx it carries 1-2% pyrite disseminated throughout.	9	35	20	50	60.5



YOU ENCLOSED

TRAVERSE NUMBER  
N.T.S. L11 R15PROJECT Cerro  
AREA Rio de VadoGEOLOGIST(S) Froude  
DATE Oct 21/07

SAMPLE NUMBER	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, AREA	LATITUDE, LONGITUDE and/or UT.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	Grob, Chip, Channel				Au ppb	Cu ppm	Ni ppm	Zn ppm	Ag ppm
210559	-	-	Grab	33.3 N	122.9 E	Dark greyish red - pink cyanite. 0-15% 2-3 mm Karmilovitic phengite. Cut by 1-4 mm 1-2 mm thick carrying minor iron pyrite.	21	35	30	85	40.5
210560	-	-	Grab	33.3 N	122.9 E	Cyanite veined pinkish red cyanite. Cut by Regional 2-3-calcite veinlet carrying minor iron pyrite + minor pyrite.	29	180	25	30	40.5
210561	-	-	Grab	103.3 N	137.2 E	Red - grey brecciated cyanite. Red fragments at Edges in a fine grained grey silicified matrix. Minor horite + Fluorite veining. trace to 10% fine grained sulphides.	5	40	30	20	40.5
210562	RK	-	Grab	103.3 N	137.2 E	Qtz vein working from 2-10 cm's wide cutting red - grey cyanite. Fresh - glossy lustrous quartz. No visible sulphides. Incorporated with horite veining.	8	25	40	35	40.5
210563	RK	-	Grab	103.3 N	137.2 E	Banite - Fluorite vein. Yellow-brown irregular vein of banite with occasional light purple chlorite. Cutting red cyanite 1-10 cm's wide 1-10 cm's + to pinch and small 1-10 cm's 2-15 cm's wide. Occurring in narrow - long veins.	7	15	20	15	40.5

PROJECT CAIRO							GEOLOGIST(S) Frizde					
TRAVERSE NUMBER N.T.S. 42-A-2/41-P-15			AREA Western End of Grid			DATE Janv 1/70						
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				An ppb	Cu ppm	Ni ppm	Zn ppm			
210564	RK	-	Grab	735 9160N	1955 E	Fine grained medium green volcanic or possibly sediment. Rusty on weathered surfaces and fractures. Contains locally 10-15% disseminated and stringer sulphides (pyrite).	47	90	615	35	1.0	
210565	RK	-	Grab	738 0N	1955 E	Generally - to Rx 210564 except contains 2-3% disseminated pyrite. Possibly weakly silicified.	7	40	40	30	40.5	
210566	RK	-	Grab	737 5N	1945 E	Generally, a fine grained green volcanic or sediment as above, cut by occasional thin glassy +/- v.o.n. 1-2% sulphide in host and possibly minor fine grained pyrite in the veining.	69	35	75	85	2.5	
210567	RK	-	Grab	737 5N	1945 E	Grey-green. Fine grained, silicified volcanic (sediment?). Very rusty gossanous rock, blocky and fractured. Contains 2-4% very fine grained sulphide. Locally, bleached looking.	64	5	50	35	15	40.5
210568	RK	-	Grab	732 5N	1925 E	Dark grey, fine grained argillaceous looking rock. Contains 2-3% stringers and blobs of pyrrhotite, pyrite and chalcopyrite. Possible bedding @ 156°/70° S.	12	80	195	80	40.5	
210569	RK	-	inh	737 0N	1975 E	irry v.o.n., fine grained moderately calcified sericitic/lithitic sediment or possibly volcanic. Very rusty and contains ~7% disseminated and stringer sulphide, mostly pyrite with possibly minor pyrrhotite and chalcopyrite. Sample is a chunk of angular rock from a pit measuring 3m x 2m x unknown depth	12	125	210	270	10	

NCO LIMITED

TRAVERSE NUMBER \_\_\_\_\_  
N.T.S. 111P15PROJECT C110  
AREA Harton End at PropertyGEOLOGIST(S) Froude  
DATE 11/11/70

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 ppm	Cu ppm	Ni ppm	Zn ppm	Ag ppm
Y210570	RK	-	Grab	1070 N	1775 E	Sulphide rich breccia. Possibly silicified, brecciated, fine grained rock (volcanic fragment?) with 20-30% pyrrhotite, pyrite and minor chalcopyrite as the matrix.	25	500	660	360	410
Y210571	RK	-	Grab	9075 N	1775 E	Possibly same rock as Rx 210570, but not as brecciated and containing only 2-4% disseminated pyrite and pyrrhotite. Rock appears to be a greyish fine grained sediment.	49	135	310	305	1.5

TRAVERSE NUMBER \_\_\_\_\_  
N.T.S. 41,01-1PROJECT Cerro  
AREA Western End of property.GEOLOGIST(S) Ergun  
DATE Nov 21/90

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	Cu ppm	Ni ppm	Zn ppm	Ag ppm
10572	RK	-	Grab	9391N	10010 E	Gray to light green, very rusty on weathered surfaces. Fine grained, siliceous rock. Possibly a silicified volcanic. Contains up to 25% stringer and disseminated pyrite, pyrrhotite and possibly minor chalcopyrite. Sample taken from gossanous, sulphide rich rock along the north ridge of a shallow pit.	29	230	210	40	1.5
10573	RK	-	Grab	1381N	10010 E	Black sample from pit. Very rusty on weathered surfaces and fractures. Fine grained rock, light grey-green in colour and possibly moderately silicified. Weak to moderate foliation. Contains 2-5% fine grained pyrite. No pyrrhotite.	20	45	100	30	1.0
10574	RK	-	Grab	9385N	10005 E	Sample taken ~ 15 metres west of pit (R#10572). Light grey green colour and moderately silicified. Generally a fine grained rock, but may be slightly brecciated. Numerous hairline fractures contain green chlorite. Contains 2-4% fine grained pyrite with minor pyrrhotite.	7	65	65	55	0.5
10575	RK	-	Grab	1360N	10032 E	Fine grained, grey-green, moderately silicified volcanic rock. Generally rusty along fractures and weathered surfaces. Contains 1-2% fine grained disseminations.	75	50	35	25	0.5
10576	RK	-	Grab	1335N	10027 E	Dark green, very fine grained volcanic rock. Appears compact and unweathered. Generally rusty and contains ~ 2% fine grained and fibrous pyrrhotite. Contains some pyrite along some fractures.	238	75	145	70	0.5

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TRAVERSE NUMBER  
N.T.S. 42-A-2 141-P-15PROJECT Cairo  
AREA Western portionGEOLOGIST(S) Grandjean  
DATE Nov 2 1968

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	Cu PPM	Ni PPM	Zn PPM	Ag PPM
210577	RX	-	Grab	9205.11	10045 E	Gray brown, very fine grained, efflorescent rock. Locally looks bedded or banded. Extremely hard rock. Contains 10-20% fine grained, possibly banded pyrite. Could be a pyritic cherty unit.	32	55	260	20	40.5
210578	RX	-	Grab	9055 N	10210 E	Similar to Rx 210577 only much darker grey and only containing 2-3% fine grained and stringer pyrite. Possibly a cherty horizon as Rx 210577.	41	45	65	200	0.5

NCO LIMITED

TRAVERSE NUMBER  
N.T.S. 42-A-2/41-P-15PROJECT Callio  
AREA Trenches near road in line 10610 E.GEOLOGIST(S) Froudie Jackson Fruscott  
DATE 1 INV 3/10

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 Sill, Soil	Grob, Chip, Channel					Au ppb	Cu ppm	Ni ppm	Zn ppm	Pb ppm	
79	T	-	-100	106 E "	Trench near road " thick sample about 1 m. long		Syenite or syenite porphyry. Medium grained rather equigranular rock with some larger 2-4 mm felsic intergrowths. Fairly massive looking rock except for several 1/2 + overite filled fractures. Contains 2-4% fine grained dissemination pyrite as well as the pyritic stringers.		21	20	20	15	40.5
160	K	-	-100	106 above.			Quartz vein cutting syenite (porphyry?) as above. 10-15 cm wide quartz vein carrying up to 50% crystalline prismatic, green mineral. Possibly diopside. Minor fine, black chlorite or tourmaline. Trace pyrite in vein. 1% diss. pyrite in host.		8	10	20	10	40.5
121	TK	-	-100	East side of road.			Quartz vein as above, but contains 5-10% disseminated and stringer pyrite. Most of the sulphide appears associated with the green crystalline mineral. Minor malachite staining locally. Possible minor chalcopyrite.		46	80	40	5	40.5
132	RK	-	-100	106 above.			Fine-grained green, weathered. Foliation unknown. Contains 2-3% fine and coarse biocls of pyrite. Appears to be 10% for some of the pyrite lining a -1 cm apart ratio of 1:2:1.		57	170	58	80	40.5

VCO LIMITED

TRAVERSE NUMBER  
V.T.S. 42-A-2 / 41-P-15

PROJECT Cairo  
AREA Tuhkash Lake (Sectn. of Line)

GEOLOGIST(S) Frazer  
DATE 11.VI.1977

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				Ag	Cu	Ni	Zn	Pb
DS83	54	-	30 cm chip	1270 N'	2030 E	Diabase - Svenite contact. 3-5 cm wide calcite vein with several smaller stringers along contact rich diabase dike and red svenite. 10% galena with trace chalcocite and pyrite in the carbonato bearing.	=	335	55	0.889	1.5
DS84	54	-	100	1475 N	11392 E	Red carbonated mafic with 10-15 % hornblende. Trace to 1% disseminated pyrite throughout.	<5	25	15	50	0.5

YOU ENCLOSED

TRAVERSE NUMBER  
N.T.S. 42A/2, 41P/15PROJECT Curo  
AREAGEOLOGIST(S) Froude  
DATE Nov 5 1960

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	GXB Grab, Chip, Channel				Au ppb	Cu ppm	Ni ppm	Zn ppm	Ag ppm
10585	RK	-	Grab	~745N	11680 E	Alt. and sheared sulfide. Itself at contact with fine grained mafic/intermediate volcanic. Weakly sheared and tilted along surfaces and fractures. Minor pyrrhotite along fractures. Locally, pyrite to 20% as massive bands or beds, but generally pyrite is finely disseminated throughout; up to 5%	140	2	58	66	40.5
10586	RK	-	Grab	10890 N	11703 E	Dark green, very fine grained, weakly chloritic, mafic volcanic rock. Generally massive with no obvious fabric. Very rusty, and contains 3-5% blebby and disseminated sulphide.	15	181	41	88	40.5
10587	RK	-	Grab	11070 N	11675 E	Sericitic, bleached, volcanic. Light gray-green, fine grained rock, highly altered. Possible weak foliation developed @ 130°/V. Contains 2-4% fine grained and stringer pyrite.	5	33	11	2	40.5
10588	RK	-	Grab	11070 N	11678 E	Sample taken from same outcrop as RX 10587. Extremely silicified rock, has a slight "banded" texture. Some quartz veining present. Contains 5-7% disseminated and stringer pyrite, and some pyrite is also found in the quartz veining. Grayish green in colour, but locally white. Some sericitic along fractures.	100	82	38	8	40.5

IVANVILLE

TRAVERSE NUMBER  
N.T.S. 42A/2 41P/15PROJECT Cairo  
AREAGEOLOGIST(S) Froude  
DATE Nov 5/90

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	Cu PPM	Ni PPM	Zn PPM	Hg PPM
10589	RK	-	Grab	11305 N	11695 E	Dark green, fine grained, possibly basaltic or somewhat intermediate, volcanic rock, chlorite altered and contains 3-5% disseminated and stringer sulphide. No fabric developed.	20	35	35	90	40.5
10590	RK	-	Grab	10520 N	11790 E	Medium green, fine grained, chloritic, mafic volcanic. Weakly carbonatized. Very rusty along fractures and weathered surfaces. Rock contains 3-5% fine grained, disseminated pyrite.	100	10	21	46	40.5

# INCO GOLD

TRAVERSE NUMBER Cairn Prospect  
N.T.S. 43-12-2

PROJECT Cairn Project  
AREA Cairn Township

GEOLOGIST(S) Jay E. Tracy  
DATE C.J.T. / 7/17/77

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. 1% / oz. per ton)				
	RX Rock, Talus	FIELD SAMPLING	SOIL				Au ppm	Cu ppm	Ni ppm	Zn ppm	Ag ppm
210701	CJ-1	GRAB	L1500E	15cm	61500E	F.G. m.g. dark grey massive weakly magnetic. DIABASE TEXTURED DIABASE DIKE. trace of PYRITE	5	195	45	180	40.5
210702	CJ-2	GRAB	L1500E	30cm	61500E	C.g. pink porphyritic feldspars from 1mm to 3mm wide, weakly magnetic. massive. 10%	5	15	25	45	40.5
X210703	CJ-3	30cm CHIP	L1500E	PS TO RX-210702 BUT WITH 5cm wide BIFERED C.I.R. VEN. THE VEN IS 30cm LONG AND PINCHES OUT AT BOTH ENDS V.EIN. N6.5° E85°N			5	25	45	15	40.5
2x210704	CJ-4	60cm CHIP	L14+900E			F.G. pink saccharic textured, massive, weakly magnetic. possible SYENITE DIKE. DIKE is probably fine grained PHASE OF SYENITE	5	60	20	20	40.5
RX210705	CJ-5	10cm CHIP	L14+900E			10cm wide, 80cm long quartz vein in SYENITE. BIFERED	5	20	45	15	40.5
2x210706	CJ-6	GRAB	L14+300E			BIFD SYENITE, small 1cm wide C.I.R. VEN.	5	15	40	45	40.5
X-210707	CJ-7	GRAB	L14+100E			SYENITE DS TO RX-210702	5	25	40	40.5	40.5
X-210708	CJ-8	GRAB	L14+100E			SYENITE DS TO RX-210703	5	25	20	20	40.5

**INCO GOLD**

TRAVERSE NUMBER Circo Property  
N.T.S. 47-12-2

PROJECT Civics Project  
AREA Civics Townships

GEOLOGIST(S) J. E. Jackson  
DATE Oct 17/68

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	FIGURE Stream Silt Soil	Grab, Chip, Channel				Au ppb	Cu ppm	Ni ppm	Zn ppm	Ag ppm
210704	CJ-9	GRAB		L14+00E	F.C., BLEACHED, LT. PINK, SYENITE. 40cm x 40cm /PbO IN SYENITE.		0	160	40	30	1.5
210710	CJ-10	GRAB		L13+90E	AS TO RX-210701 SYENITE		<5	15	25	40	40.5
210711	CJ-11	GRAB		L13+80E	DIA BASE AS TO RX-210701.		<5	150	35	80	40.5
210712	CJ-12	GRAB		L14+200E	V.E. dk grey, wslv magnetic HAZED, SYENITE.		5	95	30	30	1.0
RX-210713	CJ-13	GRAB		L14+300E	SYENITE AS TO RX-210702		<5	25	20	20	40.5
210714	CJ-14	CHIP	50cm	L13+90E	F.C., DARK GREEN, CHLORISTIC, HARD SHEAR IN SYENITE. 5cm chkd OF SHEAR. single foss site (discontinuities) BIFER.		<5	10	30	75	40.5

GOLD

TRAVERSE NUMBER  
N.T.S. 12-17-2

PROJECT

AREA Cpizo Twp 42-17-2

GEOLOGIST(S)

J.E. JACKSON

DATE Oct. 27 1977

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				Au	Cu	Ni	Zn	Ag
							PPM	PPM	PPM	PPM	PPM
210715			GRAB			MAG. DK GRAY MASSIVE CHLORITIC DIABASE DIKE. TRACE OF PYRITE.	65	150	40	95	40.5
210716			GRAB			FROM GRAINED, GRAY MATRIX WITH PORPHYRITIC FOLIATIONS (PINK), WKLY CARBONATIZED, WKLY MAGNETIC, MASSIVE SYENITE.	10	10	30	100	40.5
X210717			GRAB			AS TO RX 210716 BUT WITH 1 TO 3MM WIDE QTZ VENNS ALONG FOLIATION IN THE SYENITE	<5	20	30	125	40.5
X210718		CHIP	60CM			AS TO 12K 210716 BUT SYENITE IS FOLIATED AND CONTAIN 1 TO 2MM WIDE QTZ VENNS AND STRINGERS ALONG FOLIATION (IMMISCIBLE SHEAR) TRACE OF CHALCOPYRITE. CHIP IS ALONG FOLIATION; NOT ACROSS IT. FOLIATION ZONE 20CM X 10CM WIDE.	58	25	30	55	0.5
X210719		GRAB				AS TO RX 210716.	6	25	40	100	40.5
210720		CHIP	1 METRE			V.F.G. SILICIFIED, WKLY MAGNETIC. SYENITE, NEARLY IMPURE CONTACT.	<5	30	25	30	40.5
X210721		CHIP	1 METRE			AS ABOVE WITH RX 210720. TRACE OF PYRITE.	5	30	20	40	40.5
X210722		CHIP	1 METRE			AS TO RX 210720	9	45	25	65	40.5
X210723		CHIP	1 METRE			AS TO RX 210720	12	33	30	55	0.5

# INCO GOLD

TRAVERSE NUMBER  
N.T.S. 42-P-2

PROJECT Cairo Project  
AREA Cairo Town

GEOLOGIST(S) Jay E. Ingraham  
DATE 11/1/69

SAMPLE NUMBER	SAMPLE TYPE			SAMPLE LENGTH, WIDTH, and/or UT.M.	LATITUDE, LONGITUDE and/or UT.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	Cu ppm	Ni ppm	Zn ppm	Pb ppm
-210724		GRAB		OCT. 31		F TO M.G., DK GRAY MASSIVE, MODERATELY MAGNETIC DIA BASE - HEMIMITE ALTERATION AS SMALL SPOTS IN DIA BASE. PYRITE OCCURS AS SMALL CLOWS THROUGHOUT.	5	60	60	315	<0.5
x-210725		CHIP	40cm	OCT. 31		40cm CHIP ALONG A 5CM WIDE QUARTZ VEIN. VEIN CONTAINS PRECIPITATED FRAGMENTS OF SYENITE BARRING	<5	20	25	55	<0.5
x-210726		CHIP	30cm	OCT. 31		30CM CHIP NEXT TO RX-210725. C.G., BLEACHED, SILICIFIED, SYENITE. TRACE OF PYRITE.	<5	60	15	30	<0.5
x-210727		GRAB		OCT. 31		GRAB OF QUARTZ VEIN. VEIN RANGES FROM 10MM TO 40CM WIDE AND EXTENDS FOR 2-3M. VEIN CONTAINS BXD SYENITE FRAGMENTS TRACE OF PYRITE AND GALENA.	<5	20	20	20	<0.5
rx-210728		GRAB		Nov. 1		M.G., MASS, PINK, SUGARY TEXTURED FELSIC, PYRITIZED. up to 5% U.F.g. TO F.g. DISSEMINATES PYRITE TUBERCLES.	9	15	25	10	<0.5
x-210729		GRAB		NOV. 1		F.G., DK GRAY TO GREEN, MASSIVE, MODERATELY MAGNETIC. 2PP TO 5PP VEG. DISSEMINATED PYRITE. BASALT.	5	40	30	45	<0.5

## INCO GOLD

TRAVERSE NUMBER  
N.T.S. 42-A-2 (41 - P-5)PROJECT  
AREACairo Project

GEOLOGIST(S)

DATE

T. E. T. 20.15  
20.11.1971

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				Au ppb	Cu ppm	Ni ppm	Zn ppm	Ag ppm
-210730			GRAB		NOV. 1	M.GR. DK GRAY, MASSIVE DIABASE DIKE. HEMIMITE CHOTS. TRACE OF PYRITE.	9	20	25	15	<0.5
-210731			GRAB		NOV. 1	V.FIGE, BLEACHED, LIGHT GREEN MINOR QUARTZ FLOODING, NON MAGNETIC, ALTERED BISSELT.	2	70	65	50	<0.5
-210732			GRAB		NOV. 1	QUARTZ FLOODED FELDSPAR PORPHYRY. TRACE OF PYRITE	<5	15	75	60	<0.5
-210733		CHIP	1.0cm		NOV. 1	QUARTZ VEN. MILKY WITITE. POSSIBLE TRACE OF PYRITE.	<5	10	25	5	<0.5
-210734		CHIP	15.0cm		NOV. 1	AS TO 210730 - 210733. 1.5 m VEIN IN FELDSPAR PORPHYRY.	<5	15	30	5	<0.5
-210735			GRAB		NOV. 1	M.GR. DK GRAY, MASSIVE DIABASE- 1-2% V.FIGE PYRITE. NUMEROUS QUARTZ VEINING THICKENING.	56	85	25	15	<0.5
-210736			GRAB		NOV. 1	FELDSPAR PORPHYRY AS TO RX-210728. TRACE PYRITE.	9	35	30	40	<0.5
							6	CHECK			

# INCO GOLD

TRAVERSE NUMBER  
N.T.S. 42-1-2 171-1715

PROJECT CARDO PROPERTY  
AREA MONTAGNAU

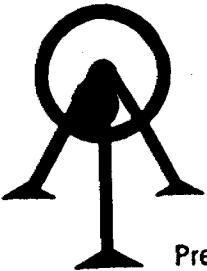
GEOLOGIST(S) J.W. JACK  
DATE NOV 9/91

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				Cu	Ni	Zn	Ag	
210737			GRAB			BIGELED, GRANULAR TEXTURED, WEAKLY SILICIFIED, SERICITIZED, LIGHT (PALE) WHITISH-GREEN, NON-MAGNETIC MASSIVE. POSSIBLE SEDIMENT? PROBABLE ALTERED MAFFIC VOLCANIC FLOW. 2-4% V.F.G. DISSEMINATED PYRITE.	Au PPM	PPM	PPM	PPM	
x 210738			GRAB			F.G., CHLORITIC, DARK GREEN, MAFFIC SCHIST (BASALT) WITH QUARTZ-CHECROILITE POSSIBLY FELDSPAR VEINING ALONG FOLIATION. 1/2 PYRITE IN CHLORITE. GOOD FOLIATION AN OVERCROWN OF TRENCH	25	1	82	86	40.5
x 210739			CHIP	10cm		MILKY WHITE TO LIGHT GREY, MASSIVE QUARTZ VEIN. V.F.G. IRON PYRITES - RE BURGEN. VEIN CUTTING IN SYNTHETIC FLOW 10cm AND IS 10cm 10cm WIDE. CHIP IS FROM REINHOLD	<5	30	5	110	1.0
-210740			GRAB			F.G., DARK GRAY-GREEN, MASSIVE NON-MAGNETIC, CHLORITIC BASALT 2-3% V.F.G. PYRITE	45	42	53	120	40.5
x 210741			GRAB			F.G., LT. GRAY, PORPHYRITIC, STRONGLY SILICIFIED, DIABASE DIKE TO PY. POSSIBLY A PORPHYRITIC KNUCKLE SITE	<5	11	62	46	40.5



**APPENDIX 2**

**ASSAY SHEETS**



# ACCURASSAY LABORATORIES LTD.

P.O. BOX 426  
KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1  
TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph.D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

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Page: 1

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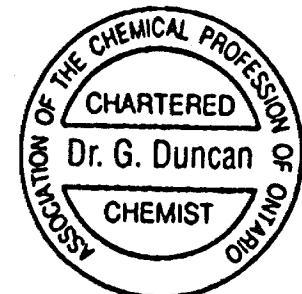
Mr. Frank Gibson  
Inco Explor. Technical Services Date: October 19 1990  
Engineering Building  
Highway 17 W  
Copper Cliff, Ontario  
POM 1NO

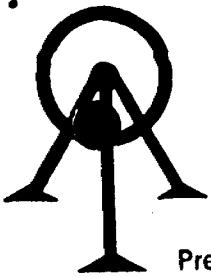
Work Order #: 900743  
Project :

SAMPLE NUMBERS Accurassay	CUSTOMER	Gold Oz/T	Gold ppb
228203	RX-210526	<0.001	<5
228204	RX-210527	<0.001	6
228205	RX-210528	<0.001	<5
228206	RX-210529	<0.001	<5
228207	RX-210530	<0.001	6
228208	RX-210531	0.004	139
228209	RX-210532	<0.001	<5
228210	RX-210601	<0.001	<5
228211	RX-210602	<0.001	12
228212	RX-210603	<0.001	<5
228212	RX-210603	<0.001	<5 Check
228213	RX-210604	0.030	1021
228214	RX-210605	<0.001	<5
228215	RX-210606	<0.001	10
228216	RX-210607	0.001	21
228217	RX-210608	<0.001	8
228218	RX-210609	<0.001	6
228219	RX-210610	<0.001	9
228220	RX-210701	<0.001	5
228221	RX-210702	<0.001	<5
228221	RX-210702	<0.001	<5 Check
228222	RX-210703	<0.001	<5
228223	RX-210704	<0.001	<5
228224	RX-210705	<0.001	<5
228225	RX-210706	<0.001	<5
228226	RX-210707	<0.001	<5
228227	RX-210708	<0.001	<5
228228	RX-210709	<0.001	8
228229	RX-210710	<0.001	<5
228230	RX-210711	<0.001	<5
228230	RX-210711	<0.001	<5 Check

Per:

G. Duncan





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TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

## Certificate of Analysis

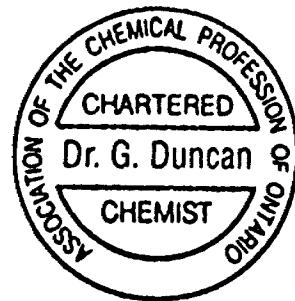
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36813

Mr. Frank Gibson  
Inco Explor. Technical Services Date: October 19 1990  
Engineering Building  
Highway 17 W  
Copper Cliff, Ontario  
P0M 1N0

Work Order # : 900743  
Project :

SAMPLE NUMBERS	Customer	Gold Oz/T	Gold ppb
Accurassay			
228231	RX-210712	<0.001	5
228232	RX-210713	<0.001	<5
228233	RX-210714	<0.001	<5
228233	RX-210714	<0.001	<5 Check



Per:

G. Duncan



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## Certificate of Analysis

Page: 1

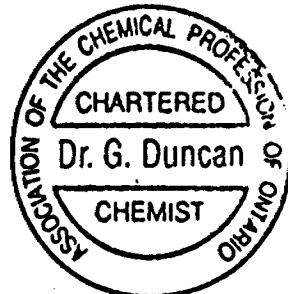
Mr. Frank Gibson  
Inco Explor. Technical Services  
37066 Engineering Building  
Highway 17 W  
Copper Cliff, Ontario  
POM 1NO

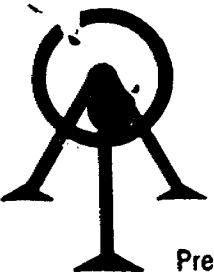
Date: November 2 19 90

Work Order # : 900787  
Project :

SAMPLE NUMBERS	Customer	Gold Oz/T	Gold ppb
Accurassay			
229143	RX-210545	<0.001	8
229144	RX-210546	<0.001	<5
229145	RX-210547	<0.001	<5
229146	RX-210548	<0.001	11
229147	RX-210549	<0.001	5
229148	RX-210550	<0.001	10
229149	RX-210551	<0.001	5
229150	RX-210552	<0.001	<5
229151	RX-210553	<0.001	7
229152	RX-210554	<0.001	6
229152	RX-210554	<0.001	5
229153	RX-210555	<0.001	<5
229154	RX-210556	<0.001	9
229155	RX-210611	<0.001	9
229156	RX-210612	<0.001	10
229157	RX-210613	<0.001	11
229158	RX-210614	<0.001	<5
229159	RX-210615	<0.001	<5
229160	RX-210616	0.001	22
229161	RX-210617	0.001	39
229161	RX-210617	0.001	36
229162	RX-210715	0.002	65
229163	RX-210716	<0.001	10
229164	RX-210717	<0.001	<5
229165	RX-210718	0.002	58
229166	RX-210719	<0.001	6
229167	RX-210720	<0.001	<5
229168	RX-210721	<0.001	5
229169	RX-210722	<0.001	9
229170	RX-210723	<0.001	12
229170	RX-210723	<0.001	9

Per:





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President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

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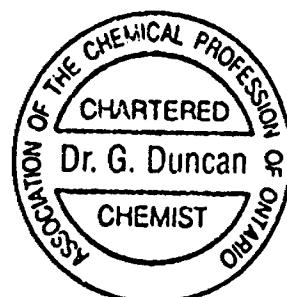
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Mr. Frank Gibson  
Inco Explor. Technical Services  
37232 Engineering Building  
Highway 17 W  
Copper Cliff, Ontario  
POM 1NO

Date: November 9 19 90

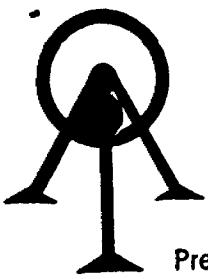
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Project :

SAMPLE NUMBERS Accurassay	Customer	Gold Oz/T	Gold ppb
229838	RX-210557	<0.001	5
229839	RX-210558	0.826	28376
229840	RX-210559	0.001	21
229841	RX-210560	0.001	29
229842	RX-210561	<0.001	5
229843	RX-210562	<0.001	8
229844	RX-210563	<0.001	7
229845	RX-210564	0.001	47
229846	RX-210565	<0.001	7
229847	RX-210566	0.002	69
229847	RX-210566	0.002	64 Check
229848	RX-210567	<0.001	5
229849	RX-210568	<0.001	12
229850	RX-210569	<0.001	12
229851	RX-210570	0.001	25
229852	RX-210571	0.001	49
229853	RX-210572	0.001	29
229854	RX-210573	0.001	20
229855	RX-210574	<0.001	7
229856	RX-210575	0.002	75
229856	RX-210575	0.001	46 Check
229857	RX-210576	0.022	758
229858	RX-210577	0.001	32
229859	RX-210578	0.001	41
229860	RX-210579	0.001	21
229861	RX-210580	<0.001	8
229862	RX-210581	0.001	46
229863	RX-210582	0.002	57
229864	RX-210583	<0.001	7
229865	RX-210584	<0.001	<5
229865	RX-210584	<0.001	<5 Check



Per:

*G. Duncan*



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P.O. BOX 426  
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President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

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Page: 1

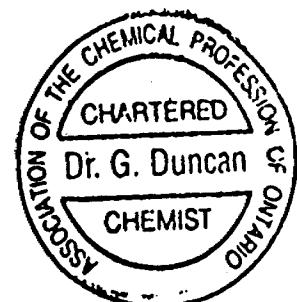
Mr. Frank Gibson  
Inco Explor. Technical Services  
Engineering Building  
37259 Highway 17 W  
Copper Cliff, Ontario  
POM 1NO

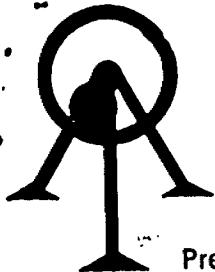
Date: November 12 1990

Work Order # : 900817  
Project :

SAMPLE NUMBERS	Customer	Gold Oz/T	Gold ppb
Accurassay			
229866	RX-210618	0.001	23
229867	RX-210619	0.001	19
229868	RX-210620	<0.001	<5
229869	RX-210621	<0.001	7
229870	RX-210622	0.001	46
229871	RX-210623	0.001	35
229872	RX-210624	0.003	89
229873	RX-210625	<0.001	<5
229874	RX-210626	<0.001	<5
229875	RX-210627	<0.001	7
229875	RX-210627	<0.001	<5
229876	RX-210628	<0.001	<5
229877	RX-210629	<0.001	<5
229878	RX-210630	<0.001	<5
229879	RX-210631	<0.001	10
229880	RX-210632	<0.001	<5
229881	RX-210633	<0.001	12
229882	RX-210634	<0.001	5
229883	RX-210724	<0.001	5
229884	RX-210725	<0.001	<5
229884	RX-210725	<0.001	<5
229885	RX-210726	<0.001	<5
229886	RX-210727	<0.001	9
229887	RX-210728	<0.001	5
229888	RX-210729	<0.001	9
229889	RX-210730	<0.001	7
229890	RX-210731	<0.001	<5
229891	RX-210732	<0.001	<5
229892	RX-210733	<0.001	<5
229893	RX-210734	<0.001	<5
229893	RX-210734	<0.001	Check

Per:





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TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph.D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

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Page: 2

Mr. Frank Gibson  
Inco Explos. Technical Services  
Engineering Building  
37260 Highway 17 W  
Copper Cliff, Ontario  
P0M 1N0

Date: November 12 1990

Work Order #: 900817  
Project :

SAMPLE NUMBERS	Customer	Gold Oz/T	Gold ppb
Accurassay			
229894	RX-210735	0.002	56
229895	RX-210736	<0.001	9
229895	RX-210736	<0.001	6 Check



Per:

*G. Duncan*

C-C- EXPLORATION GEOCHEM LAB

Submitted By : JES  
Reported To : .....

Approved : H...  
Date : 11-29-1990

Property : Matchewan  
Account No. : 60371-52020

Borehole :

Analysed : 11-28-1990 by HCM Method : FIRE ASSAY - AA  
Our File : B:G11-29

ALL ASSAYS IN PPM UNLESS OTHERWISE STATED  
DETECTION LIMITS (all in PPM, except Au in PPB) : Au = 5

Sample No. : AU

RX 210858 17.5 PPM

JJ / TF

Dump file created on 7-DEC-90 13:13:07

file name : A9027332  
 date received : 26-NOV-90  
 date last updated : 7-DEC-90  
 status : FINAL  
 total number of columns : 2  
 number of prep. codes : 1  
 number of parameters : 1  
 columns transferred : 1  
 total number of samples : 14  
 sample range transferred : 1- 14  
 project : 60371-52020  
 comments : ATTN: R. DUTCHBURN

## Parameter list

column number	Chemex code	Parameter description	Detection limit
1	100	Au ppb FA+AA	5.00

a9027332 Au	
	1-----
1 RX 210585	140.
2 RX 210586	15.
3 RX 210587	5.
4 RX 210588	100.
5 RX 210589	20.
6 RX 210590	100.
7 RX 210737	15.
8 RX 210738	25.
9 RX 210739	<5.
10 RX 210740	45.
11 RX 210741	<5.
12 RX 210742	<5.
13 RX 210743	<5.
14 RX 210744	<5.

## C. C. EXPLORATION GEOCHEM LAB

Submitted By : .....  
Reported To : .....Approved : .....  
Date : 01-21-1991Property : ONTARIO  
Account No. : 60371-52020

Borehole :

Analysed : 01-18-1991 by HCM Method : PARTIAL DIGEST - AH  
Our File : A:PO1-16

ALL ASSAYS IN PPM UNLESS OTHERWISE STATED

DETECTION LIMITS (all in PPM, except Ag in PPB) : CU = 5 NI = 5 ZN = 5 AG = .5

Sample No.	CU	NI	ZN	AG
RX 210526	120	PPM	25	PPM
RX 210527	130	PPM	45	PPM
RX 210528	15	PPM	40	PPM
RX 210529	25	PPM	15	PPM
RX 210530	15	PPM	30	PPM
RX 210531	855	PPM	35	PPM
RX 210532	20	PPM	55	PPM

## C.C. EXPLORATION GEOCHEM LAB

Submitted By : .....  
 Recorded To : .....

Approved : .....  
 Date : 01-21-1991

Property : ONTARIO  
 Account No. : 60371-52020

Borehole :

Analyzed : 01-18-1991 by HCN Method : PARTIAL DIGEST - AA  
 Our File : A:POI-18

ALL ASSAYS IN PPM UNLESS OTHERWISE STATED

DETECTION LIMITS (all in PPM, except Au in PGS) : CU = 5 NI = 5 ZN = 5 AG = .5

Sample No.	CU	NI	ZN	AG
RX 210545	45	PPM	20	PPM
RX 210546	15	PPM	20	PPM
RX 210547	5	PPM	110	PPM
RX 210548	5	PPM	130	PPM
RX 210549	15	PPM	20	PPM
RX 210550	25	PPM	40	PPM
RX 210551	40	PPM	30	PPM
RX 210552	20	PPM	35	PPM
RX 210553	20	PPM	35	PPM
RX 210554	15	PPM	30	PPM
RX 210555	15	PPM	25	PPM
RX 210556	35	PPM	20	PPM
RX 210557	10	PPM	30	PPM
RX 210558	55	PPM	25	PPM
RX 210559	35	PPM	30	PPM
RX 210560	180	PPM	25	PPM
RX 210561	40	PPM	30	PPM
RX 210562	25	PPM	40	PPM
RX 210563	15	PPM	20	PPM
RX 210564	30	PPM	615	PPM
RX 210565	40	PPM	40	PPM
RX 210566	35	PPM	75	PPM
RX 210567	50	PPM	35	PPM
RX 210568	60	PPM	135	PPM
RX 210569	125	PPM	210	PPM
RX 210570	500	PPM	660	PPM
RX 210571	135	PPM	310	PPM
RX 210572	230	PPM	210	PPM
RX 210573	45	PPM	100	PPM
RX 210574	65	PPM	65	PPM
RX 210575	50	PPM	35	PPM
RX 210576	75	PPM	145	PPM
RX 210577	55	PPM	250	PPM
RX 210578	45	PPM	65	PPM
RX 210579	20	PPM	20	PPM
RX 210580	10	PPM	20	PPM
RX 210581	60	PPM	40	PPM
RX 210582	170	PPM	55	PPM
RX 210583	395	PPM	55	PPM
RX 210584	25	PPM	15	PPM

## C.C. EXPLORATION GEOCHEM LAB

Submitted By : .....  
 Reported To : .....

Approved : .....  
 Date : 01-21-1991

Property : ONTARIO                      Corehole :  
 Account No. : 60371-52020

Analyzed : 01-18-1991 by HCN        Method : PARTIAL DIGEST - AA  
 Our File : A:R01-16

ALL ASSAYS IN PPM UNLESS OTHERWISE STATED

DETECTION LIMITS (all in PPM, except Au in PPT) : CU = 5    NI = 5    ZN = 5    AG = .5

Sample No.	CU	NI	ZN	AG
RX 210601	40	PPM	20	PPM
RX 210602	25	PPM	35	PPM
RX 210603	30	PPM	50	PPM
RX 210604	135	PPM	60	PPM
RX 210605	35	PPM	40	PPM
RX 210606	0.176 %		45	PPM
RX 210607	0.258 %		45	PPM
RX 210608	265	PPM	45	PPM
RX 210609	50	PPM	45	PPM
RX 210610	200	PPM	50	PPM
RX 210611	5	PPM	130	PPM
RX 210612	35	PPM	30	PPM
RX 210613	35	PPM	30	PPM
RX 210614	20	PPM	20	PPM
RX 210615	35	PPM	25	PPM
RX 210616	25	PPM	40	PPM
RX 210617	25	PPM	50	PPM
RX 210618	30	PPM	50	PPM
RX 210619	50	PPM	50	PPM
RX 210620	95	PPM	60	PPM
RX 210621	10	PPM	75	PPM
RX 210622	225	PPM	25	PPM
RX 210623	15	PPM	25	PPM
RX 210624	40	PPM	70	PPM
RX 210625	100	PPM	40	PPM
RX 210626	75	PPM	85	PPM
RX 210627	135	PPM	35	PPM
RX 210628	235	PPM	25	PPM
RX 210629	50	PPM	65	PPM
RX 210630	20	PPM	50	PPM
RX 210631	0.188 %		155	PPM
RX 210632	65	PPM	50	PPM
RX 210633	75	PPM	50	PPM
RX 210634	50	PPM	45	PPM

## C. C. EXPLORATION GEOCHEM LAB

Bulked By : .....  
 Referred To : .....

Approved : .....  
 Date 101-21-1991

Property : ONTARIO                      Borehole :  
 Account No. : 60371-52020

Analyzed : 01-18-1991 by HCN        Method : PARTIAL DIGEST - AA  
 Our File : A:R01-18

ALL ASSAYS IN PPM UNLESS OTHERWISE STATED

DETECTION LIMITS (all in PPM, except Au in PFS) : CU = .5    NI = .5    ZN = .5    AG = .5

Sample No.	CU	NI	ZN	AG
RX 210701	195	PPM	45	PPM
RX 210702	15	PPM	25	PPM
RX 210703	25	PPM	45	PPM
RX 210704	60	PPM	20	PPM
RX 210705	20	PPM	45	PPM
RX 210706	15	PPM	40	PPM
RX 210707	25	PPM	40	PPM
RX 210708	25	PPM	20	PPM
RX 210709	460	PPM	40	PPM
RX 210710	15	PPM	25	PPM
RX 210711	150	PPM	35	PPM
RX 210712	95	PPM	30	PPM
RX 210713	25	PPM	20	PPM
RX 210714	10	PPM	20	PPM
RX 210715	150	PPM	40	PPM
RX 210716	10	PPM	30	PPM
RX 210717	20	PPM	20	PPM
RX 210718	75	PPM	30	PPM
RX 210719	25	PPM	40	PPM
RX 210720	30	PPM	25	PPM
RX 210721	30	PPM	20	PPM
RX 210722	45	PPM	25	PPM
RX 210723	35	PPM	30	PPM
RX 210724	60	PPM	60	PPM
RX 210725	20	PPM	25	PPM
RX 210726	60	PPM	15	PPM
RX 210727	30	PPM	20	PPM
RX 210728	15	PPM	25	PPM
RX 210729	40	PPM	30	PPM
RX 210730	20	PPM	25	PPM
RX 210731	70	PPM	65	PPM
RX 210732	15	PPM	75	PPM
RX 210733	10	PPM	25	PPM
RX 210734	15	PPM	30	PPM
RX 210735	65	PPM	25	PPM
RX 210736	35	PPM	30	PPM
			15	PPM
			5	PPM
			5	PPM
			15	PPM
			40	PPM

	<u>Ag</u>	<u>Al</u>	<u>Ba</u>	<u>Be</u>	<u>Bi</u>	<u>Ca</u>	<u>Cd</u>	<u>Co</u>	<u>Cr</u>	<u>Cu</u>	<u>Fe</u>
1 RX 210585	<0.5	7.36	260	<0.5	<2.	8.34	<0.5	80	197	2	7.25
2 RX 210586	<0.5	6.60	140	<0.5	<2.	6.57	<0.5	42	123	131	11.31
3 RX 210587	<0.5	8.40	370	0.5	<2.	2.40	<0.5	9	235	33	2.19
4 RX 210588	<0.5	3.74	210	<0.5	<2.	1.84	0.5	60	354	82	4.92
5 RX 210589	<0.5	5.44	90	<0.5	<2.	9.95	0.5	45	109	35	8.58
6 RX 210590	<0.5	7.96	2880	1.0	<2.	1.98	<0.5	17	90	10	4.64
7 RX 210737	<0.5	7.40	440	1.0	<2.	0.32	1.0	13	284	9	1.71
8 RX 210738	<0.5	3.28	150	0.5	<2.	9.18	1.0	48	515	1	7.77
9 RX 210739	1.0	1.10	370	<0.5	<2.	0.36	0.5	6	486	30	0.76
10 RX 210740	<0.5	9.22	190	<0.5	<2.	5.48	<0.5	30	168	42	8.69
11 RX 210741	<0.5	8.00	680	<0.5	<2.	3.33	1.0	16	323	11	3.28
12 RX 210742	<0.5	6.84	340	0.5	<2.	2.94	0.5	15	352	82	2.42
13 RX 210743	<0.5	8.25	460	<0.5	<2.	3.28	1.0	10	253	23	3.95
14 RX 210744	<0.5	7.48	940	0.5	<2.	0.49	1.0	5	103	10	1.96

	<u>K</u>	<u>Mg</u>	<u>Mn</u>	<u>Mo</u>	<u>Na</u>	<u>Ni</u>	<u>P</u>	<u>Pb</u>	<u>Sr</u>	<u>Ti</u>	<u>V</u>	<u>W</u>	<u>Zn</u>
1 RX 210585	2.18	1.79	1860	<1.	2.11	58	290	12	475	0.70	251	<10.	66
2 RX 210586	0.50	2.23	1885	<1.	1.33	41	430	4	408	0.96	413	<10.	88
3 RX 210587	0.68	0.26	235	1	4.76	11	780	8	189	0.49	101	<10.	2
4 RX 210588	0.44	0.15	285	14	1.40	38	240	6	196	0.16	48	20	8
5 RX 210589	0.41	2.27	1290	<1.	2.95	35	450	8	185	0.61	223	<10.	90
6 RX 210590	4.89	2.22	850	<1.	2.78	21	1950	4	212	0.28	114	<10.	46
7 RX 210737	2.62	0.40	130	<1.	3.57	69	250	4	180	0.11	31	<10.	30
8 RX 210738	0.66	2.95	1775	14	0.16	82	3320	<2.	139	0.22	158	<10.	86
9 RX 210739	0.52	0.12	190	1	0.50	5	190	828	160	0.01	11	<10.	110
10 RX 210740	0.48	3.71	1700	<1.	2.02	53	1110	8	412	0.71	172	20	120
11 RX 210741	1.26	1.68	725	<1.	3.10	62	720	16	313	0.43	106	<10.	46
12 RX 210742	0.89	0.36	315	<1.	2.10	39	640	36	215	0.33	83	<10.	66
13 RX 210743	0.93	1.28	745	<1.	3.21	31	720	4	284	0.44	111	10	40
14 RX 210744	3.09	0.96	285	<1.	1.73	5	280	8	103	0.12	21	<10.	32



Ministry of  
Northern Development  
and Mines

DOCUMENT No.  
W 9108.00121



42A02SE0102 2.14122 ALMA

900

**Mining Act**

**Report of Work**

(Geophysical, Geological and Geochemical Surveys)

Mining Lands Section, Mineral Development and Lands Branch:

Type of Survey(s)	Mining Division	Township or Area
<b>Geological</b>	<b>Larder Lake</b>	<b>Cairo and Alma</b>
Recorded Holder(s)	Prospector's Licence No.	
<b>Inco Limited</b>	<b>A 19231</b>	
Address	Telephone No.	
<b>Field Exploration Dept., Hwy 17 W., Copper Cliff, Ontario P0M 1N0</b>	<b>705-682-8439</b>	
Survey Company		
<b>Inco Exploration and Technical Services Inc.</b>		
Name and Address of Author (of Geo-Technical Report)		Date of Survey (from & to)
<b>J. E. Jackson c/o Inco Expl. &amp; Tech. Services Inc., Copper Cliff, Ont.</b>		09 10 90 06 11 90 Day Mo Yr Day Mo Yr

Credits Requested per Each Claim in Columns at right

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

Total miles flown over claim(s).

Date

Recorded Holder by Agency (Signature)

March 14, 1991

Mining Claim		Mining Claim		Mining Claim	
Prefix	Number	Prefix	Number	Prefix	Number
<b>See separate list</b>					

**RECEIVED**

MAR 25 1991

Total number of claims traversed  
**MINING LANDS SECTION**  
by this report of work **87**

Certification Verifying Report of Work

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

Name and Address of Person Certifying

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

Total Days Cr. Recorded	Date Recorded	Mining Recorder	Date	Certified By (Signature)
Hwy 17 W., Copper Cliff, Ont.	705-682-8439		March 14, 1991	<i>[Signature]</i>
POM 1NO			Received Stamp	

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
34.80	March 18/91	<i>[Signature]</i>
Date Approved as Recorded	Provincial Manager, Mining Lands	
"SEE REVISED WORK STATEMENT"	TIME	

**RECEIVED  
LARDER LAKE  
MINING DIVISION**

MAR 18 1991

FROM: MNDM MINING RCDR Kirk.Lk TO: MINING LANDS-SUD

MAR 25, 1991 11:02AM P.06

As per our

WILMINGTON NO.  
W 9108, 0012

P.02

### MINING CLAIMS TRAVESED

L 1152284	L 1152308	L 1152352	L 1152394
L 1152285	L 1152309	L 1152353	L 1152395
L 1152286	L 1152310	L 1152354	L 1152396
L 1152287	L 1152311	L 1152355	L 1152397
L 1152288	L 1152312	L 1152374	L 1152398
L 1152289	L 1152313	L 1152375	L 1152399
L 1152290	L 1152314	L 1152376	L 1152400
L 1152291	L 1152315	L 1152378	L 1152401
L 1152292	L 1152316	L 1152377	L 1152404
L 1152293	L 1152317	L 1152378	L 1152405
L 1152294	L 1152318	L 1152379	L 1152406
L 1152295	L 1152340	L 1152380	L 1152407
L 1152296	L 1152341	L 1152381	L 1152408
L 1152297	L 1152342	L 1152382	L 1152409
L 1152298	L 1152344	L 1152383	L 1152410
L 1152299	L 1152345	L 1152384	L 1152411
L 1152300	L 1152346	L 1152385	L 1152412
L 1152301	L 1152347	L 1152386	L 1152413
L 1152302	L 1152348	L 1152389	L 1152414
L 1152303	L 1152349	L 1152390	L 1152415
L 1152306	L 1152350	L 1152391	L 1152416
L 1152307	L 1152351	L 1152392	
		L 1152393	

Total claims: 87

J. O. MUSKALY



Date PIN  
2-14122  
May 28, 1991 Mining Recorder's Report of  
Work No. W.9108.00121

Assessed Name

Inco Limited

Township or Area

Cairo and Alma Townships

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
<b>Geophysical</b>	
Electromagnetic _____ days	L.1152284-85 1152287 to 294 incl. 1152296-97 1152299 to 303 incl. 1152306 to 313 incl. 1152316 to 318 incl. 1152341 1152344 to 355 incl. 1152375 to 378 incl. 1152380 to 386 incl. 1152391-92 1152396 to 398 incl. 1152404 to 406 incl. 1152409 to 413 incl.
Magnetometer _____ days	
Radiometric _____ days	
Induced polarization _____ days	
Other _____ days	
<b>Section 77 (18) See "Mining Claims Assessed" column</b>	
Geological 40 days	
Geochemical _____ days	
Man days <input type="checkbox"/> Airborne <input type="checkbox"/>	
Special provision <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/> Credits have been reduced because of partial coverage of claims. <input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.	

## Special credits under section 77 (18) for the following mining claims

30 days credit for geology: L.1152286, 1152314-15, 1152374, 1152379, 1152390,  
1152414.

20 days credit for geology: L.1152401, 1152407-08, 1152416.

10 days for geology: L.1152295, 1152298, 1152340, 1152393, 1152395  
1152415.

## No credits have been allowed for the following mining claims

not sufficiently covered by the survey  Insufficient technical data filed

L.1152342  
1152389  
1152394  
1152399-400.

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical - 80; Geological - 40; Geochemical - 40; Section 77(18) - 80.



Ministry of  
Northern Development  
and Mines

Ministère du  
Développement du Nord  
et des Mines

Mining Lands Section  
159 Cedar Street, 4th Floor  
Sudbury, Ontario  
P3E 6A5

Telephone: (705) 670-7264  
Fax: (705) 670-7262

Your File: W. 9108.00121  
Our File: 2.14122

June 28, 1991

Mining Recorder  
Ministry of Northern Development  
and Mines  
4 Government Road, East  
Kirkland Lake, Ontario  
P2N 1A2

Dear Sir/Madam:

RE: Notice of Intent dated May 28, 1991 for Geological  
Survey on mining claims L. 1152284 et al. in the  
Townships of Cairo and Alma.

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

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

Yours sincerely,

A handwritten signature in black ink, appearing to read "Ron C. Gashinski".

Ron. C. Gashinski,  
Provincial Manager, Mining Lands  
Mines & Minerals Division

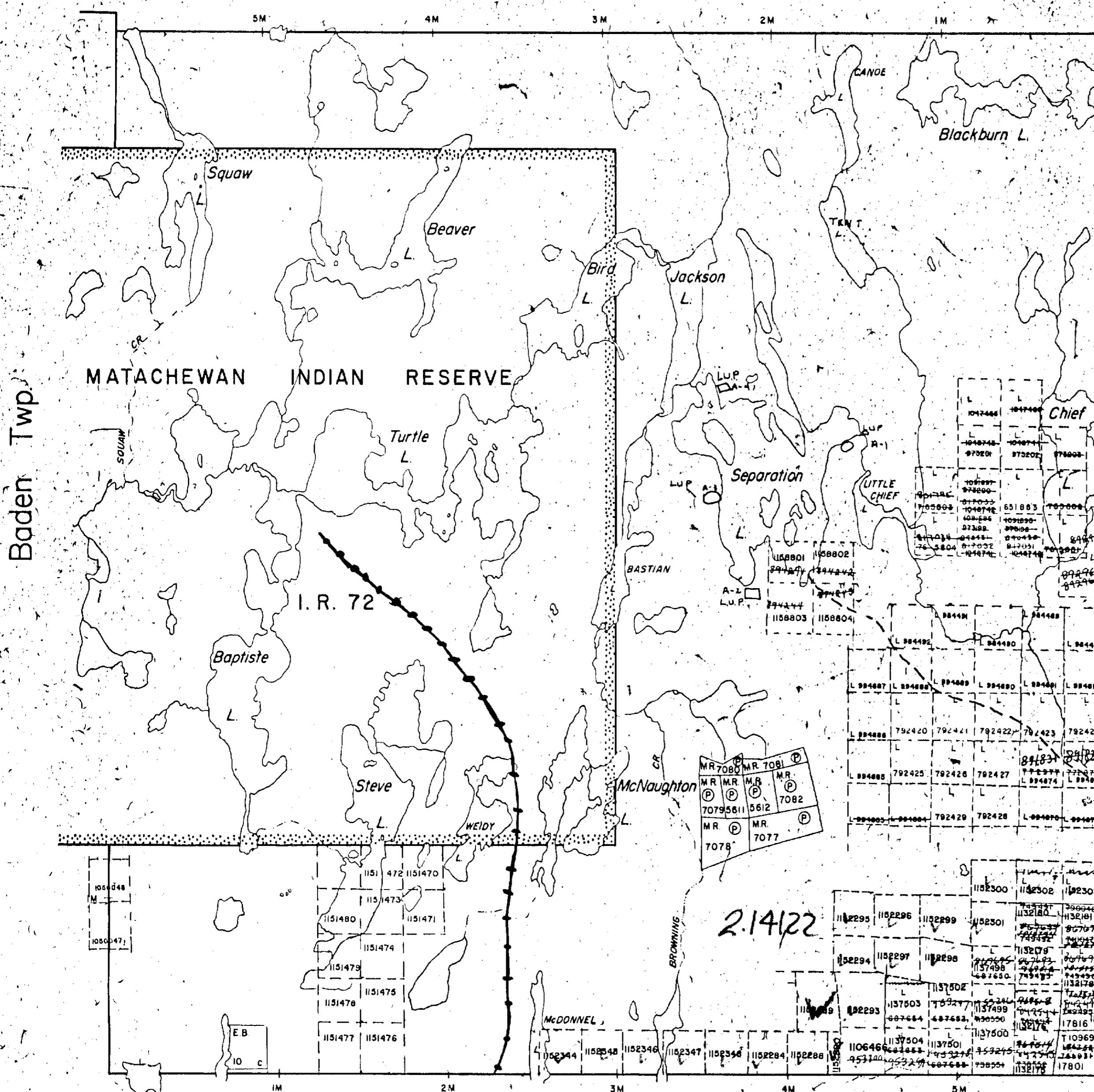
*WJL*  
LJS/jl  
Enclosures:

cc: Inco Limited  
Copper Cliff, Ontario

Assessment Files Office  
Toronto, Ontario

Resident Geologist  
Kirkland Lake, Ontario

TOWNSHIP SUBJECT  
TO  
Sheba Twp. FORESTRY OPERATIONS



DATE OF ISSUE

JAN 29 1991

LARDER LAKE  
MINING RECORDER'S OFFICE

THE TOWNSHIP  
OF  
**ALMA**

DISTRICT OF  
TIMISKAMING

LARDER LAKE  
MINING DIVISION

SCALE: 1-INCH=40 CHAINS

LEGEND

(P)	C.S.
(L)	Loc.
(L.O.)	L.O.
(M.R.O.)	M.R.O.
(S.R.O.)	S.R.O.
—	ROADS
—	IMPROVED ROADS
—	KING'S HIGHWAYS
—	RAILWAYS
—	POWER LINES
—	MARSH OR MUSKEG
—	MINES
—	CANCELLED

NOTES

Matachewan Indian Reserve shown thus:-

400' Surface rights reservation around all lakes and rivers.

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

NOTICE OF FORESTRY ACTIVITY

THIS TOWNSHIP / AREA FALLS WITHIN THE  
ELK LAKE MANAGEMENT UNIT

AND MAY BE SUBJECT TO FORESTRY OPERATIONS.  
THE MNR UNIT FORESTER FOR THIS AREA CAN BE CONTACTED AT:

P.O. BOX 129  
SWASTIKA, ONTARIO  
POK ITO  
705-642-3222

PLAN NO. M-202

ONTARIO #3  
MINISTRY OF NATURAL RESOURCES  
SURVEYS AND MAPPING BRANCH



42A02SE0102 2.14122 ALMA

# REFERENCES

## AREAS WITHDRAWN FROM DISPOSITION

- M.R.O. - MINING RIGHTS ONLY
- S.R.O. - SURFACE RIGHTS ONLY
- M.+R. - MINING AND SURFACE RIGHTS

Description Order No. Date Disposition F.R.

(R) MINING AND SURFACE RIGHTS NOT OPEN  
TO STAKING, APPLICATION UNDER SECTION 3(6)  
JUNE 12/987.

SL 4908 - PENDANT APPLICATION UNDER PUBLIC LANDS ACT

**TOWNSHIP SUBJECT  
TO FORESTRY OPERATION**

THE INFORMATION THAT  
APPEARS ON THIS MAP  
HAS BEEN COMPILED  
FROM VARIOUS SOURCES,  
AND ACCURACY IS NOT  
GUARANTEED. THOSE  
WISHING TO STAKE MIN-  
ING CLAIMS SHOULD CON-  
SULT WITH THE MINING  
RECORDER, MINISTRY OF  
NORTHERN DEVELOP-  
MENT AND MINES, FOR AD-  
DITIONAL INFORMATION  
ON THE STATUS OF THE  
LANDS SHOWN HEREON.

## NOTES

AREA WEST OF WEST MONTREAL RIVER  
CLOSED TO STAKING SUBJECT TO SEC. 38(7)  
OF THE MINING ACT, 20 SEPT. 1978.

"THIS MAP SHOWS THE  
APPROXIMATE LOCATION  
OF THE BOUNDARIES OF  
THE AREA WHICH IS THE  
SUBJECT OF CURRENT  
LITIGATION. THE EXACT  
LOCATION WILL BE  
SHOWN FOLLOWING  
CONFIRMATION BY THE  
PARTIES TO THE ACTION."

NOTICE OF FORESTRY ACTIVITY

THIS TOWNSHIP / AREA FALLS WITHIN THE

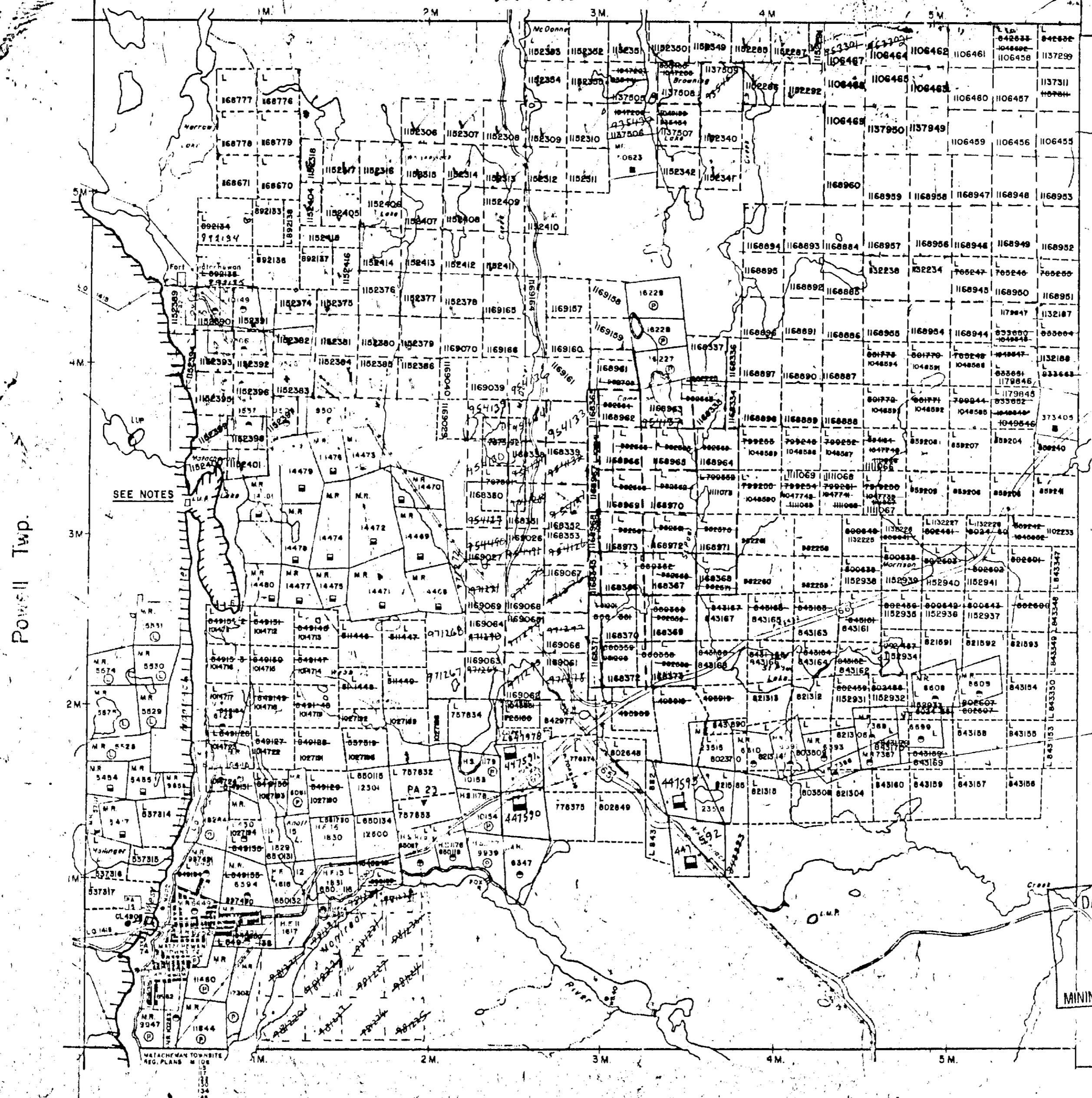
42A02SE0102 2.14122 ALMA

705-642-3222

210

Alma Twp.

2.14122



Kimberley Twp.

## 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

L.O.

ORDER-IN-COUNCIL

O.I.C.

RESERVATION

R.

CANCELLED

C.

SAND & GRAVEL

S.G.

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 8  
1913, VESTED IN ORIGINAL PATENTEE & THE PUBLIC  
LANDS ACT, REGD. 1970, CHAP. 380, SEC. 63, SUBS. 1

### SCALE 1:125,000 CHAIN

FEET	0	1000	2000	3000	4000	5000	BODM
0 200	1000	2000	3000	4000	5000	6000	7000

METRES

### TOWNSHIP

## CAIRO

### M.N.R. ADMINISTRATIVE DISTRICT

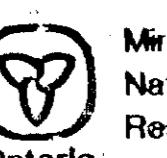
KIRKLAND LAKE

MINING DIVISION

LARDER LAKE

LAND TITLES / REGISTRY DIVISION

TIMISKAMING



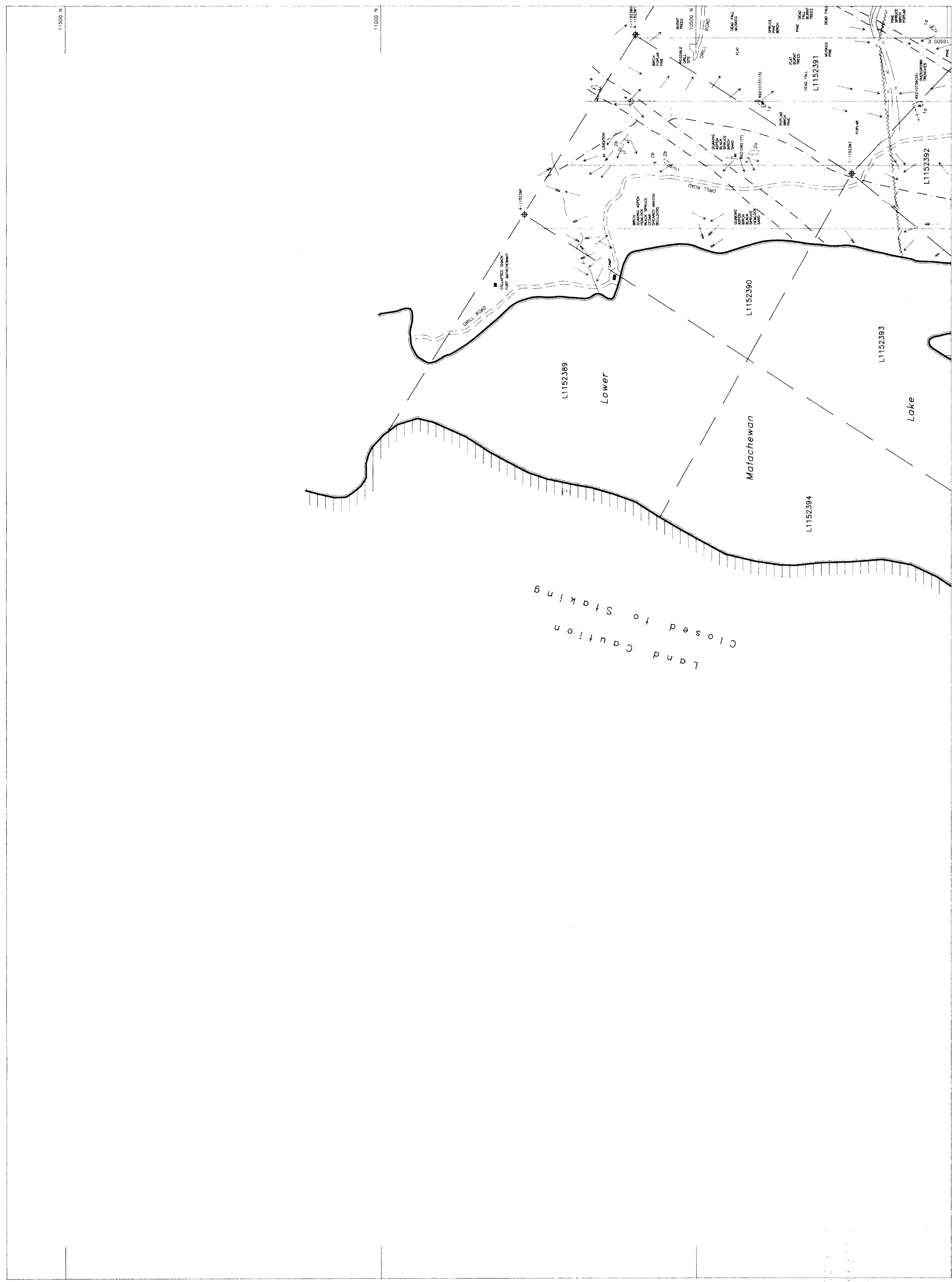
Ministry of  
Natural  
Resources

Ministry of  
Northern Development  
and Mines

Date JULY 1986

Number

G-3209



**INCO EXPLORATION AND TECHNICAL SERVICES INC.**

Copper Cliff, Ontario  
POM 1N0

Area: Kirkland Lake, Ontario

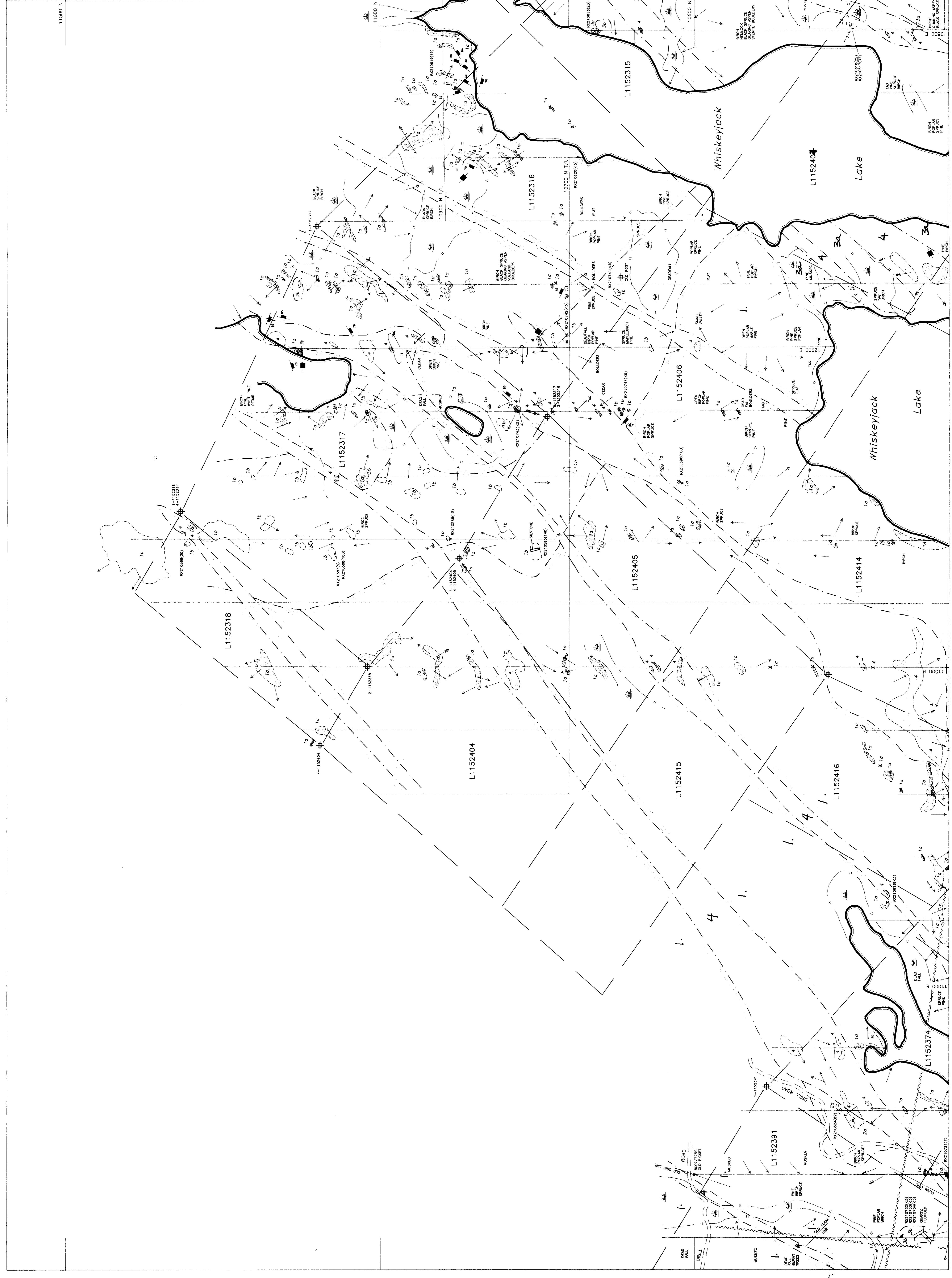
Project: CAIGEO

**GEOLOGICAL SURVEY**

**FIGURE D4**

Supervisor: 4. Perry	Instrument: J.J. Vande	Survey date: 05/02/91
Compiled by: J. Jackson	Drawn by: L.J. Vande	Drawn: 05/02/91
Scale: 1:25000	File: CAIGEOA.DWG	Revised:
M.T.S. 1:250000 Z: 1:1 P: 15		





**INCO EXPLORATION AND  
TECHNICAL SERVICES INC.**

Copper Cliff, Ontario  
FDM 110  
Area: Kirkland Lake, Ontario

Project: CA10

Supervisor: A. Berry

Drawn by: J. Jackson

Date Drawn: 06/22/81

Revised: 06/22/81

Scale: 1:2500

File #: DAGERS002.DWG

W.T.S.: 102 K 2, 41 P 15



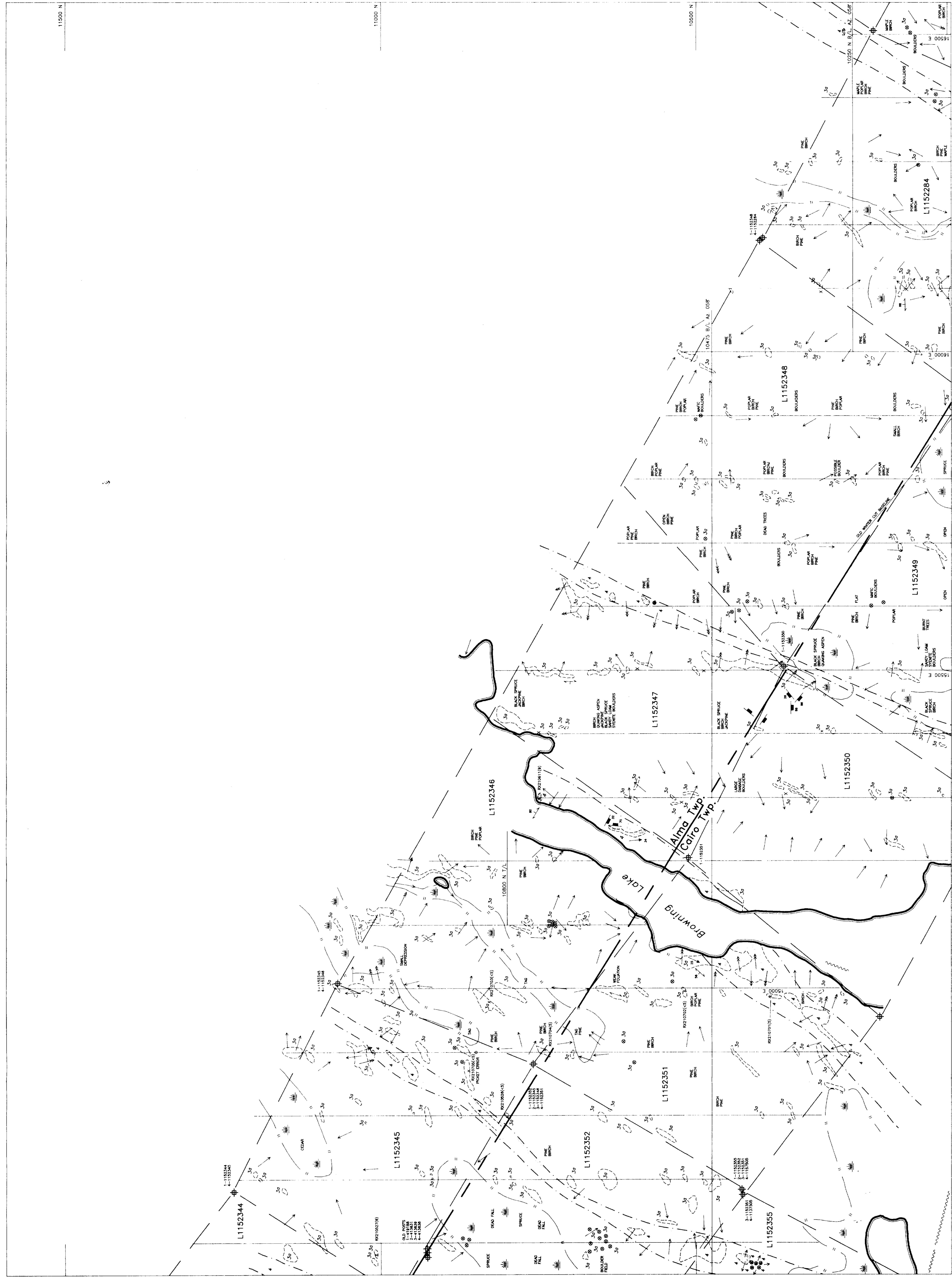


**INCO EXPLORATION AND  
TECHNICAL SERVICES INC.**

GEOLOGICAL SURVEY		SHEET	FIGURE
CABO	Kirkland Lake, Ontario	D6	4

Project: Copper Cliff, Ontario  
Area: Kirkland Lake, Ontario  
Instrument: Survey date: 08/02/91  
Compiled by: J. Jackson Drawn by: L.J. Valade Revised: 08/02/91  
Scale: 1:250,000 Elevation: CAE2000.DNC  
N.T.S. 42 A 2 A1 P 15





**INCO EXPLORATION AND  
TECHNICAL SERVICES INC.**

**GEOLOGICAL SURVEY**

Project: CARO

Area: Kirkland Lake, Ontario

Sheet D7

Figure 4

Copper Cliff, Ontario  
POM 1 NO

Survey date: 08/02/91  
Surveyor: L.J. Voldze

Instrument: FINE CARMOCO DMNC

Drafter: J. Jackson

Revised: 08/02/91

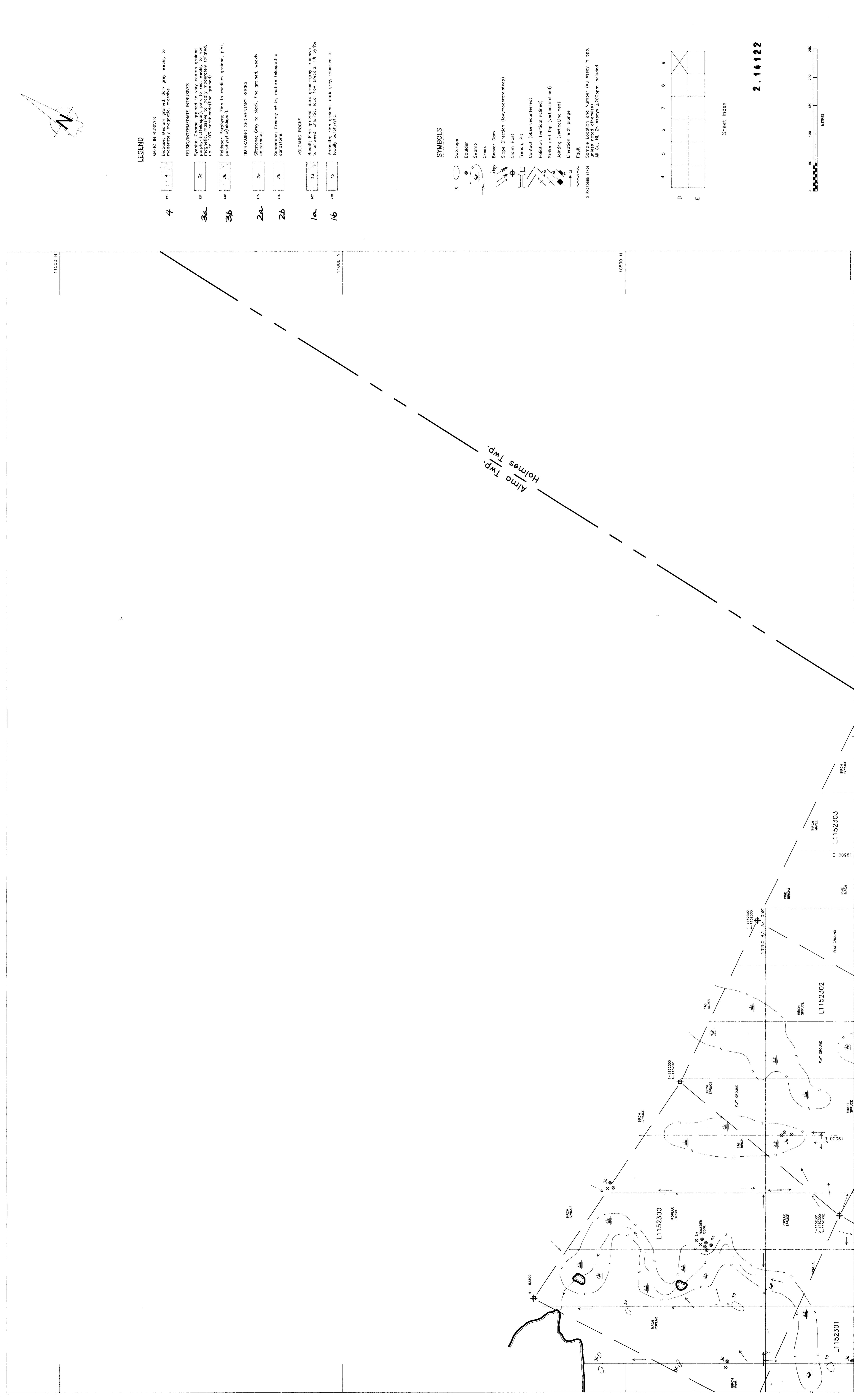
Scale: 1:2500

File: CARO/DMNC

N.T.S. 42 A 2, R 15 P 15







# INCO EXPLORATION AND TECHNICAL SERVICES INC.

TECHNICAL SERVICES INC.			
Project:	CAIRO	Area:	Kirkland Lake, Ontario
		<b>GEOLOGICAL SURVEY</b> FIGURE SHEET <b>D9</b> <b>4</b>	
Supervisor:	J. Perry	Instrument:	Survey date:
Compiled by:	J. Jackson	Drawn by: L.J. Valade	Date drawn: 06/02/91
Scale:	1:2500	File: CAIGEOD9.DWG	Revised:
		N.T.S. 42 A 2, 41 P 15	

A standard linear barcode is positioned vertically on the right side of the page. It consists of vertical black bars of varying widths on a white background.



2.141224







**INCO EXPLORATION AND  
TECHNICAL SERVICES INC.**

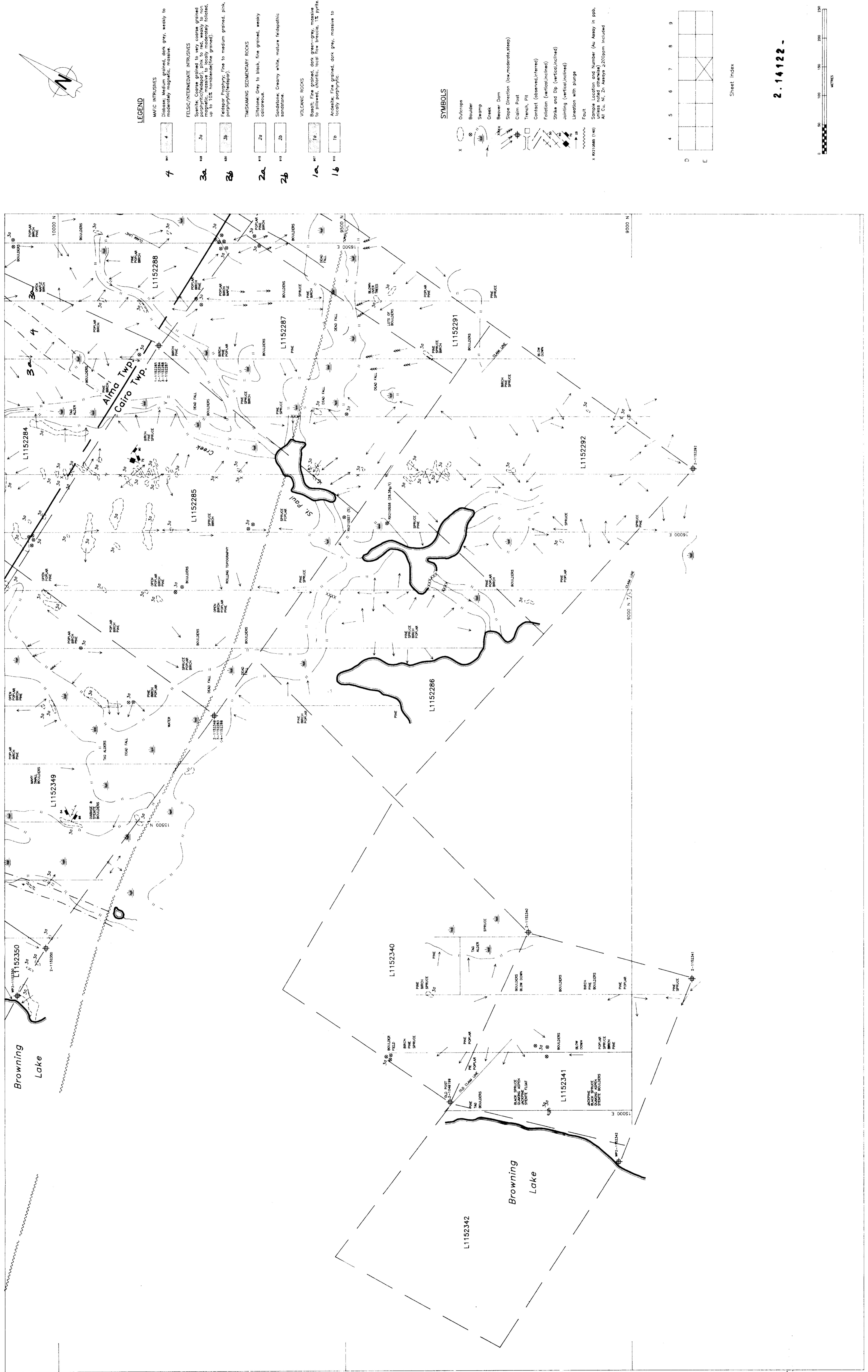
Copper Cliff, Ontario  
PDM 110  
Area: Kirkland Lake, Ontario  
Survey date: 10/20/2016  
Drawing: L.J. Vande  
Scale: 1:25000  
Sheet index: 2.14122

Project: CARO  
Supervisor: J. Perry  
Instrument: J. Jackson  
Drawn by: L.J. Vande  
Compiled by: J. Jackson  
Scale: 1:25000

Survey date: 10/20/2016  
Drawing: L.J. Vande  
Scale: 1:25000  
Sheet index: 2.14122

N.T.S. 1:250000  
Revision: 1





2.14122 -

**INCO EXPLORATION AND  
TECHNICAL SERVICES INC.**

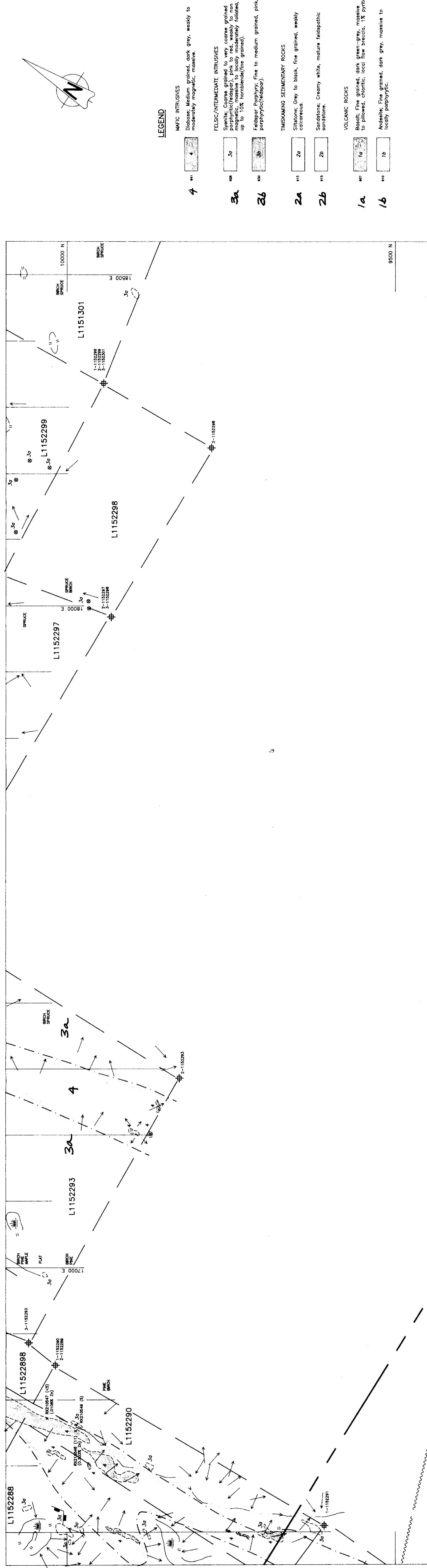
Copper Cliff, Ontario  
P.O.M. 110

Area: Kirkland Lake, Ontario  
Project: CARO  
Surveyor: J. Perry  
Instruments: Dronet  
Compiled by: J. Jackson  
Drawn by: L.J. Valade  
Survey date: Dec 07/2002  
Date drawn: Dec 07/2002  
Reviewed: N.I.S.: #2 A. Z. #1 P. 15  
Scale: 1:25000  
Fins: DANGER/T

FIGURE 4  
GEOLOGICAL SURVEY  
SHEET E7  
FIGURE 4  
Area: Kirkland Lake, Ontario  
Project: CARO  
Surveyor: J. Perry  
Instruments: Dronet  
Compiled by: J. Jackson  
Drawn by: L.J. Valade  
Survey date: Dec 07/2002  
Date drawn: Dec 07/2002  
Reviewed: N.I.S.: #2 A. Z. #1 P. 15  
Scale: 1:25000  
Fins: DANGER/T



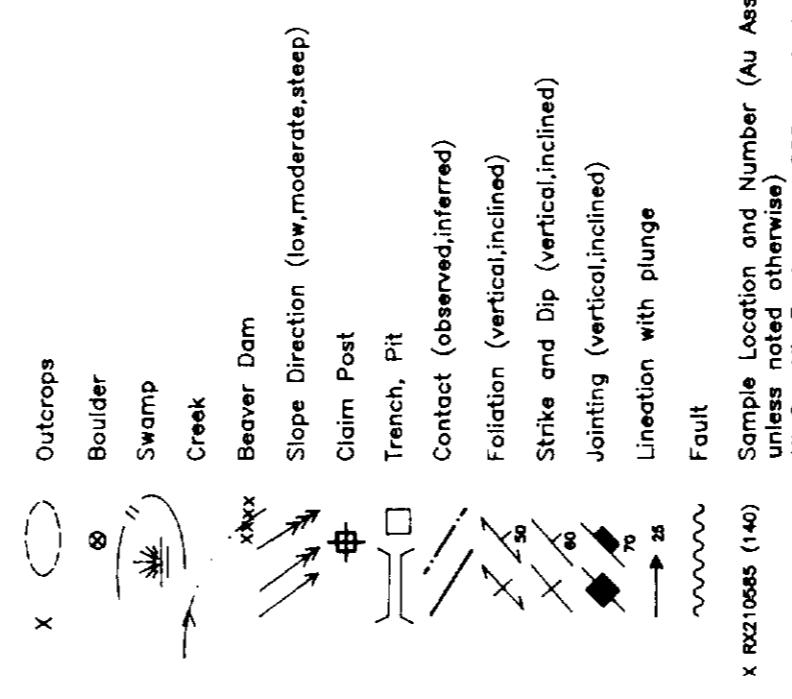
310



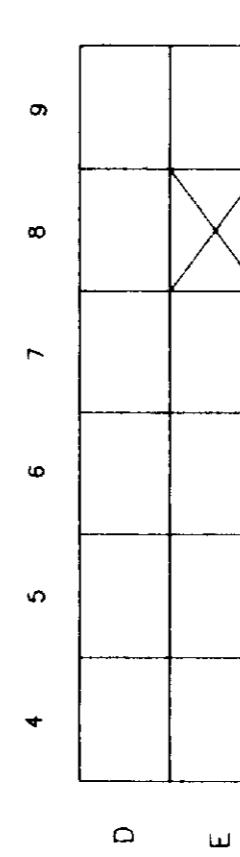
#### LEGEND

MAFIC INTRUSIVES		
4	Diabase; Medium grained, dark grey, weakly to moderately magnetic, massive.	
FELSIC/INTERMEDIATE INTRUSIVES		
3a	Syenite; Coarse grained to very coarse grained porphyritic (vesper), pink to red, ready to non to 10% hornblende define grained.	
2b	Feldspar Porphyry; Fine to medium grained, pink, porphyritic (vesper).	
TIMEKANING SEDIMENTARY ROCKS		
2a	1a	Siltstone; Grey to black, fine grained, weakly concretes.
2b	1b	Sandstone; Creamy white, moisture lespistic semirectangular.
VOLCANIC ROCKS		
1a	1a	Basalt; Fine grained dark green to grey, massive to pumiceous, local flow breccia, K-Pyrite.
1b	1b	Ashfall; Fine grained, dark grey, massive to locally pumiceous.

#### SYMBOLS



x Sample Location and Number (Au Assay in ppb, unless noted otherwise) (140 All Co. No. 2, Au Assay > 200ppm included)



Sheet Index

2.14128 -

#### INCO EXPLORATION AND TECHNICAL SERVICES INC.

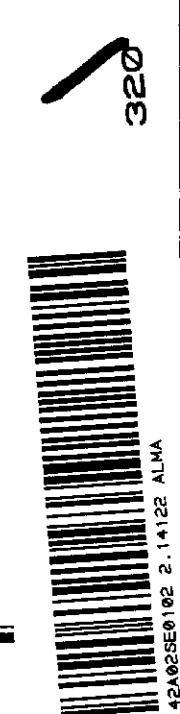
Copper Cliff, Ontario  
P.O. 1 NO

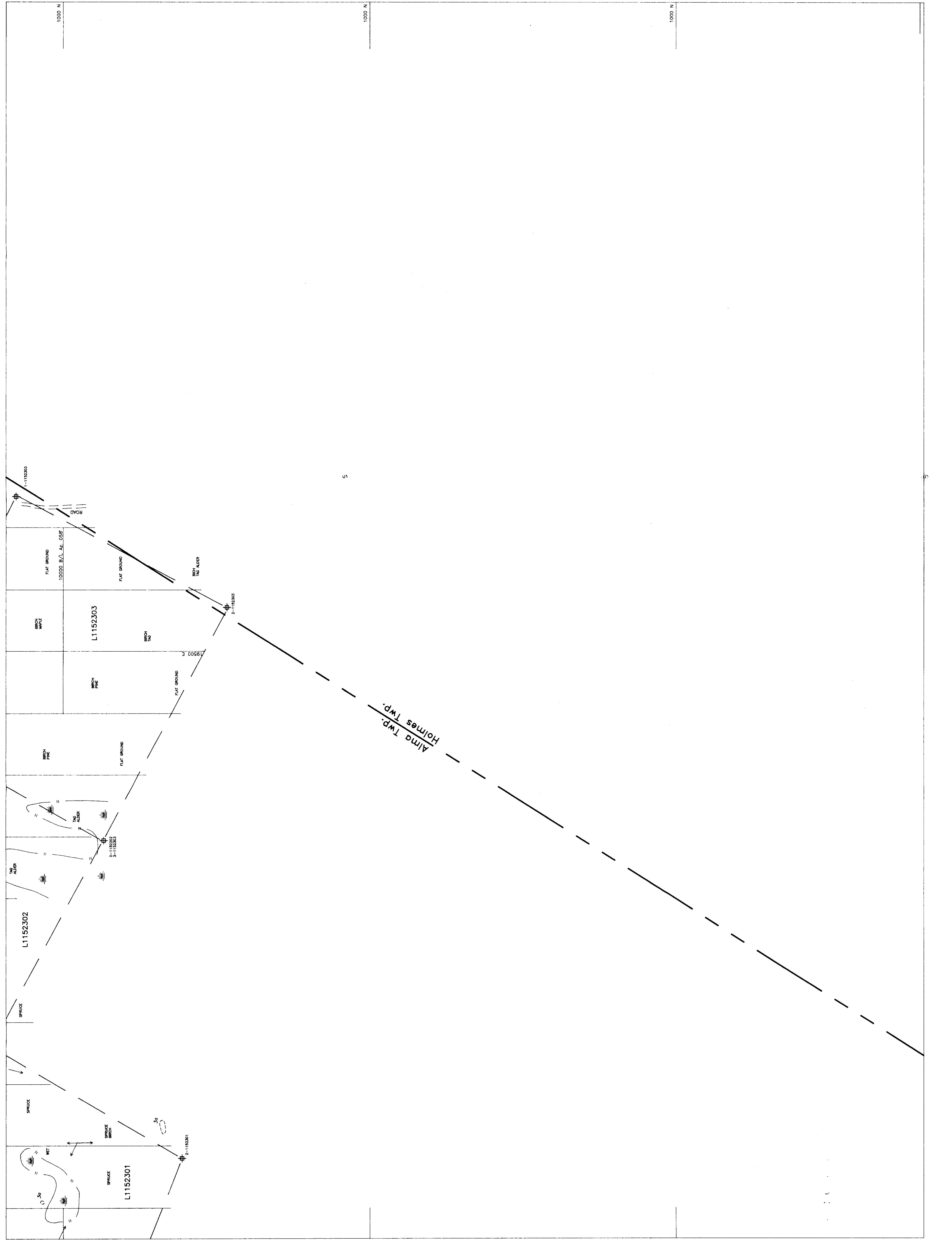
Project: CAIRO  
Supervisor: J. Perry  
Compiled by: J. Jackson  
Scale: 1:2500

Instrument: Total Station  
Drawn by: L.J. Voldze  
Survey date: Oct 02/91  
Revised: Oct 02/91  
File: CAIRO.DWG  
N.T.S.: 42 A 2, 41 P 15

#### GEOLOGICAL SURVEY

Sheet E8 FIGURE 4





2.14122

**INCO EXPLORATION AND  
TECHNICAL SERVICES INC.**

Copper Cliff, Ontario  
P.O. 110

Project: CA10  
Supervisor: J. Perry  
Compiled by: J. Jackson  
Scale: 1:25000

Survey date: 08/02/87  
Drawn by: L.J. Vadebe  
Reviewed: 08/02/87  
File: CAGE09.DWG  
H.T.S.: #2 A 2, 41 P 15

Area: Kirkland Lake, Ontario

Sheet: E9  
Figure: 4



340