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**KNEE LAKE - CINDER LAKE PROJECTS**

**1994 DIAMOND DRILLING PROGRAM**

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WINNIPEG, MAN.

234201

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February, 1995**

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### Summary

Inco Exploration and Technical Services Inc. completed an eight hole, 1,209.9 metre diamond drilling program on the Knee Lake and Cinder Lake Properties between March 7 and April 7, 1994.

The majority of the property is underlain by four cycles of Hayes River Group mafic to felsic volcanics. Exhalative horizons indicated by previous work in the area are poorly exposed. Mafic to felsic dikes and Bayly Lake Group felsic intrusives cut the package which is unconformably overlain by Oxford Lake Group felsic to intermediate volcanics, chemical and clastic sediments.

The drilling program was designed to test conductivity associated with known, well developed massive sulphide rich exhalative zones and chlorite-garnet alteration in brecciated dacite. Massive pyrite-pyrrhotite over core lengths of up to 22.7 metres assayed and associated graphitic mudstone assayed up to 0.86% Zn and 0.31% Cu. Dacite breccia with a chloritic, garnetiferous matrix was intersected in the footwall to massive pyrite-pyrrhotite in the two most northerly holes and assayed up to 0.21% Zn across 0.65 metres.

Geochemical results from the felsic volcanics intersected during the program indicate there are two spatially and chemically distinct populations. The southern felsic volcanics are predominantly calc-alkaline. In contrast, the northern felsic volcanics are predominantly tholeiitic and are associated with chloritic and garnetiferous felsic breccia. The breccia and the underlying, unaltered felsic volcanics are cogenetic. The matrix of the dacite breccia reflects metasomatic addition of Fe and Mg associated with Na depletion.

Further work is warranted. Chloritic and garnetiferous dacite breccia intersected in the immediate footwall to massive sulphide mineralization in two adjacent holes requires testing at depth and immediately along strike to the north. Soil sampling is recommended to refine target areas within the high potential stratigraphy.

### **1.0 Introduction**

An eight hole, 1,209.9 metre diamond drilling program was completed on the Knee Lake and Cinder Lake Properties between March 7 and April 7, 1994.

### **2.0 Location and Access**

Central Knee Lake is located 35 kilometres east of the town of Oxford House and 215 kilometres southeast of Thompson, Manitoba (Figure 1). Access is by air from Thompson. Knee Lake is linked to the winter road network servicing Oxford House and God's Narrows, which is open in February.

### **3.0 Property**

Inco Limited holds a total of 26 claims in the Knee Lake area in three blocks (Figure 2). The Knee Lake and Cinder Lake properties comprise 22 claims covering 4,992 hectares. Claim names, numbers, recording date and due dates are tabulated below:

<b><u>Name</u></b>	<b><u>Number</u></b>	<b><u>Recording Date</u></b>	<b><u>Work Due</u></b>
CIN 1	W53281	Dec.15, 1992	Dec.14, 1995
CIN 2	W53282	Dec.15, 1992	Dec.14, 1995
CIN 3	W54283	Dec.15, 1992	Dec.14, 1995
CIN 4	W53284	Dec.15, 1992	Dec.14, 1995
KNEE 2	W49890	Feb.9, 1994	Feb.8, 1996
KNEE 3	W49891	Feb.9, 1994	Feb.8, 1996
KNEE 4	W49892	Feb.9, 1994	Feb.8, 1996
KNEE 5	W49893	Feb.9, 1994	Feb.8, 1996
KNEE 6	W49894	Feb.9, 1994	Feb.8, 1996
KNEE 7	W49895	Feb.9, 1994	Feb.8, 1996
KNEE 8	W49896	Feb.9, 1994	Feb.8, 1996
KNEE 9	W49897	Feb.9, 1994	Feb.8, 1996
KNEE 10	W49898	Feb.9, 1994	Feb.8, 1996
KNEE 11	W49899	Feb.9, 1994	Feb.8, 1996
KNEE 12	W49900	Feb.9, 1994	Feb.8, 1996
KNEE 13	W49901	Feb.9, 1994	Feb.8, 1996
KNEE 14	W49902	Feb.9, 1994	Feb.8, 1996
KNEE 15	W49903	Feb.9, 1994	Feb.8, 1996
KNEE 16	W49904	Feb.9, 1994	Feb.8, 1996
KNEE 17	W49905	Feb.9, 1994	Feb.8, 1996
KNEE 18	W49906	Feb.9, 1994	Feb.8, 1996
KNEE 19	W49907	Feb.9, 1994	Feb.8, 1996

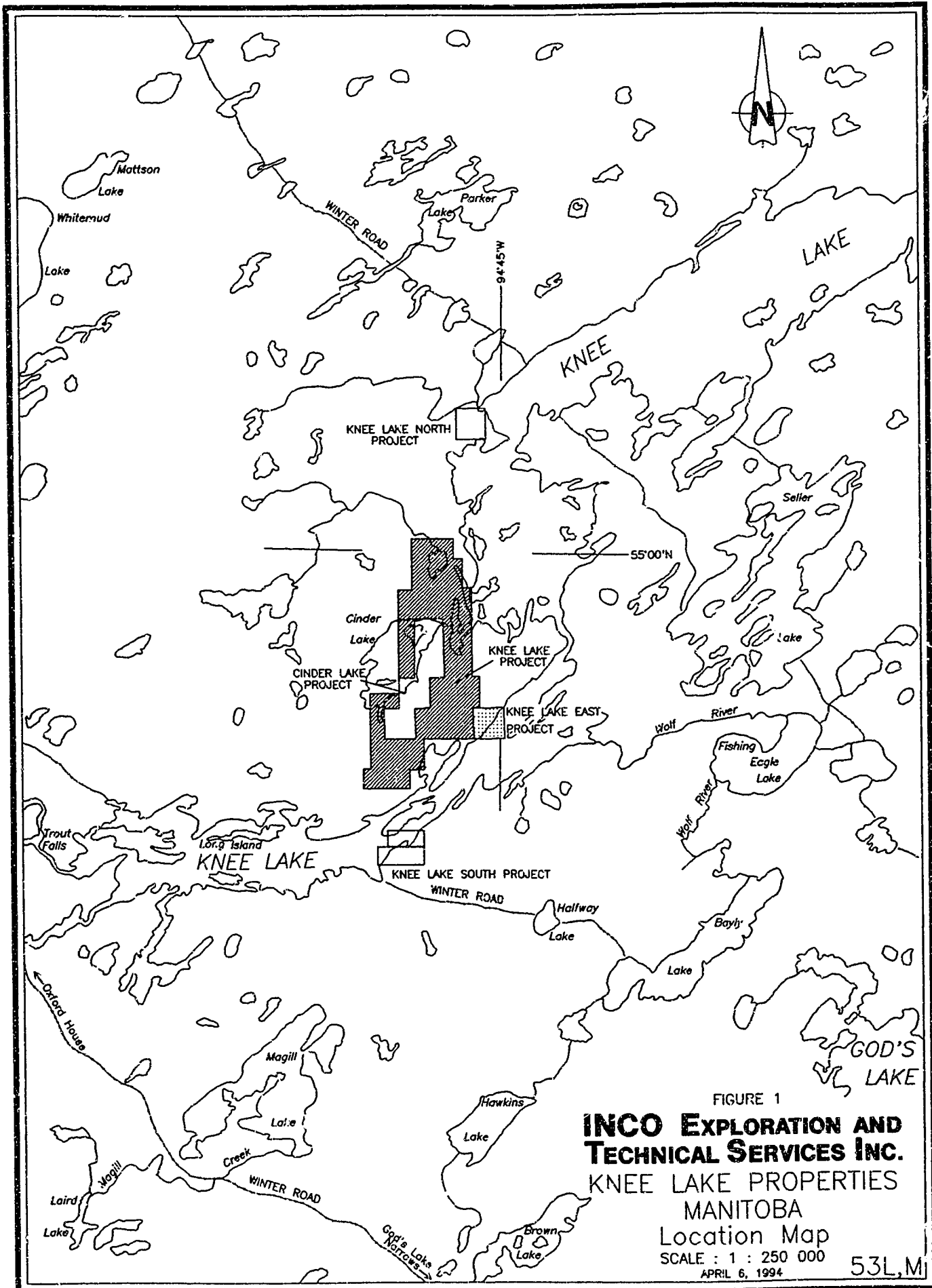
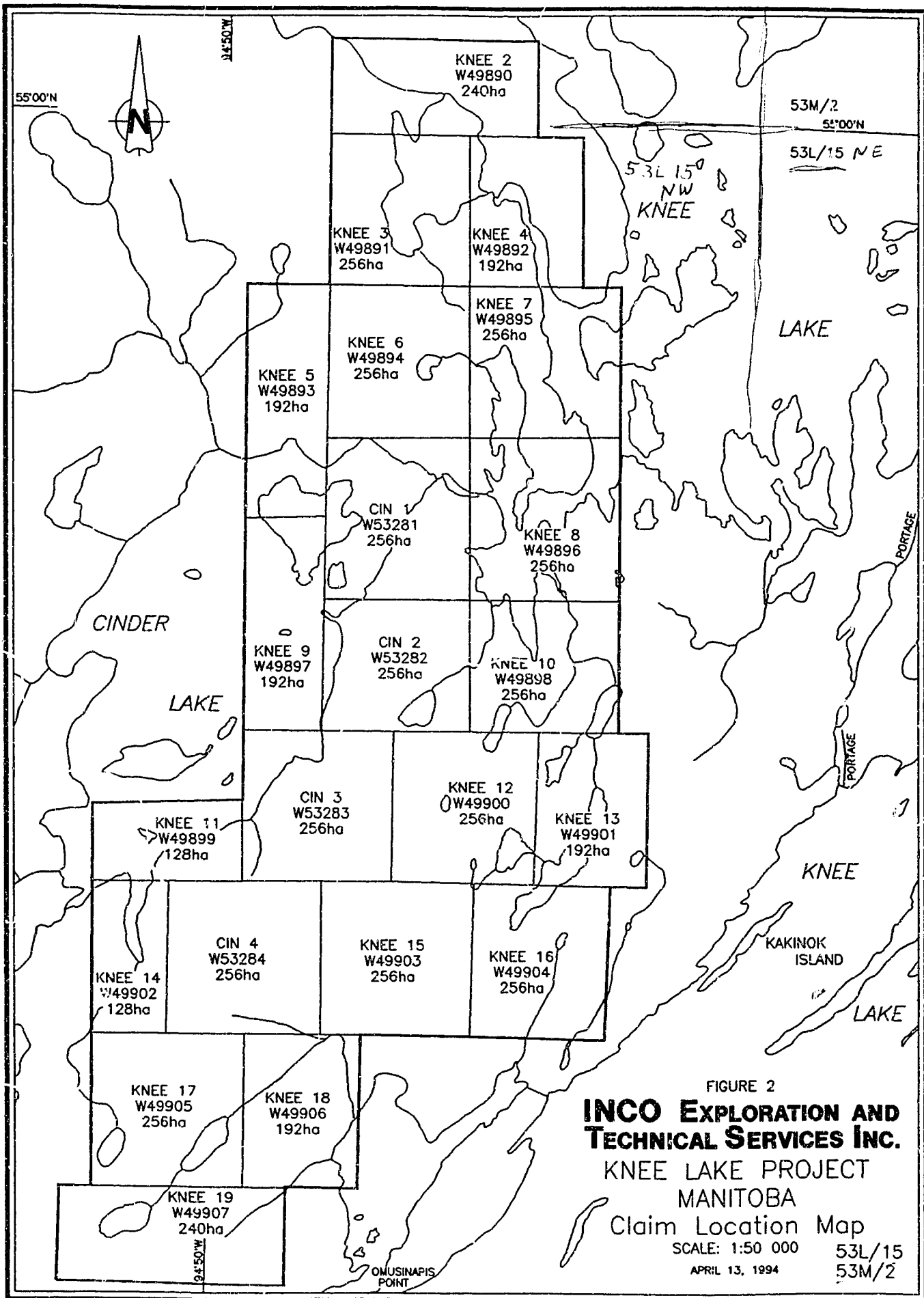


FIGURE 1  
**INCO EXPLORATION AND TECHNICAL SERVICES INC.**  
 KNEE LAKE PROPERTIES  
 MANITOBA  
 Location Map  
 SCALE : 1 : 250 000  
 APRIL 6, 1994 53L, M





#### 4.0 Previous Exploration

- 1919-1961: Regional geological mapping was completed by Bruce (1920), Wright (1926), Barry (1959) and Quinn and Currie (1961) for the Manitoba Mines Branch and the Geological Survey of Canada.
- 1956-1961: The property was covered by Canico AEM as part of the Wolf and Bear programs. Follow up ground geophysics was completed and 8 holes totalling 669.65 metres were drilled. Three holes were drilled at the Canico Occurrence where chloritic and siliceous tuff associated with massive pyrite and pyrrhotite assayed up to 0.38% Zn across 3.08 metres. Approximately 500 metres northeast, 33.0 metres (true width) of massive and brecciated pyrite-pyrrhotite with rare chalcopyrite and sphalerite was intersected.
- 1960-1964: Icon Syndicate completed a helicopter-borne electromagnetic survey which identified multiple conductive horizons covered by the current property. Local ground geophysical and geological surveys were completed and several shallow (< 15 metres) holes were drilled. Felsic volcanics and minor sulphides were intersected.
- 1968-1973: Barringer-Magenta completed regional and detailed geochemical sampling in the Knee Lake area. Airborne magnetometer, electromagnetic and radiometric surveys, ground HLEM, magnetometer, gravity, geological, and local soil and lakeshore sediment geochemical surveys were completed. Multiple drill targets were identified and at least two holes totalling 156.67 metres were drilled. Massive pyrite, pyrrhotite and minor chalcopyrite across 20.2 metres, associated with fragmental to banded felsic volcanics and intercalated graphitic sediments were intersected at the Canico Occurrence. No analyses were reported. Barringer-Magenta drilled one 145.08 metre long hole which intersected moderately sericitic, chloritic felsic volcanics with pyrrhotite, minor chalcopyrite and sphalerite over 2.43 metres.
- 1970-1972: The Knee Lake area was mapped by H.P. Gilbert and F.J. Elbers as part of the Manitoba Energy and Mines Greenstone Project.
- 1970-1974: Questor Surveys flew a Mark V Input survey for Selco. Ground geophysical surveys were completed and 11 holes totalling 1,347.22 metres were drilled.
- 1973: Roger Barlow completed an M.Sc. study on the major and trace element geochemistry of the southern part of the current property, based on work with Barringer-Magenta. Nathan Green completed an M.Sc. thesis on the volcanic stratigraphy of the Hayes River Group volcanics in the Knee Lake area.

- 1992: Permit #114 was acquired. Reconnaissance geological mapping and prospecting were completed at approximately 400 metre line spacings. Samples were collected for lithogeochemical analyses. Four claims surrounded by Permit #114 in the Cinder Lake area and a single claim on the east permit boundary, were staked in December, 1992.
- 1993: Gridding, followed by magnetometer, Max Min HLEM and geological surveys were completed. Lithogeochemical sampling, prospecting and orientation soil, humus and black spruce bark surveys were completed.
- 1994: A total of 20 claims were staked within the permit boundary. Permit #14 was subsequently terminated.

### **5.0 Regional Geology**

The Knee Lake area is situated in the Gods Lake Subprovince, part of the Superior Province of the Canadian Shield. Hayes River Group mafic to felsic volcanics, gabbro, chemical and clastic sediments are intruded by the tonalitic to granitic Bayly Lake Complex. The volcanics form a monoclinial sequence which is unconformably overlain by intermediate to felsic volcanics and clastic sediments of the Oxford Lake Group. The assemblage was subjected to greenschist facies metamorphism and intruded by mafic dikes.

### **6.0 Property Geology**

The majority of the property is underlain by four cycles of Hayes River Group mafic to felsic volcanics. Exhalative horizons indicated by previous work in the area are poorly exposed. Mafic to felsic dikes and Bayly Lake Group felsic intrusives cut the package which is unconformably overlain by Oxford Lake Group felsic to intermediate volcanics, chemical and clastic sediments.

In the lower part of the stratigraphic package, felsic volcanics consist of massive flows and pyroclastics intercalated with minor debris flows of monolithic and heterolithic character. They comprise the high potential stratigraphy with respect to VMS type mineralization. The proportion of resedimented lithologies increases up stratigraphy to the point where all felsic lithologies are tuffaceous and or resedimented mass flow deposits.

Southeast of Cinder Lake, felsic volcanics are massive, locally chloritic and garnetiferous. Local outcrops of dacite breccia are characterised by monolithic, angular dacite fragments in a matrix composed of chlorite, garnet, minor sericite with up to 7% pyrite and minor pyrrhotite in patches. Dacitic fragments contain 3% quartz crystals up to 1.5 mm diameter and have diffuse contacts. The unit is interpreted to represent a hydrothermal breccia and lies in the immediate footwall to conductivity which was previously drill tested

by Barringer - Magenta. They intersected approximately 23 metres of massive pyrrhotite and pyrite with minor base metal values.

To the southwest, massive quartz and plagioclase phyric rhyolite flows are locally sheared, carbonatized and are weakly sericitized. Where exposed, it is strongly fractured. Mafic dikes up to 4 metres wide cut the rhyolite and are interpreted as feeders to overlying mafic units. Diamond drilling by Canico in 1961 intersected approximately 33.0 metres (true width) of massive pyrite-pyrrhotite which yielded assays of up to 0.38% Zn across 3.08 metres. Hangingwall rocks exposed nearby include one outcrop of chert-felsic tuff with up to 20% pyrite and minor pyrrhotite and massive, medium grained gabbro. Most of the footwall to the sulphide horizon and its strike extensions are unexposed.

The Hayes River Group in the south and central part of the property forms a monoclinial sequence which dips steeply away from the Cinder Lake alkalic intrusion. Radial faults in this area are defined by crosscutting mafic and felsic dike swarms (feeders to higher level flows), by the orientation of a late, elongate felsic body and by sinistral displacement of the stratigraphy. Late 050° trending faults form topographic lineaments across the property and probably mask radial faults in the north part of the property. Additional late structures include north-south and east-west oriented lineaments and shear zones.

#### 7.0 Diamond Drilling

Between March 7 and April 7, 1994, eight holes totalling 1,209.9 metres were drilled by Midwest Drilling on the Knee Lake and Cinder Lake Properties. Inco Exploration and Technical Services Inc. personnel involved with the program were S. Mooney, D. Car and A. Aubut. Collar locations are shown on Figure 3 and on 1:5,000 scale maps included in a back pocket of this report. The core is stored at the Inco plant site in Thompson.

Boreholes completed during this program are listed below:

<u>BH#</u>	<u>NORTHING</u>	<u>EASTING</u>	<u>AZIMUTH</u>	<u>DIP</u>	<u>DEPTH</u>
BH82434-0	5300N	1925W	270°	-45°	176.0m
BH82439-0	5000N	1725W	315°	-45°	134.0m
BH82449-0	4600N	1650W	315°	-45°	110.3m
BH82484-0	4300N	1325W	315°	-45°	260.0m
BH82485-0	4300N	1125W	315°	-50°	128.0m
BH82486-0	2800N	1575W	090°	-45°	074.0m
BH82487-0	1600N	0155W	315°	-45°	229.6m
BH82488-0	1800N	0100E	315°	-45°	098.0m
			<b>TOTAL:</b>		<b>1,209.9m</b>

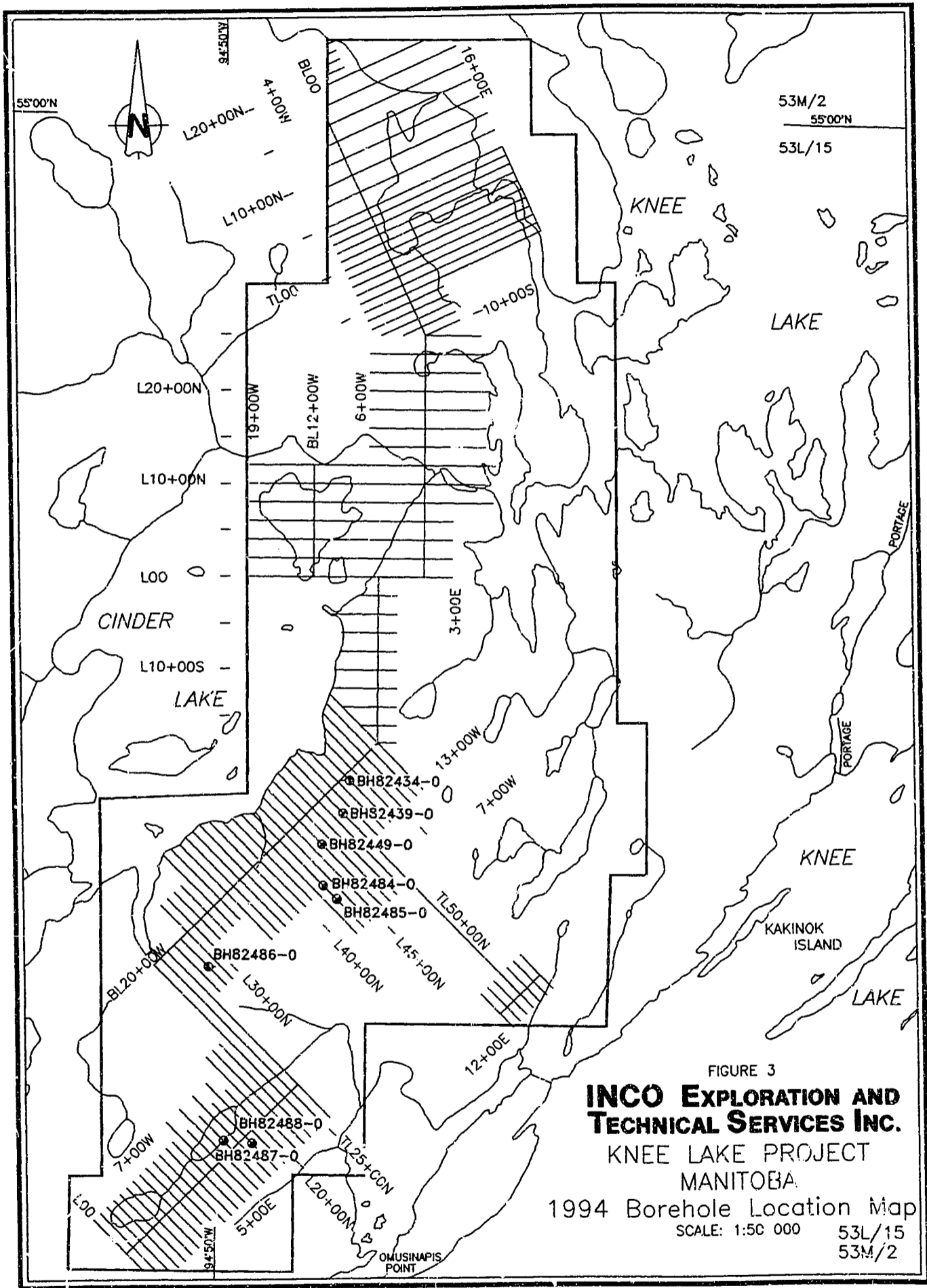


FIGURE 3  
**INCO EXPLORATION AND  
 TECHNICAL SERVICES INC.**  
 KNEE LAKE PROJECT  
 MANITOBA  
 1994 Borehole Location Map  
 SCALE: 1:50 000      53L/15  
    53M/2

Seven of the eight holes were drilled from stratigraphic and structural hangingwall to footwall since dips were known to be approximately 80 degrees to the east. BH82486-0 was drilled from footwall to hangingwall due to a pronounced westerly dip indicated by the geophysics.

A brief description and a summary of significant results for each hole are given below. Borehole logs are provided in Appendix 1 and 1:500 scale sections are included in the back pockets of this report.

**BH82434-0 (5300N/1575W, Az.270°, -45°, 176m)**

The hole encountered minor hangingwall basalt and predominantly dacitic volcanics. The HLEM conductor is explained by an upper 7.4 metre section of fine grained vuggy pyrite and pyrrhotite associated with adjacent graphitic sediments, a central 4.9 metre pyritic section associated with graphitic sediments and a lower 3.2 metre section of pyrite with secondary subhedral pyrite and interstitial pyrrhotite. Reddish brown sphalerite is locally present in the lowermost sulphide unit. Sphalerite (<1%) occurs within quartz stringers and strongly silicified zones within this dominantly pyritic section. Brecciated sulphide with local fragments of chert assayed 0.16% Cu across 0.9 metres. Four of five samples from the lower sulphide zone/silicified zone yielded anomalous Zn values of up to 0.21% Zn across 0.65 metres. The zone has an average grade of 0.13% Zn across 4.22 metres. The immediate footwall to the lowermost sulphide intersection consists of dacitic volcanics. They are brecciated, chloritic, sulphidic and garnetiferous along a core length of 41.93 metres and locally contain weakly anomalous base metal values of up to 0.21% Zn across 0.65 metres.

Base metal values of > 0.1% Cu and/or 0.1% Zn are summarized below:

<u>SAMPLE#</u>	<u>FROM(m)</u>	<u>TO(m)</u>	<u>(m)</u>	<u>Cu (%)</u>	<u>Zn (%)</u>	<u>LITHOLOGY</u>
FX692223	58.30	59.20	0.90	0.16	-	MASU
FX692226	67.53	68.70	1.17	-	0.16	dac bx
FX692227	68.70	69.35	0.65	-	0.21	dac bx
FX692229	70.18	71.00	0.82	-	0.14	if
FX692230	71.00	71.75	0.75	-	0.13	MASU

**BH82439-0 (5000N/1725W, Az.315°, -45°, 134m)**

The upper part of the hole consists of gabbro, andesite and graphitic sediment - silicate facies iron formation. Graphitic argillite high in the stratigraphic package assayed up to 0.15% Zn across 1.72 metres. Stratigraphically below, a thin massive sulphide horizon associated with intercalated chert and mudstone assayed 0.1% Cu. These units are underlain by graphitic mudstone, chert-mudstone - brecciated pyrrhotite-pyrite and by 22.7 metres of massive sulphide which yielded low Zn and Cu values (up to 0.05% and

0.01%, respectively). Dacite in the immediate footwall to the massive sulphide is brecciated, chloritic and garnetiferous across 20.6 metres and returned low base metal values. The HLEM conductor is explained by the thick massive sulphide horizon.

Base metal values of > 0.1% Cu and/or 0.1% Zn are summarized below:

<u>SAMPLE#</u>	<u>FROM(m)</u>	<u>TO(m)</u>	<u>(m)</u>	<u>Cu (%)</u>	<u>Zn (%)</u>	<u>LITHOLOGY</u>
FX692255	42.72	44.60	1.72	-	0.15	mudstone
FX692259	52.5	53.25	0.75	0.1	-	MASU-chert

**BH82449-0 (4600N/1650W, Az.315°, -45°, 110.3m)**

Andesite, dacite and minor sediment is underlain by 22.65 metres of massive pyrite and pyrrhotite. The underlying lithology is quartz phyric dacite crystal tuff, similar to that intersected at the bottom of BH82439-0. The overlying units include felsic lapilli tuff, fine ash and andesitic flows. Graphite is noticeably absent in this hole and Zn and Cu values are low (.02%). HLEM conductivity is explained by the massive sulphide horizon.

**BH82484-0 (4300N/1325W, Az.315°, -45°, 260m)**

The upper part of the hole intersected predominantly chert, mudstone, siltstone and graphitic mudstone over approximately 30 metres which is the source of the first target HLEM conductor. Weakly anomalous Zn and Cu values of up to 0.3% across 2.55 metres and 0.11% across 0.6 metres, respectively were obtained from this unit. Stratigraphically below, basalt is massive to locally brecciated. The second target conductor was not intersected. Sheared basalt with minor quartz and calcite veining assayed 0.1% Cu across 1.9 metres near the bottom of the hole.

Base metal values of > 0.1% Cu and/or 0.1% Zn are summarized below:

<u>SAMPLE#</u>	<u>FROM(m)</u>	<u>TO(m)</u>	<u>(m)</u>	<u>Cu (%)</u>	<u>Zn (%)</u>	<u>LITHOLOGY</u>
FX692319	34.15	36.7	2.55	-	0.3	mudstone
FX692320	36.7	37.75	0.75	-	0.22	chert
FX692322	39.8	41.8	0.6	0.11	0.13	chert
FX692323	225.2	227.1	1.9	-	0.11	basalt

**BH82485-0 (4300N/1125W, Az.315°, -50°, 128m)**

Gabbro and basalt are stratigraphically underlain by graphitic mudstone which hosts a 0.9 metre thick, barren massive pyrite horizon. Graphitic argillite immediately below the sulphide horizon assayed 0.07% Zn across 2.3 metres.

**BH82486-0 (2800N/1575W, Az.090°, -45°, 74m)**

Quartz phyric rhyolite tuff is stratigraphically overlain by an 11.8 metre section of chloritic siltstone-silicate facies iron formation, mudstone, chert, massive pyrite (up to 1.2 metres) and quartz veins which explains the HLEM conductor. The massive pyrite assayed 0.02% Zn and 0.03% Cu across 1.18 metres and is overlain by intermediate tuff and by sheared, chloritic iron formation. The iron formation assayed 0.09% Zn across 1.0 metre. Stratigraphically above, andesite and basalt are locally cut by thin granite and granodiorite dikes. Core angles indicate that stratigraphy dips 50° to the west at this location.

**BH82487-0 (1600N/155W, Az.315°, -45°, 229.6m)**

Massive to sheared, quartz and plagioclase feldspar phyric rhyolite is overlain by minor brecciated siltstone, graphitic sediment and by 21.77 metres of massive to brecciated pyrite and pyrrhotite. Fragments of chert and oxide facies iron formation locally occur. Dacite and intercalated graphitic mudstone - lean oxide facies iron formation - chert overlie the sulphide zone. The upper part of the stratigraphy consists of massive gabbro/basalt.

The main massive sulphide unit (173.78 to 195.55) yielded low base metal values (up to 0.07% Zn across 1.2 metres and up to 0.04% Cu across 0.55 metres). Stratigraphically above the massive sulphide, several graphitic mudstone units yielded Zn values of up to 0.86% across 0.82 metres. Below the massive sulphide, chert-siltstone assayed 0.39% Zn across 0.55 metres, a thin massive sulphide horizon assayed 0.22% Zn across 0.32 metres and graphitic mudstone assayed 0.58% Zn across 0.38 metres. This interval explains the broad zone of HLEM conductivity.

Base metal values of > 0.1% Cu and/or 0.1% Zn are summarized below:

<u>SAMPLE#</u>	<u>FROM(m)</u>	<u>TO(m)</u>	<u>(m)</u>	<u>Cu (%)</u>	<u>Zn (%)</u>	<u>LITHOLOGY</u>
FX692342	142.87	144.0	1.13	-	0.4	mudstone
FX692343	144.0	144.75	0.75	0.31	0.27	mudstone
FX692347	148.83	149.65	0.82	-	0.86	mudstone
FX692351	154.4	155.45	1.05	0.12	0.50	mudstone
FX692352	155.45	156.45	1.0	0.13	0.69	mudstone
FX692354	166.25	166.75	0.5	0.2	0.36	mudstone
FX692359	173.2	173.78	0.58	-	0.39	mudstone
FX692382	195.55	196.1	0.55	-	0.39	chert
FX692383	196.1	196.42	0.32	-	0.22	MASU po,py
FX692384	196.42	196.8	0.38	-	0.58	mudstone

**BH82488-0 (1800N/100E, Az.315°, -45°, 98.0m)**

Basalt is overlain by 6.33 metres of oxide facies iron formation-siltstone and graphitic argillite with a 0.09 metre thick massive pyrite horizon which represents the HLEM conductor. The hole ended in footwall andesite and no anomalous assays were received.

The best gold value was 100 ppb across 1.18 metres (BH82486) associated with quartz veins in massive sulphide-graphitic mudstone. Ag ranges from background values of <0.4 to 2.4 ppm and is not obviously anomalous within massive sulphide zones.

**7.1 Geochemistry**

Mineralized samples were submitted to Chemex for ICP determination of Cu, Zn, Pb, Mo, Au, Ag, As, Bi, Hg and Sb. Samples suitable for whole rock analysis were submitted to XRAL for major element analysis plus Zr, Y, Nb, Rb and Sr. Chemex and XRAL Lab reports are provided in Appendices 2 and 3, respectively.

All of the data are presented on a Jensen Cation Plot (Figure 4). Mafic samples cluster about the tholeiitic-calc-alkaline boundary whereas a distinct linear trend of sample compositions is evident from tholeiitic basalt to tholeiitic and calc-alkaline rhyolite. Felsic samples are readily divisible into two spatially and chemically distinct sample populations. Felsic volcanics from BH82486-0 and BH82487-0 are predominantly calc-alkaline rhyolites with local samples which plot in the tholeiitic rhyolite and dacite fields. In contrast, the northern three holes (BH82434-0, BH82439-0 and BH82449-0) intersected tholeiitic dacites and rhyolites. Felsic breccia associated with massive sulphide mineralization plot as the more mafic endmembers on this trend and reflect metasomatically altered felsic volcanic chemical compositions.

Similar trends are evident on an AFM diagram (Figure 5). Altered felsic breccia samples have higher Fe, slightly higher Mg and considerably less Na than the relatively unaltered felsic volcanics.

Figure 6 is a plot of Al<sub>2</sub>O<sub>3</sub> vs TiO<sub>2</sub>, two incompatible elements that are usually immobile. Mafic lithologies are defined by higher TiO<sub>2</sub> content. The compositions of footwall felsic volcanics and alteration breccia plot on a single line which passes through the origin. This relationship indicates that aluminum and titanium were immobile during alteration and that the unaltered felsic volcanics and the alteration breccia are cogenetic. Furthermore, felsic breccia samples all contain lower Al<sub>2</sub>O<sub>3</sub> and TiO<sub>2</sub> than do the relatively unaltered felsic volcanics. These elements were not directly involved in the metasomatic event but their abundance has been diluted by metasomatic mass addition to the system.



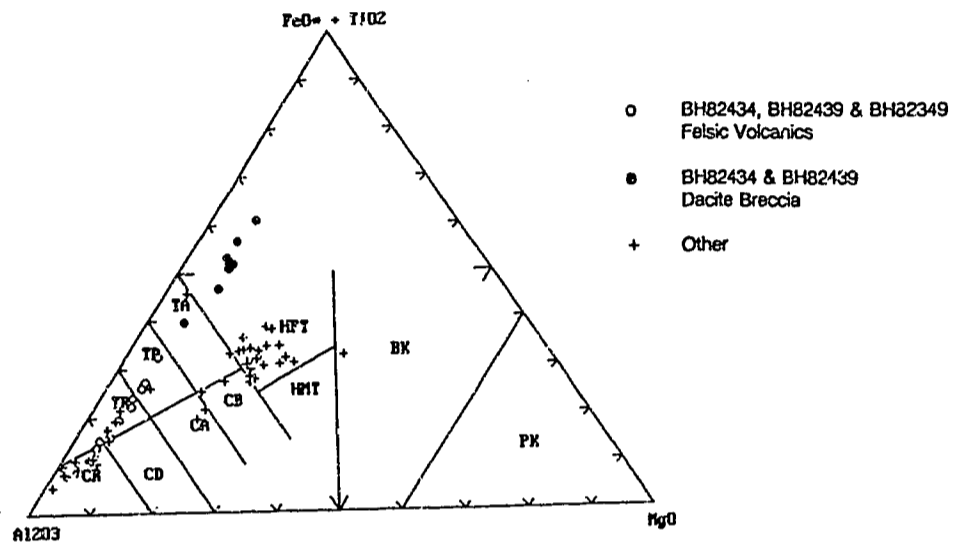


Figure 4 - Jensen Diagram

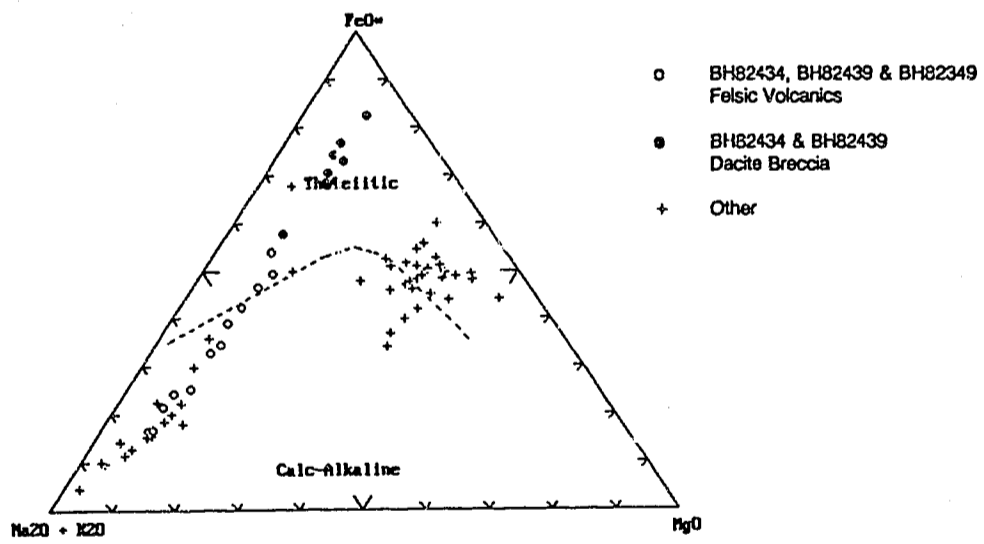
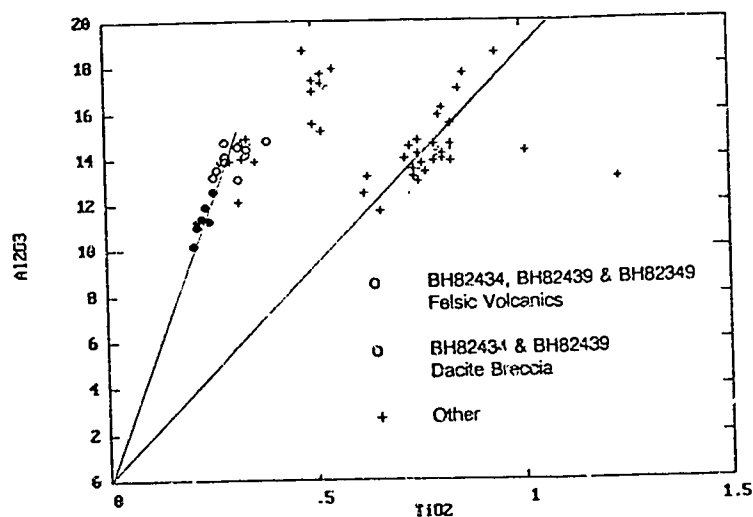


Figure 5 - AFM Diagram

Figure 6 - Al<sub>2</sub>O<sub>3</sub> vs TiO<sub>2</sub>

### 8.0 Conclusions and Recommendations

Lithologies encountered during the drilling program include Hayes River Group mafic to felsic volcanics with associated massive pyrite-pyrrotite, chert, iron formation, graphitic mudstone, siltstone, gabbro and mafic dikes.

The drilling program was designed to test conductivity associated with well developed massive sulphide rich exhalative zones and local footwall brecciated, chloritic, garnetiferous dacite. Significant thicknesses (up to 22.7 metres) of iron rich massive sulphide were encountered in four holes and returned Cu and Zn values of up to 0.16% (BH82434-0) and 0.22% (BH82487-0), respectively.

The two northern holes (BH82434-0 and BH82439-0) intersected chloritic, garnetiferous, and locally sulphidic dacite breccia immediately below massive sulphide for core lengths of 41.93 metres and 20.6 metres, respectively. Rare base metal values of up to 0.21% Zn across 0.65 metres were obtained from this unit.

Two spatially and chemically distinct populations of felsic volcanics are evident from whole rock geochemical results. The southern felsic volcanics are predominantly calc-alkaline whereas predominantly tholeiitic felsic volcanics occur to the north. In the two northern

holes (BH82434-0 and 82435-0) chloritic and garnetiferous felsic breccia is cogenetically related to the relatively unaltered felsic volcanics stratigraphically below. The breccia has been subject to metasomatic addition of Fe and to a lesser extent, Mg and is Na depleted.

The property has excellent economic potential to host Zn-Cu deposits and further exploration is recommended. Dacite breccia with a strongly chloritic and garnetiferous matrix in the immediate footwall to massive pyrite-pyrrhotite offers excellent untested potential at depth and along strike to the north. Soil sampling is recommended to refine target areas within the high potential stratigraphy

#### **9.0 References**

- Barlow, R.B. (1973):  
Major and minor element geochemistry of the Archean volcanic rocks of the southern Knee Lake area, Manitoba, unpublished M.Sc. thesis, Michigan Technological University.
- Barry, G.S. (1959):  
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- Gilbert, H.P. (1985):  
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- Green, N.L. (1973):  
The volcanic stratigraphy and petrochemistry of the God's Lake Subgroup, Knee Lake Manitoba, unpublished M.Sc. thesis, University of Manitoba, 132 p.
- Quinn, H.A. and Currie, K.L. (1961)  
Geology of the Oxford House Area, Manitoba, G.S.C. Map 21-1961, with marginal notes.

**Appendix 1**  
**Diamond Drill Logs**

82434-0

82434-0

INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG

PRINT DATE : 12-JAN-1995 11:44

BOREHOLE : 82434-0  
PROJECT : KNEE LAKE  
PROPERTY NAME: KNEE LAKE  
Latitude : 5300.00N  
NTS/Quad : 53L15  
Country : CANADA  
Prov./state : MANITOBA  
Twp/County :  
Claim # : CIN 3 - W53283

Departure : 1925.00M  
Logged by : D. Car  
Drilled by : MIDWEST DRILLING  
Drill type : BBS 17  
Core size : B2  
Section : 5300M

Elevation : 10000.00m  
Assay req. : Cu,Zn,Ag,Au  
Test Method : ACID TEST  
Started : MARCH 15, 1994  
Completed : MARCH 16, 1994  
Grid name : CANICO

Hole length : 176.00m  
Level : SURFACE  
Dip : -45.00  
BL azimuth : 045  
BH bearing : 235  
Heading :

DEVIATION RECORDS

depth	azm	dip	depth	azm	dip	depth	azm	dip
0.00	270.00	-45.00	68.00	270.00	-46.00	128.00	270.00	-44.00
176.00	270.00	-43.00						

COMMENTS : LEFT IN HOLE: ALL CASING PULLED.

FROM	TO	DESCRIPTION	FROM	TO	LENGTH	SAMPLE#	CU	ZN	AU	AG	MIN%	CANG
m	m		m	m	m		PPM	PPM	PPB	PPM		
0.00	4.80	OVERBURDEN clay.	0.00	4.80	4.80	NS						
4.80	8.45	BASALT Fine grained, massive, dark gray to dark green with local	4.80	8.45	3.65	NS						

82434-0

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**INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG**

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FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MIN%	CANG
		feldspathic zones up to 10 centimetres wide which contain up to 30% irregular plagioclase crystals up to 5 millimetres long. Locally weakly magnetic with 1 to 2% irregular calcite veinlets up to 1.5 centimetres wide at variable angles to core axis.										
8.45	19.18	<b>BASALTIC PILLOW BRECCIA</b> Very fine grained, dark gray to light gray, massive to brecciated. Light gray fragments locally in a dark gray matrix, locally weakly magnetic with trace pyrites along joints and rare blebs pyrrhotite, less than 1% calcite veinlets up to 8 millimetres wide at variable angles to core axis and two quartz carbonate veins up to 12 centimetres wide. At 18.6 metres, several black ovoids up to 6 millimetres in 18.60 several black ovoids up to 6 millimetres diameter which exhibits a crystal core. These may be variolites or chloritic alteration. quartz, chlorite ?, and possible garnet.	8.45	19.18	10.73	NS						
19.18	30.15	<b>ANDESITE</b> 19.08 19.18 Fine grained to very fine grained, medium gray to light gray, variably brecciated. possibly	19.18	30.15	10.97	NS						

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INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG

FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MIN%	CANG
		andesitic pillow breccia. Contacts of fragments are sharp to diffuse. A few, locally wuggy calcite veins up to 6 centimetres wide at variable angles to cax. massive to weakly foliated.										
30.15	31.91	30.15 31.91 ANDESITIC PILLOW BRECCIA	30.15	31.91	1.76	NS						
27.75		27.75 30.15 Fine grained, foliated, medium gray. Possibly a siltstone. Weakly bedded with 2 to 3% calcite veinlets up to 3 millimetres wide at variable angles to core axis.										
31.91	34.10	31.91 34.10 CHLORITE-BIOTITE SCHIST	31.91	34.10	2.19	NS						
		Fine grained to very fine grained, dark gray to brown, highly foliated and broken-up schist with local contorted bands of chert up to 1 centimetre wide. Less than 2% pyrite as disseminated and stringer type, 2% calcite and quartz veinlets to 1.5 centimetres wide parallel to foliation and at variable angles to core axis.										
34.10	43.25	34.10 43.25 EXHALITE	34.10	43.25	9.15							
		The unit is a complex melange of variably brecciated pyrite, chert, and chloritic mudstone. locally intensely foliated.										
35.20	35.55	35.20 35.55 Brecciated pyrite with 50% chert and mudstone fragments up to 4	34.10	35.20	1.10	FX 692201	77.	192.	<5.	<0.200	Tr	52
			35.20	35.55	0.35	FX 692202	273.	76.	<5.	0.600	50	-
			35.55	36.35	0.80	FX 692203	56.	116.	<5.	<0.200	Tr	-
			36.35	37.40	1.05	FX 692204	75.	62.	<5.	<0.200	15	-
			37.40	38.58	1.18	FX 692205	115.	64.	<5.	0.400	40	-
			38.58	39.78	1.20	FX 692206	64.	166.	<5.	<0.200	1	-

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**INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG**

82434-0

FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MIN% CANG
		centimetres in diameter.	39.78	40.70	0.92	FX 692207	175.	34.	<5.	0.400	80
35.55	36.35	Intensely foliated, thinly laminated chert and gray to black mudstone and siltstone.	40.70	41.90	1.20	FX 692208	112.	104.	<5.	<0.200	15
36.35	37.40	Predominantly foliated chert with 25% pyrite as stringers and irregular masses up to several centimetres in diameter.	41.90	43.25	1.35	FX 692209	183.	50.	<5.	<0.200	25
37.40	38.58	Predominantly brecciated mudstone and pyrite with some sections of foliated cherty mudstone.									
38.58	39.78	Predominantly foliated chert with minor siltstone and mudstone, 2 to 3% disseminated and stringer pyrite.									
39.78	40.70	Brecciated pyrite with 20% chert and mudstone as clasts up to 10 centimetres in diameter.									
40.70	41.90	Predominantly weakly brecciated chert with 10% pyrrhotite as stringers up to 1.5 centimetres wide.									
41.90	43.25	70% mudstone and 30% massive pyrite with numerous inclusions of mudstone.									
43.25	52.15	<b>DACITE</b> Predominantly light gray, very fine grained to fine grained and variably brecciated. Locally fragmental, possibly dacite lapille tuff. Locally weakly chloritic with blebs up to 2 millimetres long. Trace	43.25	44.35	1.10	FX 692210	55.	150.	<5.	<0.200	Tr
			44.35	45.65	1.30	FX 692211	109.	128.	<5.	<0.200	7
			45.65	46.20	0.55	FX 692212	116.	82.	<5.	<0.200	3
			46.20	47.00	0.80	FX 692213	79.	64.	<5.	<0.200	1
			47.00	48.50	1.50	FX 692214	285.	22.	15.	0.800	10
			48.50	50.00	1.50	FX 692215	156.	4.	5.	0.400	10

82434-0



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**INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG**

82434-0

FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MIN% CANG
		plagioclase feldspar phenocrysts up to 1 millimetre in diameter. Minor biotite in several wisps up to 1 cm wide. 1 to 2% pyrite as irregular stringers up to 2 centimetres wide. Lower contact is diffuse. fine grained, gray to very dark gray, weakly porphyritic, weakly magnetic mafic dike. 1% calcite veinlets up to 6 millimetres wide and 2 to 3% pyrite, mainly as an irregular bleb 3 centimetres wide near the upper contact and locally disseminated. Diffuse upper contact, locally similar to dacite and sharp lower contact. fine grained to very fine grained, light gray, massive dacite. Weakly chloritic with 1 to 2% pyrite as irregular stringers and bands up to 3 centimetres wide.	50.00	51.50	1.50	FX 692216	83.	30.	<5.	0.200	1
			51.50	52.15	0.65	FX 692217	194.	118.	<5.	0.200	Tr
52.15	59.20	<b>MASSIVE SULFIDE</b>	52.15	53.45	1.30	FX 692218	121.	6.	15.	1.000	85
		52.15 53.45 Fine grained crystalline pyrite with 15 to 20% calcite as irregular clots and veinlets up to 1.5 centimetres wide.	53.45	54.70	1.25	FX 692219	286.	72.	<5.	0.800	70
			54.70	56.10	1.40	FX 692220	250.	22.	<5.	0.600	70
			56.10	57.20	1.10	FX 692221	402.	16.	<5.	0.400	95
		53.45 56.10 Highly brecciated, fine grained to coarse grained, crystalline pyrite with up to 40% inclusions of graphitic mudstone.	57.20	58.30	1.10	FX 692222	445.	14.	<5.	0.800	98
		56.10 58.30 Massive, fine grained to	58.30	59.20	0.90	FX 692223	1593.	30.	<5.	0.800	70

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**INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG**

82434-0

FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MIN%	CANG
		medium grained pyrrhotite. Minor pyrite as one crystalline mass up to 20 centimetres in diameter.										
		58.30 59.20 Fine grained to medium grained, crystalline, very vuggy pyrite with 25% chert and chloritic mudstone.										
59.20	65.40	<b>MUDSTONE</b> Very graphitic mudstone interbedded with minor graphitic siltstone and rare chert. Highly conductive, highly contorted and variably brecciated with up to 10% pyrite as irregular stringers up to 2 centimetres wide. A few calcite -filled vugs and trace calcite veinlets. The siltstone interbeds are up to 1.5 centimetres thick.	59.20	65.40	6.20	NS						
65.40	68.70	<b>BRECCIA</b> Light to dark gray, intensely brecciated, foliated breccia with dacite fragments up to 9 centimetres diameter. Minor graphitic mudstone, chert and siltstone fragments all in a matrix composed of 15% chlorite, pyrite and minor magnetite.	65.40	66.30	0.90	FX 692224	124.	286.	<5.	0.200	25	-
		65.40 66.30 Intensely brecciated dacite ?, siltstone, and graphitic mudstone, with 25% pyrite as matrix in some	66.30	67.53	1.23	FX 692225	213.	100.	<5.	0.400	10	-
			67.53	68.70	1.17	FX 692226	185.	1578.	<5.	0.500	30	-

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INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG

FROM	TO	DESCRIPTION	FROM	TO	LENGTH	SAMPLE#	CU	ZH	AU	AG	MIN%	CANG
m	m		m	m	m		PPM	PPM	PPB	PPM		
68.70	71.00	sections of the unit. Some vugs are associated with the more pyrite rich portions. Lower contact is gradational over 10 centimetres. light gray relatively monomictic dacite breccia with fragments up to 9 centimetres in diameter. A few mafic phenocrysts up to 2 millimetres in diameter. Matrix composed of 15% pyrite and minor chlorite. intensely brecciated, foliated, locally well banded chert and possible siltstone with less than 1% magnetite as irregular blebs up to 5 millimetres wide.	68.70	69.35	0.65	FX 592227	80.	2126.	<5.	<0.200	20	-
69.35	70.18		69.35	70.18	0.83	FX 692228	119.	196.	45.	0.600	10	-
70.18	71.00		70.18	71.00	0.82	FX 692229	140.	1412.	<5.	0.200	35	-

68.70 71.00 SILICATE IRON FORMATION

67.53 68.70 Consists of 85% massive chlorite, and 10 to 15% pyrite as weakly bedded crystals up to 7 millimetres in diameter, moderately magnetic. Upper contact is sharp, but lower contact is gradational.  
dacite breccia as from 67.53 68.70 with local fragments of silicate iron formation up to 5 centimetres in diameter with minor vugs . 1% white chert as irregular clots up to 3 centimetres long, 10 to 15% pyrite as disseminated crystals up to 4 millimetres in diameter, and as

82434-0

**INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG**

82434-0

FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MIN%	CANG
		irregular stringers up to 1.5 centimetres wide.										
71.00	71.75	<b>71.75 MASSIVE SULFIDE</b> 70% pyrite as subhedral crystals up to 3 millimetres diameter with 20% silicate iron formation clasts up to 1.5 centimetres wide, 10% light gray siltstone ? clasts up to 1 centimetre in diameter. Highly brecciated.	71.00	71.75	0.75	FX 692230	80.	1258.	<5.	<0.200	65	-
71.75	72.45	<b>71.75 73.60 BRECCIA</b> Highly bleached, moderately chloritic, predominantly felsic breccia with a few fragments of silicate iron formation up to 5 millimetres wide. 1% white chert ? as fragments up to 3 centimetres in diameter. 20% pyrite as massive bands up to 12 centimetres wide and as fine grained disseminated crystals.	71.75	72.45	0.70	FX 692231	144.	110.	50.	0.400	40	-
72.45	73.60		72.45	73.60	1.15	FX 692232	80.	74.	30.	0.400	20	-
73.60	74.55	<b>73.60 74.55 MUDSTONE</b> Highly foliated, graphitic mudstone interbedded with local siltstone beds up to 1 centimetre wide. 2 to 3% pyrite as irregular blebs up to 2 centimetres wide. Upper contact and lower contact are relatively sharp.	73.60	74.55	0.95	FX 692233	109.	896.	<5.	0.200	7	f50

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**INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG**

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FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MINX	CANG
74.55	88.63	<b>MASSIVE SULFIDE</b>	74.55	75.55	1.00	FX 692234	99.	254.	15.	0.400	90	-
		Fine grained to coarse grained pyrite with up to 8% pyrrhotite, weakly to strongly magnetic, locally vuggy with 2 to 10% chloritic, graphitic mudstone fragments 2 millimetres to 2 centimetres diameter. Cut by quartz veins up to 2 centimetres wide.	75.55	76.55	1.00	FX 692235	68.	72.	<5.	0.200	90	-
			76.55	77.55	1.00	FX 692236	99.	68.	<5.	0.200	90	-
			77.55	78.55	1.00	FX 692237	77.	266.	10.	0.200	90	-
			78.55	79.45	0.90	FX 692238	68.	134.	<5.	0.200	90	-
			79.45	80.60	1.15	FX 692239	21.	880.	5.	<0.200	5	-
			80.60	81.80	1.20	FX 692240	116.	426.	30.	1.200	80	-
			81.80	82.93	1.13	FX 692241	45.	244.	10.	0.200	5	-
			82.93	83.95	1.02	FX 692242	77.	32.	20.	0.400	95	f65
			83.95	84.95	1.00	FX 692243	62.	56.	<5.	0.200	95	-
			84.95	86.01	1.06	FX 692244	131.	228.	<5.	0.400	75	-
			86.01	87.01	1.00	FX 692245	91.	216.	<5.	0.400	65	-
			87.01	88.01	1.00	FX 692246	111.	380.	<5.	0.200	75	-
			88.01	88.63	0.62	FX 692247	106.	220.	<5.	0.400	80	-

intensely bleached and silicified  
white to light gray dacite breccia.  
20% quartz as irregular veins and clots  
with sharp contacts. Variably plagioclase  
feldspathized as irregular clots and as  
brecciated veins up to 1 centimetre  
wide. 5% disseminated pyrite. Pyritic  
zones are vuggy and the upper contact  
is gradational over a few centimetres,  
but the lower contact is sharp. A few  
clots of magnetite up to 8 millimetres  
wide.

brecciated fine grained to medium  
grained crystalline pyrite with 5%  
inclusions of chloritic mudstone and

82434-0

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**INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG**

82434-0

FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MIN%	CANG
		quartz veins ? up to 2 centimetres in diameter. magnetic with several% fine grained pyrrhotite. as from 79.45 to 80.60.										
		82.45 82.65 Dark gray, very fine grained, massive sediment ? clast with several% pyrrhotite as oblate blebs up to 2 millimetres in diameter. brecciated, fine grained to coarse grained crystalline pyrite with 2 to 3% inclusions of chloritic and graphitic mudstone, up to 7 millimetres wide with 5 to 8% very fine grained brown pyrrhotite as interstitial sulphide, discrete boudinaged stringers up to 1.5 centimetres wide and as irregular blebs a few millimetres in diameter. contorted and locally brecciated pyrite interbedded with pyrrhotite rich dark gray siltstone and dark green chloritic mudstone. the pyrite is fine grained to coarse grained and comprises 50%. The siltstone occurs as beds to 2 centimetres thick. The mudstone occurs as beds and inclusions up to 4 centimetres thick, and commonly contains several% very fine grained to fine grained garnet ? The lower contact is sharp.										

88.63 129.56 BRECCIA

82434-0

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**INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG**

82434-0

FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MIN%	CANG
88.63	90.13	Composed of approximately 60% gray, very fine grained, massive to porphyritic, sub rounded to rounded dacite fragments up to 40 centimetres diam in a matrix composed of 30% chlorite, magnetite, garnet and pyrrhotite. dacite fragments have a very sharp to slightly diffuse contact (over 1-2 mm) with the chloritic matrix. Commonly, the chlorite rims each dacite fragment in a band 1 to 5 millimetres wide. Subhedral phenocrysts of plagioclase feldspar up to 3 millimetres in diameter comprise 2 to 3% of the dacite. Trace mafic phenocrysts up to 3 millimetres long. very fine grained magnetite occurs in the central core of each zone of matrix, and appears to be extremely fine grained. The garnet commonly occurs as fine grained crystals forming semi-continuous stringers at the contact between the chlorite rims and the magnetite cores and as disseminated crystals up to 2 millimetres in diameter within the chlorite rims.	18.	248.	<5.	<0.200	10	-				
90.13	91.63		25.	198.	<5.	<0.200	7	-				
91.63	93.00		N/A	N/A	N/A	N/A	-	-				
93.00	101.00		NS	N/A	N/A	N/A	-	-				
101.00	102.50		NS	N/A	N/A	N/A	-	-				
102.50	112.50		NS	N/A	N/A	N/A	-	-				
112.50	113.50		NS	N/A	N/A	N/A	-	-				
113.50	126.50		NS	N/A	N/A	N/A	-	-				
126.50	127.50		NS	N/A	N/A	N/A	-	-				
127.50	129.56		NS	N/A	N/A	N/A	-	-				
129.56	130.66		NS	<1.	44.	60.	<0.400	2	-			
130.66	131.65		NS	<1.	42.	20.	<0.400	2	-			
131.65	136.50		NS									

82434-0

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**INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG**

FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MIN%	CANG
		phenocrysts up to 4 millimetres in diameter. Locally chloritic dacite breccia as above up to 40 centimetres diameter with diffuse contacts. less than 1% calcite veinlets to 2 millimetres wide, sub parallel to a weak foliation at 60 degrees to core axis.	136.50	137.50	1.00	FX 692844	N/A	N/A	N/A	N/A	-	-
		light to medium gray, siliceous, weakly porphyritic and weakly brecciated dacite with less than 5% plagioclase feldspar phenocrysts up to 2 millimetres diam. The matrix consists of calcite, quartz and black chlorite with 2% disseminated and blebs of pyrite and pyrrhotite up to 6 millimetres in diameter.	137.50	147.95	10.45	NS						
147.95	159.20	<b>BRECCIA</b>	147.95	152.00	4.05	NS						
		129.56 131.65 As from 88.63 to 129.56. Moderately brecciated with matrix composed of 15% chlorite, 5% garnet. the contacts of dacite fragments with the chloritic matrix are not as sharp and no magnetite is present subhedral garnet up to 3 millimetres in diameter tends to be disseminated throughout the matrix and in dacite fragments. local massive zones up to 90 centimetres thick.	152.00	153.05	1.05	FX 692845	N/A	N/A	N/A	N/A	-	-
		fine grained intermediate dike with	153.05	155.50	2.45	NS						
			155.50	159.20	3.70	NS						

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INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG

FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MIN%	CANG
-----------	---------	-------------	-----------	---------	-------------	---------	-----------	-----------	-----------	-----------	------	------

chill margins and sharp contacts.

159.20 176.00 DACITE

Very similar to porphyritic  
dacite from 131.65 to 147.65. 5 to 20%  
plagioclase feldspar phenocrysts up to  
4 millimetres in diam. Numerous  
bleached zones up to 20 centimetres  
wide with sharp to diffuse contacts.  
trace calcite veinlets.  
Foot of hole

159.20	169.00	9.80	NS									
169.00	170.00	1.00	FX 692846	N/A	N/A	N/A	N/A	N/A	N/A			
170.00	176.00	6.00	NS									

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82434-0

82439-0

82439-0

INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG

PRINT DATE : 12-JAN-1995 11:44

Hole length : 134.00m  
Level : SURFACE  
Dip : -45.00  
BL azimuth : 045  
BH bearing : 270  
Heading :

Elevation : 10000.00m  
Assay req. : Cu,Zn,Ag,Au  
Test Method : ACID  
Started : March 18, 1994  
Completed : MARCH 20, 1994  
Grid name : CANICO

Departure : 1725.00W  
Logged by : D. Car  
Drilled by : MIDWEST DRILLING  
Drill type : BBS 17  
Core size : BQ  
Section : 5000N

BOREHOLE : 82439-0  
PROJECT : KNEE LAKE  
PROPERTY NAME: KNEE LAKE  
Latitude : 5000.00N  
NTS/Quad : 53L15  
Country : CANADA  
Prov./state : MANITOBA  
Twp/County :  
Claim # : CIN 3 - W53283

DEVIATION RECORDS

depth	azm	dip	depth	azm	dip	depth	azm	dip
0.00	315.00	-45.00	11.00	315.00	-46.00	71.00	315.00	-48.00
						131.00	315.00	-48.00

COMMENTS: LEFT IN HOLE: ALL CASING REMOVED.

FROM	TO	DESCRIPTION	FROM	TO	LENGTH	SAMPL.#	CU	ZN	AU	AG	MIN%	CANG
m	m		m	m	m		PPM	PPM	PPB	PPM		
0.00	5.70	OVERBURDEN	0.00	5.70	5.70	NS						
5.70	30.30	GABBRO	5.70	27.50	21.80	NS					Tr	
		Coarse grained, very massive and medium gray. Composed of 80 to 85% anhedral to subhedral amphibolite	27.50	28.50	1.00	FX 692847	N/A	N/A	N/A	N/A		
			28.50	30.30	1.80	NS						

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**INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG**

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FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPH	MIN%	CARG
		crystals up to 5 millimetres in diameter, 15 to 20% very fine grained plagioclase plagioclase feldspar crystals with 1% quartz and calcite veinlets up to 4 mms wide At variable angles to core axis. Trace pyrite along chloritic fractures.										
	25.20	26.60										
		Variably foliated, fine grained to medium grained, plagioclase plagioclase feldspar rich.										
	28.92	30.00										
		Similar to above, but contacts are not as sharp.										
30.30	33.55	MAFIC DIKE Medium grained to fine grained dark, gray, massive, weakly magnetic with gradational contacts. possibly a chilled margin weak diabasic texture.	30.30	33.55	3.25	NS						
33.55	39.50	SEDIMENT Intercalated graywacke, chert, siltstone and minor graphitic mudstone. Very fine grained to medium grained, gray to black, locally brecciated with individual beds up to 3 centimetres thick. 1 to 2% pyrrhotite, pyrite as stringers sub parallel bedding ups 4 millimetres wide. fine grained to medium grained gray,	33.55	34.45	0.90	NS						
			34.45	36.55	2.10	FX 692252	249.	68.	<5.	<0.400	1	?
			36.55	37.70	1.15	FX 692253	260.	840.	15.	<0.400	2	b48
			37.70	39.50	1.80	NS					Tr	

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**INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG**

FROM	TO	DESCRIPTION	FROM	TO	LENGTH	SAMPLE#	CU	ZN	AU	AG	MIN%	CANG	
m	m		m	m	m		PPM	PPM	PPB	PPM			
		highly foliated, possibly boudinaged graywacke with a few thin boudinaged interbeds of chert.											
		locally brecciated chert with 30 to 40% interbeds of chloritic and minor graphitic mudstone. trace possible garnet in the chloritic mudstone.											
		weakly boudinaged mixture of 50% gray siltstone, 25% white chert, and 25% black graphitic mudstone. 1 to 2% pyrite and pyrrhotite as 1 to 4 millimetre wide stringers parallel to bedding.											
		thinly bedded to thickly bedded graywacke, well developed uphole, local examples of primary soft-sediment deformation. some coarse grained, thicker beds exhibit blotches of calcite rich sediment. Up to 15% pyrrhotite as rounded blebs up to 3 millimetres in diameter with thin chloritic rims from 37.90 38.00.											
39.50	52.50	MUDSTONE	39.50	41.60	2.10	NS					Tr	-	
		37.70 39.50 Black, graphitic and rare chloritic mudstone interbedded with 40 to 50% thinly bedded siltstone.	41.60	42.07	0.47	NS					Tr	-	
		Locally weakly contorted, locally boudinaged with 1 to 2% pyrite and pyrrhotite as irregular stringers up to 5 millimetres wide. 50% brecciated,	42.07	42.72	0.65	FX 692254	198.			<5.	<0.400	5	-
			42.72	44.60	1.88	FX 692255	172.			<5.	<0.400	1	-
			44.60	46.50	1.90	FX 692256	544.			10.	<0.400	15	-
			46.50	46.90	0.40	NS					Tr	-	
			46.90	48.05	1.15	FX 692257	461.			<5.	<0.400	10	b58

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**INCO EXPLORATION AND TECHNICAL SERVICES INC.**  
**DRILL LOG**

FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MINX	CANG
		boudinaged chert beds up to 3 centimetres thick and local silicate iron formation.	48.05	51.80	3.75	NS					Tr	-
		well bedded chert interbedded with 60% green chloritic mudstone. Beds average 1 centimetre in thickness, trace pyrrhotite.	51.80	52.50	0.70	FX 692258	426.	188.	<5.	<0.400	3	-
		light to dark gray, thickly bedded siltstone with trace pyrrhotite as thin stringers.										
		40% gray siltstone and 10% chert. Upper contact is sharp, but lower contact is brecciated and diffuse.										
		highly boudinaged and brecciated chert interbedded with 15% black graphitic mudstone, 1% light gray siltstone, and 10 to 15% pyrite as irregular stringers and clots up to 1.5 centimetres wide.										
		Some of the pyrite may be sedimentary. Pyritic zones are slightly vuggy.										
		very graphitic, highly contorted with 10% dark gray siltstone, 2 to 3% pyrite.										
		as from 44.60 to 46.50, but not as highly brecciated.										
		very graphitic, highly boudinaged with 10 to 15% boudinaged clasts of chert and siltstone, up to several centimetres in diameter. 3 to 5% pyrite as irregular stringers and clots up to 1 centimetre in diameter.										

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**INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG**

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FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MIN% CANG	CANG
49.30	49.75	Graphite fault gouge with 5% calcite.										
49.75	51.80	As from 48.05 49.30. sheared chloritic mudstone with 3 to 5% pyrite as irregular clots up to 2 centimetres in diameter.										
52.15	52.50	White, highly recrystallized chert with 3 to 5% pyrite as irregular										
52.50	53.25	<b>MASSIVE SULFIDE</b> clots up to 2 centimetres in diameter. 50% brecciated pyrite with 50% chert and black mudstone fragments up to 5 centimetres in diameter. Numerous vugs up to 8 millimetres by 2 centimetres.	52.50	53.25	0.75	FX 692259	980.	22.	10.	0.800	50	-
53.25	56.10	<b>MUDSTONE</b> Very graphitic black mudstone with 20% interbedded chert and siltstone in beds up to 1 centimetre wide. 2 to 3% marcasitic pyrite as irregular stringers and blebs up to 5 millimetres in width. Several% very irregular quartz veinlets at variable angles to core axis.	53.25	56.10	2.85	NS					Tr	-
56.10	56.88	<b>MASSIVE SULFIDE</b> Very fine grained to locally coarse grained, dense, variably brecciated pyrite with less than 10% inclusions of chert and graphitic	56.10	56.88	0.78	FX 692260	223.	60.	<5.	<0.400	25	-
56.88	57.88		56.88	57.88	1.00	FX 692261	48.	120.	<5.	1.600	75	-
57.88	58.90		57.88	58.90	1.02	FX 692262	28.	106.	10.	2.000	95	-
58.90	59.90		58.90	59.90	1.00	FX 692263	22.	90.	<5.	1.600	97	-

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**INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG**

FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MIN%	CANG
		mudstone. Locally finely laminated.	59.90	60.90	1.00	FX 692264	13.	94.	<5.	1.600	95	-
		Variably distributed pyrrhotite up to 20%, locally vuggy and variably magnetic.	60.90	61.90	1.00	FX 692265	9.	52.	<5.	1.200	90	-
			61.90	62.90	1.00	FX 692266	15.	24.	<5.	0.800	90	-
			62.90	63.90	1.00	FX 692267	63.	18.	<5.	0.800	85	-
		56.10 56.23 Pyrite breccia with numerous fragments of graphitic mudstone.	63.90	65.43	1.53	FX 692268	77.	44.	<5.	0.800	85	-
			65.43	66.28	0.85	FX 692269	69.	158.	<5.	<0.400	15	-
		56.23 56.38 Light green tuff ?	66.28	67.30	1.02	FX 692270	83.	20.	<5.	0.800	98	-
		56.56 56.88 Massive to locally well bedded chert.	67.30	68.30	1.00	FX 692271	87.	86.	5.	<0.400	85	-
			68.30	69.42	1.12	FX 692272	104.	92.	10.	0.400	90	-
		63.43 65.43 Crystalline pyrite with minor pyrrhotite, internally structureless.	69.42	70.00	0.58	FX 692273	89.	244.	<5.	0.400	80	f65
			70.00	71.00	1.00	FX 692274	50.	346.	<5.	0.800	90	-
		boudinaged and brecciated magnetite -bearing iron formation. 60% white chert as fragments up to several centimetres in diameter in a matrix of variably magnetic, chloritic mudstone ? and 15% crystalline pyrite as subhedral crystals up to 8 millimetres in diameter.	71.00	72.00	1.00	FX 692275	117.	178.	<5.	0.800	90	-
			72.00	73.00	1.00	FX 692276	105.	230.	<5.	0.800	90	-
			73.00	74.00	1.00	FX 692277	88.	272.	<5.	0.400	90	-
			74.00	75.00	1.00	FX 692278	65.	64.	<5.	0.800	95	-
			75.00	76.00	1.00	FX 692279	107.	160.	<5.	0.400	90	-
			76.00	77.00	1.00	FX 692280	71.	310.	<5.	0.400	80	-
			77.00	78.00	1.00	FX 692281	85.	300.	<5.	0.800	90	-
			78.00	78.80	0.80	FX 692282	73.	522.	<5.	0.800	90	-

66.28 69.42 Less than 10% magnetite as rare stringers and irregular clots up to 8 millimetres wide.

69.42 70.00 50 to 60% pyrrhotite and very fine grained magnetite as irregular stringers up to 1 centimetre wide.

70.00 74.00 20 to 30% pyrrhotite and magnetite. Two 10 centimetre wide bands of very fine grained magnetite and minor pyrrhotite.

**INCO EXPLORATION AND TECHNICAL SERVICES INC.**  
**DRILL LOG**

FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPH	MIN%	CANG
74.00	75.00	5% pyrrhotite and magnetite.										
75.00	76.80	30% pyrrhotite and magnetite as stringers and as matrix to pyrite crystals.										
78.80	84.90	<b>BRECCIA</b> Intensely brecciated and sheared breccia with 20 to 60% angular to sub rounded, dark brown to gray, siliceous, dacite fragments up to 8 centimetres in diameter in an intensely foliated matrix composed of chlorite, pyrite, pyrrhotite with minor garnet. 7 to 10% subhedral to euhedral plagioclase feldspar phenocrysts up to 3 millimetres long within dacite fragments which locally exhibit a dark alteration rim up to 3 millimetres thick. pyrite as stringers and as crystals up to 4 millimetres in diameter comprises 10 to 15%. pyrrhotite and magnetite comprise 20 to 30%. Cut by white, locally brecciated quartz veins with up to 40% pyrite. vuggy bull quartz vein with 40% pyrite as irregular clots up to 10 centimetres in diameter, 3 to 5% pyrrhotite as irregular stringers and blebs in the pyrite.	78.80	79.75	0.95	FX 692283	46.	470.	<5.	0.400	25	-
			79.75	80.73	0.98	FX 692284	52.	352.	<5.	<0.400	30	-
			80.73	81.70	0.97	FX 692285	17.	342.	<5.	<0.400	5	-
			81.70	82.20	0.50	FX 692286	3.	14.	<5.	<0.400	Tr	-
			82.20	82.85	0.65	FX 692287	26.	142.	<5.	<0.400	3r	-
			82.85	83.60	0.75	FX 692288	8.	24.	<5.	<0.400	Tr	-
			83.60	84.90	1.30	FX 692289	10.	384.	<5.	<0.400	2	-



INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG

FROM	TO	DESCRIPTION	FROM	TO	LENGTH	SAMPLE#	CU	ZN	AU	AG	MIN%	CANG
m	m		m	m	m		PPM	PPM	PPB	PPM		

81.70 82.20 Barren, white quartz vein.

82.20 82.85 Breccia

Brecciated dacite as at 80.73, but with only about 20% pyrite and pyrrhotite rich matrix. White quartz vein with trace pyrite. Bull quartz vein with several inclusions of brecciated dacite up to 25 centimetres wide. Trace blue quartz phenocrysts up to 2 millimetres in diameter occur within the dacite.

84.90 99.40 BRECCIA

83.60 84.90 Moderately to weakly brecciated dacite, brecciation decreases down hole. porphyritic, very fine grained, dark gray dacite fragments up to 15 centimetres diameter comprise 80 to 85% and fragments are commonly partially connected to adjacent fragments. plagioclase plagioclase feldspar phenocrysts up to 3 millimetres long are variably distributed, but comprise about 7% of the dacite fragments. the matrix consists of a very fine grained mixture of chlorite, magnetite, and pyrrhotite. Commonly the chlorite occurs along the margins of the fragments, and the pyrrhotite and magnetite occur in the central core of the matrix. Trace to

84.90	86.40	1.50	FX 692801	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
86.40	87.90	1.50	FX 692802	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
87.90	90.00	2.10	NS									
90.00	91.00	1.00	FX 692848	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
91.00	96.50	5.50	NS									
96.50	97.50	1.00	FX 692849	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
97.50	99.40	1.90	NS									

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**INCO EXPLORATION AND TECHNICAL SERVICES INC.**  
**DRILL LOG**

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FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MIN%	CANG
-----------	---------	-------------	-----------	---------	-------------	---------	-----------	-----------	-----------	-----------	------	------

1% garnet as crystals up to 3 millimetres in diameter is disseminated in the matrix, and locally as stringers of crystals along the contact between the pyrrhotite - magnetite rich core and the chlorite rich fragment margins.

97.40 99.40 Weakly brecciated with 7% fine grained garnet.

**99.40 105.80 DACITE**

Weakly to intensely brecciated, variably porphyritic dacite. the matrix is light gray, lacks the chlorite, garnets, and is only very weakly magnetic. the fragments are commonly very angular and up to 5 centimetres in diameter. The matrix comprises 20 to 50% of the unit. The upper contact is gradational over 20 to 30 centimetres, but the lower contact is sharp.

99.40 105.80 6.40 NS

**105.80 110.70 DACITE**

Dark gray, porphyritic, massive with 7 to 10% subhedral to euhedral plagioclase plagioclase feldspar crystals up to to 4 millimetres long. Rare brecciated zones. Local wispy irregular bleached patches up to 15 centimetres wide. The

105.80 106.00 0.20 NS  
106.00 107.00 1.00 FX 692850  
107.00 110.70 3.70 NS

N/A N/A N/A

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INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG

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FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MIN%	CANG
-----------	---------	-------------	-----------	---------	-------------	---------	-----------	-----------	-----------	-----------	------	------

lower contact is sharp and the upper contact is diffuse over 10 centimetres. The groundmass is similar to the unit described above.

110.70 134.00 DACITE

Light gray to dark gray, variably bleached with 10 to 30%, euhedral to subhedral plagioclase plagioclase feldspar phenocrysts up to 5 millimetres in diameter. locally trace biotite phenocrysts up to 2 millimetres long.

1 to 2% of the unit is intensely bleached as sub rounded masses to 5 centimetres in diameter, with sharp to diffuse contacts. These bleached zones contain less than 1% quartz phenocrysts up to 3 millimetres in diameter. possibly intrusive.

110.70 111.70 Highly porphyritic dacite with sharp contacts.  
Foot of hole

110.70	114.50	3.80	NS									
114.50	115.50	1.00	FX 692851	N/A	N/A	N/A	N/A	N/A	N/A			
115.50	122.00	6.50	NS									
122.00	123.00	1.00	FX 692852	N/A	N/A	N/A	N/A	N/A	N/A			
123.00	128.50	5.50	NS									
128.50	129.50	1.00	FX 692853	N/A	N/A	N/A	N/A	N/A	N/A			
129.50	134.00	4.50	NS									

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INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG

PRINT DATE : 12-JAN-1995 11:44

BOREHOLE : 82449  
 PROJECT : KNEE LAKE  
 PROPERTY NAME: KNEE LAKE  
 Latitude : 4600.00N  
 NTS/Quadr : 53L15  
 Country : CANADA  
 Prov./state : MANITOBA  
 Twp/County :  
 Claim # : CIN 3 - W53283

Departure : 1650.00M  
 Logged by : D. Car  
 Drilled by : MIDWEST DRILLING  
 Drill type : BBS 17  
 Core size : BQ  
 Section : 4600

Elevation : 10000.00m  
 Assay req. : Cu,Zn,Ag,Au  
 Test Method : ACID  
 Started : MARCH 21, 1994  
 Completed : MARCH 22, 1994  
 Grid name : CANICO

Hole length : 110.30m  
 Level : SURFACE  
 Dip : -45.00  
 BL azimuth : 045  
 BH bearing : 270  
 Heading :

DEVIATION RECORDS

depth	azm	dip	depth	azm	dip	depth	azm	dip
0.00	315.00	-45.00	19.00	315.00	-47.00	75.00	315.00	-47.00
						110.00	315.00	-50.00

COMMENTS : LEFT IN HOLE: ALL CASING REMOVED.

FROM	TO	DESCRIPTION	FROM	TO	LENGTH	SAMPLE#	CU	ZN	AU	AG	MIN%	CANG
m	m		m	m	m		PPM	PPM	PPB	PPM		
0.00	12.60	OVERBURDEN Clay, sand, and a few boulders.	0.00	12.60	12.60	NS						
12.60	15.90	CHLORITE SCHIST Sheared, calcite rich chloritic schist with trace pyrite.	12.60	13.20	0.60	NS					Tr	
			13.20	15.90	2.70	NS						

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**INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG**

FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPH	ZN PPH	AU PPB	AG PPH	MIN%	CANG
		Foliation at 10 to 20 degrees to core axis. Narrow, locally brecciated quartz veins up to several centimetres wide sub parallel to core axis comprise 50% to 60%. Some broken core, possible boulder of medium grained basalt ? and rubbly chlorite schist.										
15.90	22.20	<b>22.20 ANDESITE</b>			6.30	NS						
12.60	13.20	Fine grained, locally brecciated and foliated, with some thin chlorite stringers along foliation planes. Weak foliation at 30 degrees to core axis. 7 to 10% calcite as irregular veinlets up to 2 centimetres wide, predominantly sub parallel to core axis. the upper contact is sharp.										
22.20	29.70	<b>29.70 DACITE</b>			4.00	NS						
		Very fine grained medium gray to locally bleached, siliceous, with 2% calcite veinlets up to 6 millimetres wide at variable angles to core axis. epidote alteration, brecciated quartz vein, and pyrite from 29.60 to 29.70.	22.20	26.20	0.70	FX 692854	N/A	N/A	N/A	N/A		
26.20	29.70	<b>33.50 DIKE</b>			3.80	NS						
29.70	33.50	Very fine grained, dark gray mafic dike, weakly magnetic with minor	26.90	29.70	2.80	NS						

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**INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG**

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FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MIN%	CANG
		calcite veinlets and 1 to 2% fine grained disseminated pyrrhotite. Several% unidentifiable medium gray alteration ? spots up to 3 millimetres in diameter. Lower contact is sharp										
33.50	35.47		33.50	35.47	1.97	NS					-	-
35.47	36.97		35.47	36.97	1.50	FX 692803	N/A	N/A	N/A	N/A	Tr	-
36.97	38.45		36.97	38.45	1.48	FX 692804	N/A	N/A	N/A	N/A	Tr	-
33.50	38.45	<b>38.45 38.45 DACITE</b> magnetically but visually indistinct. fine grained, massive, light gray, bleached (altered ?), siliceous with 3 to 5% very irregular calcite veinlets up to 4 millimetres wide at variable angles to core axis. Lower contact is sharp.										
38.45	39.20	<b>38.45 39.20 SEDIMENT</b> The unit consists of an upper 40 centimetre weakly sheared chloritic siltstone ? or possibly sheared dacite ?, and a lower 35 centimetre section composed of intensely brecciated white to light gray siltstone ? and chloritic mudstone. Most fragments are white siltstone ranging from 3 to 5 millimetres in diameter, and are sub rounded. The matrix comprises about 30% and is dark gray wispy chloritic mudstone ? the upper contact and lower contact are sharp.										
		38.90 39.20 Brecciated siltstone and	38.45	39.20	0.75	FX 692290	162.	136.	<5.	<0.400	Tr	-

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**INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG**

FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPH	MIN%	CANG
		white quartz vein.										
39.20	40.20	<b>49.15 MASSIVE SULFIDE</b> Fine grained to locally medium grained crystalline pyrite with 5 to 10% wispy and irregular inclusions of highly magnetic siltstone ? or possibly fine grained tuff ? the inclusions are up to 3 centimetres wide, but commonly are less than 5 millimetres wide, and are oriented sub parallel to a weak foliation trending 45 degrees to core axis. the inclusions contain fine grained disseminated pyrrhotite and some magnetite. Less than 2% magnetite occurs as massive irregular blebs up to 5 millimetres wide. 1 to 2% calcite occurs as disseminated blebs and rare stringers up to 3 millimetres wide.	39.20	40.20	1.00	FX 692291	11.	122.	15.	0.800	50	143
40.20	41.20		40.20	41.20	1.00	FX 692292	85.	28.	<5.	0.800	95	-
41.20	42.20		41.20	42.20	1.00	FX 692293	39.	28.	<5.	0.800	90	-
42.20	43.20		42.20	43.20	1.00	FX 692294	47.	18.	<5.	0.800	95	-
43.20	44.20		43.20	44.20	1.00	FX 692295	37.	16.	<5.	0.400	95	-
44.20	45.20		44.20	45.20	1.00	FX 692296	50.	28.	<5.	0.800	90	-
45.20	46.20		45.20	46.20	1.00	FX 692297	54.	30.	<5.	0.400	90	-
46.20	47.20		46.20	47.20	1.00	FX 692298	54.	16.	<5.	0.800	95	-
47.20	48.20		47.20	48.20	1.00	FX 692299	30.	16.	<5.	1.200	95	-
48.20	49.15		48.20	49.15	0.95	FX 692300	31.	28.	<5.	0.800	95	-
49.15	50.20	<b>52.00 MASSIVE SULFIDE</b> Fine grained to medium grained, vuggy crystalline pyrite with 3 to 5% dark gray angular chloritic mudstone inclusions up to 4 centimetres in diameter. The vugs are up to 5 millimetre in diameter.	49.15	50.20	1.05	FX 692301	24.	50.	<5.	0.800	95	-
50.20	51.20		50.20	51.20	1.00	FX 692302	53.	18.	<5.	0.800	97	-
51.20	52.00		51.20	52.00	0.80	FX 692303	61.	142.	<5.	0.800	85	-

**INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG**

FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MIN%	CANG
52.00	52.37	52.37 DIKE Very fine grained, dark gray, siliceous dike with sharp contacts and chill margins. 1% garnet as crystals up to 7 millimetres in diameter.	52.00	52.37	0.37	NS					Tr	-
52.37	53.40	52.37 57.23 MASSIVE SULFIDE Fine grained to coarse grained, vuggy crystalline pyrite with at least 3% magnetite as irregular stringers and blebs up to 6 millimetres wide. 1 to 3% vugs up to 5 millimetres in diameter, locally calcite filled ?. 1 to 2% disseminated calcite blebs up to 5 mms in diameter. 54.15 54.40 Inclusion of weakly brecciated chert. 56.40 57.23 Several inclusions of chert ? up to 3 centimetres in diameter and a 10 centimetre wide chloritic mudstone.	52.37	53.40	1.03	FX 692304	52.	18.	<5.	0.800	95	-
53.40	54.40		53.40	54.40	1.00	FX 692305	42.	18.	<5.	0.800	70	-
54.40	55.40		54.40	55.40	1.00	FX 692306	53.	20.	<5.	0.800	95	-
55.40	56.40		55.40	56.40	1.00	FX 692307	100.	40.	<5.	0.800	85	-
56.40	57.23		56.40	57.23	0.83	FX 692308	119.	32.	<5.	0.800	85	-
57.23	59.23	57.23 DIKE Fine grained to medium grained intermediate dike with 30 to 40% chloritized mafic crystals up to 2 millimetres in diameter and 60 to 70% plagioclase feldspar as subhedral to anhedral matrix to the mafic crystals. Lower contact has a 2 centimetres wide	57.23	59.23	2.00	NS					Tr	-



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**INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG**

FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MIN%	CANG
		chilled chloritic margin.										
57.23	57.57	Possibly fine grained, felsic dike.										
57.57	58.07	50% massive vuggy pyrite and dark green chloritic mudstones?, possibly a xenolith.										
<b>59.23</b>	<b>61.85</b>	<b>MASSIVE SULFIDE</b> Fine grained to coarse grained vuggy crystalline non-magnetic pyrite unit with 20% inclusions of dark gray chloritic siltstone up to 4 centimetres in diameter. The lower contact is very sharp.	59.23	60.50	1.27	FX 692309	91.	40.	<5.	1.200	70	-
			60.50	61.85	1.35	FX 692310	118.	40.	<5.	1.200	85	b62
<b>61.85</b>	<b>99.40</b>	<b>RHYOLITIC CRYSTAL TUFF</b> Medium to light gray, weakly to moderately foliated, siliceous rock with 7 to 10% plagioclase feldspar as subhedral to anhedral crystals up to 5 millimetres in diameter. Less than 1% angular and embayed quartz crystals up to 3 millimetres in diameter. Possibly fragmental with felsic fragments or sericite alteration zones up to 10 centimetres in diam with sharp to diffuse contacts. cut by numerous dark green, fine grained to medium grained mafic dikes from 10 to 70 centimetres wide. 61.85 62.90 Light gray, highly foliated,	61.85	62.90	1.05	FX 692805	N/A	N/A	N/A	N/A	tr	ct63
			62.90	64.33	1.43	FX 692806	N/A	N/A	N/A	N/A	Tr	-
			64.33	83.00	18.67	NS					-	-
			83.00	84.00	1.00	FX 692855	N/A	N/A	N/A	N/A	-	-
			84.00	92.00	8.00	NS					-	-
			92.00	93.00	1.00	FX 692856	N/A	N/A	N/A	N/A	-	-
			93.00	99.40	6.40	NS					-	-

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INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG

FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPH	MIN%	CANG
		sericitized rhyolitic crystal tuff. Degree of shearing decreases down hole.										
64.33	64.50	Fine grained, dark green mafic dike.										
66.40	67.10	Mafic dike with fine grained margins and a medium grained core.										
68.60	68.90	Mafic dike.										
73.13	73.38	Mafic dike.										
84.70	86.00	5 to 7% rounded quartz phenocrysts up to 5 millimetres in diameter.										
89.55	90.10	Fine grained to medium grained mafic dike.										
96.40	99.40	Predominantly fine grained, massive medium gray unit with 3% angular, rounded and embayed quartz crystals.										
99.40	104.50	5.10 NS										
104.50	105.60	1.10 FX 692857							N/A	N/A	N/A	
99.40	105.60	<b>99.40 105.60 RHYOLITIC CRYSTAL TUFF</b> Black to dark gray to locally mottled light gray, very siliceous plagioclase feldspar rich, rhyolitic crystal tuff. 5 to 7% subhedral to euhedral plagioclase feldspar from 3 to 6 millimetres long, and 15 to 20% subhedral plagioclase feldspar from less than 1 millimetre to 3 mms long. Many of the larger crystals contain pink cores, and some of the smaller crystals are completely										

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INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG

FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPH	ZH PPH	AU PPB	AG PPH	MIN%	CANG
		pink. 1 to 2% quartz crystals up to 4 millimetres in diameter. the matrix is very fine grained to fine grained, locally sericitized and weakly chloritic. less than 1% quartz veins up to 1 centimetre wide at 30 degrees to core axis. upper contact and lower contact are sharp over 1 to 2 centimetres.	105.60	108.00	2.40	NS						
		105.60 110.30 RHYOLITIC CRYSTAL TUFF As at 61.85. Up to 20% plagioclase feldspar as subhedral crystals up to 8 millimetres long. Foot of hole	108.00	109.00	1.00	FX 692858	N/A	N/A	N/A	N/A		
			109.00	110.30	1.30	NS						

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### INCO EXPLORATION AND TECHNICAL SERVICES INC. DRILL LOG

PRINT DATE : 12-JAN-1995 11:44

BOREHOLE : 82484-0  
 PROJECT : KNEE LAKE  
 PROPERTY NAME: KNEE LAKE  
 Latitude : 4300.00N  
 NTS/Quad : 53L15  
 Country : CANADA  
 Prov./state : MANITOBA  
 Twp/County :  
 Claim # : CIN 4 - W53284

Departure : 1325.00M  
 Logged by : D. Car  
 Drilled by : MIDWEST DRILLING  
 Drill type : BBS 17  
 Core size : BQ  
 Section : 4300 N

Elevation : 10000.00m  
 Assay req. : Cu, Zn, Ag, Au  
 Test Method : ACID  
 Started : MARCH 23, 1994  
 Completed : MARCH 26, 1994  
 Grid name : Canico

Hole length : 260.00m  
 Level : SURFACE  
 Dip : -45.00  
 RL azimuth : 045  
 BH bearing : 270  
 Heading :

#### DEVIATION RECORDS

depth	azm	dip	depth	azm	dip	depth	azm	dip
0.00	315.00	-45.00	11.00	315.00	-47.00	71.00	315.00	-48.00
191.00	315.00	-46.00	260.00	315.00	-43.00	131.00	315.00	-46.00

COMMENTS : LEFT IN HOLE: 20 FEET OF B CASING AND SHOE.

FROM	TO	DESCRIPTION	FROM	TO	LENGTH	SAMPLE#	CU	ZN	AU	AG	MINX	CANG
m	m		m	m	m		PPM	PPM	PPB	PPM		
0.00	5.70	OVERBURDEN Clay.	0.00	5.70	5.70	NS						
5.70	11.05	ANDESITE Fine grained, massive to locally weakly foliated, medium gray	5.70	7.50	1.80	NS						
			7.50	9.50	2.00	FX 692807	N/A	N/A	N/A	N/A		

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**INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG**

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FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	NI% %	CANG
9.50	11.05	with less than 1% light greenish gray alteration spots up to 3 millimetres in diameter which have diffuse contacts. 1% calcite veinlets up to 4 millimetres wide sub parallel to a weak foliation. fine grained, light gray massive to locally very weakly foliated. Several% very fine grained calcite disseminated throughout the rock. 1 to 2% calcite as veinlets up to 3 millimetres wide, sub parallel to weak foliation. 1 to 2% very fine grained disseminated pyrrhotite. Upper contact and lower contact are sharp.	9.50	11.05	1.55	FX 692808	N/A	N/A	N/A	N/A	N/A	-
11.05	13.20	<b>11.05 13.20 IRON FORMATION</b> 9.00 11.05 Boudinaged and locally brecciated, light to medium gray chert interbedded with 10 to 15% magnetite rich chloritic mudstone and local magnetite bands and stringers. Most bedding contacts sheared. 1 to 2% pyrite as disseminated crystals and as a few irregular clots up to several centimetres in diameter. 11.05 12.55 Beds are less than 2 centimetres thick. individual beds of chert and magnetite rich mudstone or possibly siltstone are up to 20 centimetres thick.	11.05	13.20	2.15	FX 692311	76.	70.	<5.	<0.400	1	-
13.20	20.02	<b>13.20 20.02 CHERT</b>										

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**INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG**

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FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPH	MINZ	CANE
13.20	14.70	1.50	FX 692312	118.	52.	<5.	<0.400	3	;
14.70	16.20	1.50	FX 692313	316.	102.	15.	0.800	10	f65
16.20	17.70	1.50	FX 692314	186.	52.	25.	0.800	5	-
17.70	19.20	1.50	FX 692315	164.	50.	<5.	<0.400	2	;
19.20	20.02	0.82	FX 692316	221.	60.	<5.	<0.400	3	;

Highly brecciated and boudinaged to massive, light to dark gray chert interbedded with 15 to 20% siltstone and 15 to 20% pyrite. 5% quartz as highly brecciated veins. The chert occurs as fragments up to 15 centimetres in diameter. the siltstone occurs as discrete beds up to 2 centimetres thick, and as highly foliated and brecciated zones up to 30 centimetres thick. The pyrite occurs as irregular stringers up to 5 millimetres wide and as irregular vuggy masses up to 15 centimetres wide. The pyrite commonly occurs as matrix to the brecciated chert. The unit is not magnetic.

**20.02 31.40 SILICATE IRON FORMATION**

20.02 31.40 11.38 NS

Tr

Weakly contorted and brecciated chert beds up to 25 centimetres thick interbedded with 15% magnetic green chloritic mudstone beds up to 30 cms thick & 5% Pyritic mudstone beds up to 10 centimetres thick. trace to 1% fine grained garnet magnetite is very fine grained and disseminated within the mudstone. trace pyrite as a few irregular stringers mainly within the graphitic mudstone.

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**INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG**

82484-0

FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MIN%	CANG
31.40	34.15	<b>31.40 34.15 CHERT</b> 60% gray chert interbedded with 30% weakly graphitic mudstone, minor siltstone and 10% pyrite. The chert is light gray to black and occurs as weakly boudinaged bands up to 30 centimetres wide. Weakly graphitic mudstone occurs as beds up to 3 centimetres thick. Contacts are moderately sheared and diffuse. pyrite occurs as irregular stringers up to 8 millimetres wide and as semi-massive bands up to 10 centimetres wide. Contacts with upper and lower units are gradational.	31.40	32.90	1.50	FX 692317	316.	124.	10.	0.800	4	b60
32.90	34.15		32.90	34.15	1.25	FX 692318	375.	880.	65.	0.800	5	-
34.15	36.70	<b>34.15 36.70 MUDSTONE</b> Highly conductive, graphitic black mudstone interbedded with 10% white boudinaged chert as beds up to 4 centimetres wide. 2% pyrite as irregular stringers sub parallel to foliation and as irregular clots up to 1 centimetre in diameter. Trace calcite as boudinaged veinlets at variable angles to core axis.	34.15	36.70	2.55	FX 692319	363.	2916.	5.	0.800	2	-
36.70	37.75	<b>36.70 37.75 CHERT</b> 65% white to light gray chert interbedded with 25% black,	36.70	37.75	1.05	FX 692320	556.	2200.	<5.	0.800	8	b60

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INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG

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FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPH	ZN PPH	AU PPB	AG PPH	MIN%	CANG
		weakly graphitic mudstone beds up to 10 centimetres thick. 15% pc as mass to semi-massive bands up to 7 centimetres thick, predominantly associated with										
37.75	39.80	39.80 CHERT brecciated chert. fine grained weakly recrystallized white chert interbedded with less than 5% chloritic mudstone or siltstone as beds up to 2 centimetres wide. trace pyrrhotite and pyrite as stringers. 39.40 a 1 millimetre wide stringer of chalcopyrite.	37.75	39.80	2.05	FX 692321	565.	474.	<5.	<0.400	Tr	-
39.80	41.40	41.40 SILICATE IRON FORMATION Heavily to locally highly brecciated and sheared gray chert interbedded with about 30% magnetic, light green chloritic mudstone. chert beds are up to 2 centimetres wide and mudstone beds are up to 1 centimetre wide with 1% pyrite as irregular clots up to 2 centimetres wide. 41.10 41.40 Highly brecciated with 50% pyrrhotite as massive and wispy bands and a few wispy stringers up to 2 millimetres wide.	39.80	41.40	1.60	FX 692322	1113.	1284.	<5.	<0.400	6	-
41.40	97.20	97.20 BASALT Predominantly very fine	41.40	42.90	1.50	FX 692809	N/A	N/A	N/A	N/A	Tr	-

82484-0



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INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG

82484-0

FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPH	MIN%	CANG
-----------	---------	-------------	-----------	---------	-------------	---------	-----------	-----------	-----------	-----------	------	------

up to 5 millimetres long. Trace pyrite, weakly to moderately magnetic. Contacts are highly sheared at 20 to 30 degrees to core axis.

101.10 116.80 BASALT

Fine grained to medium grained, very massive with 1 to 2% irregular quartz calcite veinlets and veins up to 3 centimetres wide at variable angles to core axis with associated bleaching in adjacent wallrock. Trace pyrrhotite as a few blebs and stringers.

101.10 116.80 15.70 NS

116.80 153.60 BASALT

Very fine grained to fine grained, predominantly dark gray, moderately foliated and locally weakly to highly brecciated. Possible pillowed. 1 to 2% quartz and calcite veinlets and veins from less than 1 millimetre to 10 centimetres wide; at variable angles to core axis with associated highly bleached and altered zones up to 15 centimetres wide. Foliation varies from 35 to 50 degs to

116.80 153.60 36.80 NS

cax.  
116.80 118.60 Highly brecciated and locally intensely foliated. Possible flowtop breccia.

82484-0

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INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG

82484-0

FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MIN%	CANG
130.10	130.25	Fine grained, light green, very siliceous, pyrrhotite rich massive sediment ? or dike ?. Contacts are very shrp.										
152.00	152.50	Foliation at 65 degrees to core axis.										
153.60	186.30	<b>BASALT</b> Fine grained to medium grained predominantly dark gray very massive basalt. as at 101.10, less than 1% quartz veins up to 3 centimetres wide, less than 1% feldspathic alteration as bands up to 1.5 centimetres wide associated with quartz veinlets. Most alteration bands are parallel to a very weak foliation at 52 degrees to core axis. the unit is very weakly magnetic in places. Lower contact is very sharp and chloritic. fine grained, light gray, massive, siliceous sediment ? or dike ? with several% very fine grained disseminated pyrrhotite. contacts are very sharp. Weakly magnetic. fine grained to medium grained, gray to dark gray and massive basalt to andesite. The grain size gradually increases down hole. The l. almost 10 to 20 centimetres are fine grained to very fine grained.	153.60	186.30	32.70	NS						

82484-0

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INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG

FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MIN%	CANG
		very fine grained to locally medium grained, massive, with local highly foliated zones up to 15 centimetres wide at 50 degrees to core axis.										
186.30	260.00	<b>BASALT</b>	186.30	225.20	38.90	NS						
177.15	186.30	Fine grained to very fine grained, variably mottled dark green to dark gray to locally, light gray possible pillowed flow or flows with some pillow breccia. Weakly to strongly foliated, in zones up to 40 centimetres wide with more than 10% chlorite and minor biotite. Trace variolites up to 5 millimetres in diameter. 3 to 5% variably plag feldspathized zones to 10 centimetres wide, commonly associated with thin quartz calcite veinlets or clots.	225.20	227.10	1.90	FX 692323	479.	1134.	<5.	<0.400	15	105
		188.0 very fine grained to fine grained, with sharp to diffuse contacts at 50 degrees to core axis, less than 1% quartz and calcite veinlets at variable angles to core axis. Trace pyrrhotite and pyrite. highly sheared, variably chloritic and locally brecciated, very fine grained to fine grained basalt. Most of the unit exhibits a foliation that is 5 to 10 degrees to core axis. 1% quartz and calcite veinlets up to 1 centimetre	227.10	260.00	32.90	NS					TF	

82484-0

INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG

82484-0

FROM	TO	DESCRIPTION	FROM	TO	LENGTH	SAMPLE#	CU	ZN	AU	AG	MIN%	CANG
m	m		m	m	m		PPM	PPM	PPB	PPM		
		wide at variable angles to core axis.										
225.20	227.10	15% pyrrhotite as stringers and irregular clots up to 2 centimetres in diameter. Trace chalcocopyrite as irregular blebs up to 3 millimetres wide.										
227.10	228.75	Fine grained to medium grained, dark gray, variably brecciated, foliated and chloritic.										
250.00	252.50	Very fine grained, dark gray, massive with up to 20 quartz -filled round amygdulites ? from up to 5 mms diameter.										
		Foot of hole										

82484-0

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82485-0

### INCO EXPLORATION AND TECHNICAL SERVICES INC. DRILL LOG

PRINT DATE : 12-JAN-1995 11:44

BOREHOLE : 82485-0  
 PROJECT : KNEE LAKE  
 PROPERTY NAME: KNEE LAKE  
 Latitude : 4300.00N  
 NTS/Quad : 53L15  
 Country : CANADA  
 Prov./state : MANITOBA  
 Twp/County :  
 Claim # : KNEE 15 - W49903

Departure : 1125.00W  
 Logged by : D. Car  
 Drilled by : MIDWEST DRILLING  
 Drill type : BBS 17  
 Core size : 80  
 Section : 4300N

Elevation : 10000.00m  
 Assay req. : Cu,Zn,Ag,Au  
 Test Method : ACID  
 Started : MARCH 27, 1994  
 Completed : MARCH 28, 1994  
 Grid name : CANICO

Hole length : 128.00m  
 Level : SURFACE  
 Dip : -50.0  
 BL azimuth : 045  
 BH bearing : 270  
 Heading :

#### DEVIATION RECORDS

depth	azm	dip	depth	azm	dip	depth	azm	dip
0.00	315.00	-50.00	11.00	315.00	-51.00	71.00	315.00	-52.00
						128.00	315.00	-53.00

COMMENTS : LEFT IN HOLE: 18 FEET OF BW CASING AND SHOE.

FROM	TO	DESCRIPTION	CU	ZN	AU	AG	MIN%	CANG
m	m		PPM	PPM	PPB	PPM		
0.00	5.70	OVERBURDEN Clay.						
5.70	88.88	GABBRO Coarse grained dark gray green, weakly to highly foliated, 60 to 70% equi hornblende crystals up to 6						

82485-0

82485-0

**INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG**

82485-0

FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MIN%	CANG
		millimetres in diameter, in a very chloritic fine grained sheared matrix. Less than 1% fine grained leucoxene crystals up to 2 millimetres long associated with feldspathic alteration. 4% anhedral plagioclase feldspars up to a few millimetres long occur in some sections. 1 to 2% quartz calcite veins and veinlets. medium grained, weakly foliated, dark gray, not magnetic with less than 1% quartz calcite veinlets up to 6 millimetres wide sub parallel to foliation. Lower contact is gradational over 10 centimetres.										
88.88	105.60	<b>BASALT</b>	88.88	102.60	13.72	NS						
		5.70 8.00 Very fine grained locally medium grained, dark gray to locally light to medium gray, massive, and very chloritic. 1% quartz carbonate veinlets up to 4 millimetres wide at variable angles to core axis. 1 to 2% white feldspathic alteration zones up to 15 centimetres wide at variable angles to core axis. Upper contact is sheared.	102.60	104.10	1.50	FX 692811	N/A	N/A	N/A	N/A	N/A	Tr
			104.10	105.60	1.50	FX 692812	N/A	N/A	N/A	N/A	N/A	Tr
105.60	110.80	<b>MUDSTONE</b>	105.60	107.20	1.60	FX 692324	88.	180.	<5.	1.200		Tr
		Very fine grained, black, weakly graphitic, poorly conductive, highly foliated and boudinaged mudstone	107.20	108.90	1.70	FX 692325	101.	266.	<5.	0.800		10
			108.90	109.60	0.70	FX 692326	148.	352.	<5.	<0.400		Tr

82485-0

82485-0

**INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG**

82485-0

FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MIN%	CANG
109.60	110.80	1.20	FX 692327	313.	292.	<5.	0.800	15	-
<p>with less than 3% very thin interbeds of light gray siltstone up to a few millimetres wide. 10% pyrite, mainly as a massive 13 centimetre wide, highly contorted band. 1 to 2% pyrite as irregular stringers up to 3 millimetres wide. 1% calcite as veinlets to 2 millimetres wide at variable angles to core axis. Veinlets are commonly folded.</p> <p>very fine grained, light gray, thickly bedded and variably sheared siltstone interbedded with 15% black mudstone as beds up to 15 centimetres thick. Trace wispy pyrite stringers to 2 millimetres wide. Less than 1% quartz and calcite veins as veins up to 1.5 centimetres wide.</p> <p>highly sheared and boudinaged gray siltstone with no internal structure. Several% very fine grained disseminated pyrrhotite and pyrite. Weakly to moderately magnetic.</p> <p>70% foliated and boudinaged, black, very weakly graphitic mudstone interbedded with 30% pyrite as semi-massive bands up to 30 centimetres wide and as irregular stringers up to 1 centimetre wide. Calcite rich fault breccia from 110.30 to 110.34.</p>									

110.80 111.70 MASSIVE SULFIDE

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**INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG**

FROM	TO	DESCRIPTION	FROM	TO	LENGTH	SAMPLE#	CU	ZN	AU	AG	MIN%	CANG
m	m		m	m	m		PPM	PPM	PPB	PPM		
110.80	111.70	85% foliated fine grained to medium grained crystalline pyrite with 15% foliated inclusions of black mudstone and minor gray siltstone up to 1 centimetre wide. Highly conductive.	23.	146.	0.90	FX 692328	23.	146.	30.	0.400	85	f60
111.70	114.90	<b>111.70 114.90 MUDSTONE</b> 70% black, weakly graphitic mudstone interbedded with 25% dark gray siltstone and 5 to 8% pyrite as stringers up to 2 centimetres wide sub parallel to foliation. The unit is foliated and variably contorted.	181.	700.	2.30	FX 692329	181.	700.	30.	<0.400	7	f58
114.00	114.90	114.00 114.20 Brown, intensely foliated, very siliceous with fragments of chert throughout. the brown colour is due to abundant very fine grained disseminated pyrrhotite.	168.	456.	0.90	FX 692330	168.	456.	<5.	<0.400	5r	-
114.20	114.50	Possibly chert. Light brown, very siliceous, highly magnetic, pyrrhotite rich.										
114.50	114.90	Intensely foliated and brecciated light brown pyrrhotite rich, magnetic and very siliceous unit with several% light gray wispy laminated chert ? or quartz vein ? with up to 1% pyrite as irregular stringers sub parallel to foliation. the lower contact is sheared and gradational over several centimetres.										

114.90 128.00 DACITE

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INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG

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FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MIN%	CANG
114.90	116.40	Very fine grained to fine grained, predominantly medium gray, siliceous, with a few very weakly altered light gray zones up to 20 centimetres wide. Local white to light gray feldspathic alteration zones up to 8 centimetres wide with sharp contacts generally associated with quartz or quartz calcite veinlets. Foot of hole	114.90	116.40	1.50	FX 692813	N/A	N/A	N/A	N/A	TF	-
116.40	117.90		116.40	117.90	1.50	FX 692814	N/A	N/A	N/A	N/A	TF	-
117.90	128.00		117.90	128.00	10.10	NS					TF	-

82485-0

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82486

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### INCO EXPLORATION AND TECHNICAL SERVICES INC. DRILL LOG

PRINT DATE : 12-JAN-1995 11:44

BOREHOLE : 82486  
 PROJECT : KNEE LAKE  
 PROPERTY NAME: KNEE LAKE  
 Latitude : 2800.00N  
 NTS/Quad : 53L15  
 Country : CANADA  
 Prov./state : MANITOBA  
 Twp/county :  
 Claim # : Claim 4 - W53284

Departure : 1575.00M  
 Logged by : D. Car  
 Drilled by : MIDWEST DRILLING  
 Drill type : BBS 17A  
 Core size : BQ  
 Section : 2800N

Elevation : 10000.00m  
 Assay req. : Cu,Zn,Ag,Au  
 Test Method : ACIL  
 Started : MARCH 29, 1994  
 Completed : MARCH 30, 1994  
 Grid name : CANICO

Hole length : 74.00m  
 Level : SURFACE  
 Dip : -45.00  
 BL azimuth : 045  
 BH bearing : 045  
 Heading :

#### DEVIATION RECORDS

depth	azm	dip	depth	azm	dip
0.00	90.00	-45.00	20.00	90.00	-49.00
74.00	90.00	90.00	74.00	90.00	-49.00

COMMENTS : LEFT IN HOLE: ALL CASING REMOVED.

FROM	TO	DESCRIPTION	FROM	TO	LENGTH	SAMPLE#	CU	ZN	AG	AU	PPB	PPM	MIN%	CANG
m	m		m	m	m		PPM	PPM	PPM	PPM				
0.00	15.80	OVERBURDEN clay, sand, and boulders up to 40 centimetres in diameter.	0.00	15.80	15.80	NS								
15.80	36.87	RHYOLITIC CRYSTAL TUFF highly variable colour, crystal content, and degree of	15.80	23.50	7.70	NS							Tr	
			23.50	24.50	1.00	FX 962859	N/A	N/A	N/A	N/A	N/A	N/A	Tr	

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**INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG**

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FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MIN%	CANG
		foliation.	24.50	32.50	8.00	NS					Tr	-
		Light gray to beige, weakly to intensely foliated at 85 degree to core axis. Porphyritic, with quartz and plagioclase feldspar phenocrysts. Locally possible lithic fragments.	32.50	34.00	1.50	FX 692815	N/A	N/A	N/A	N/A	Tr	-
		15.80 17.75 Predominantly light gray with minor beige zones up to 30 centimetres wide. Intensely foliated with 5 to 7% angular to sub rounded quartz crystals up to 4 millimetres in diameter and 2 to 3% subhedral plagioclase feldspar crystals up to 4 millimetres in diameter. Trace very fine grained disseminated pyrite.	34.00	35.50	1.50	FX 692816	N/A	N/A	N/A	N/A	Tr	-
		17.75 19.97 Predominantly beige, with 40% light gray zones up to 20 centimetres wide. matrix is very fine grained with 3 to 5% quartz crystals up to 4 millimetres long. Trace plagioclase feldspar crystals. Two intensely brecciated and highly deformed quartz veins up to 4 centimetres wide.	35.50	36.10	0.60	FX 692817	N/A	N/A	N/A	N/A	Tr	-
		19.97 20.20 White bull quartz vein.	36.10	36.87	0.77	FX 692818	N/A	N/A	N/A	N/A	Tr	485
		20.20 23.00 70% gray plagioclase rich bands, 5 centimetres to 15 centimetres wide interbedded with 30% beige quartz rich bnds up to 15 centimetres wide. 2 to 3% quartz crystals up to 3 millimetres in diameter and 2 to 3%										

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**INCO EXPLORATION AND TECHNICAL SERVICES INC.**  
**DRILL LOG**

82486

FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MIN%	CANG
		plagioclase feldspar crystals up to 7 millimetres long.										
		23.00 25.85 Predominantly very fine grained, beige with 20% to 30% very diffuse light gray zones. 2 to 3% quartz crystals and less than 1% plagioclase feldspar crystals. less than 1% quartz veins up to 1.5 centimetres wide sub parallel to weak foliation. fine grained banded intermediate dike ? with sharp contacts from 23.35 to 23.50.										
		25.85 35.50 Very fine grained, weakly mottled gray unit with less than 20% beige zones up to 10 centimetres wide. becoming dark gray down hole. 5 to 7% anhedral to subhedral plagioclase feldspar crystals up to 8 millimetres in diameter and less than 2% quartz crystals up to 3 millimetres in diameter in a very fine grained, massive matrix. the lower contact is gradational over 10 centimetres.										
		35.50 36.10 Beige, intensely foliated with 3% angular to sub rounded quartz crystals up to 4 millimetres long										
		36.10 36.87 Light gray, intensely foliated with 30% beige bands up to 2 centimetres wide. 3 to 5% angular to sub rounded quartz crystals up to 5 millimetres in diameter. The upper										

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INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG

FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MIN%	CANG
		contact is gradational over 10 centimetres and the lower contact is gradational over 15 centimetres.										
36.87	37.60	<b>36.87 37.60 MASSIVE SULFIDE</b> 60% brecciated fine grained to coarse grained crystalline pyrite as matrix to 10% Jark green chloritic fragments up to 4 centimetres wide. 3 to 5% magnetite as irregular clots up to 8 millimetres in diameter. Trace disseminated calcite. 25% sheared rhyolitic crystal tuff fragments, 15% pyrite as disseminated	36.87	37.60	0.73	FX 692331	222.	168.	<5.	0.800	60	-
37.60	39.50	<b>37.60 39.50 QUARTZ VEIN</b> crystals and as stringers of crystals. 40% white bull quartz as veins up to 30 centimetres wide interlayered with 50% pink medium grained pegmatite as bands up to 30 centimetres wide. 7% black mudstone as inclusions up to 8 centimetres wide. 2% pyrite as a 5 centimetre wide massive band. Less than 1% magnetite as several stringers up to 6 millimetres wide.	37.60	39.50	1.90	FX 692332	12.	94.	<5.	<0.400	2	-
39.50	40.68	<b>39.50 40.68 MASSIVE SULFIDE</b> 36.87 37.07 Fine grained to locally coarse grained crystalline foliated pyrite with 3 to 5% stretched	39.50	40.68	1.18	FX 692333	339.	238.	100.	0.800	80	-

INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG

FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MINX	CANG
		inclusions of chlorite (after mdst ?) up to 2 centimetres wide. 3% boudinaged and brecciated quartz veins up to 3 centimetres wide. 4 disseminated calcite and 7% magnetite as disseminated crystals and as rare veins up to 1.3 centimetres wide, parallel to foliation.										
40.68	40.87	40.87 40.87 QUARTZ VEIN Coarse grained pegmatitic quartz vein with local inclusions of siltstone and chloritic mudstone.	40.68	40.87	0.19	NS					Tr	-
40.87	45.04	40.87 45.04 ACTINOLITE CRYSTAL TUFF Intensely foliated to sheared, dark green to gray, thinly bedded to thickly bedded intermediate tuff with beds from less than 1 centimetre to at least 20 centimetres in thickness. Ranges from very fine grained with chloritic tops to medium grained plagioclase feldspar rich bases. At least 20% plagioclase. feldspar crystals from 1 to 2 millimetres in length. 5% light gray bands up to 2 centimetres wide, which may be alteration or possibly siltstone interbeds. 41.98 42.60 quartz vein with an 18 centimetre wide inclusion of actinolite	40.87	41.99	1.11	FX 692819	N/A	N/A	N/A	N/A	Tr	f87
			41.98	42.60	0.62	FX 692334	20.	56.	5.	<0.400	Tr	-
			42.50	44.10	1.50	FX 692820	N/A	N/A	N/A	N/A	Tr	f75
			44.10	45.04	0.94	NS					Tr	-

INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG

FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MIN%	CANG
		crystal tuff, and some pegmatitic inclusions up to 15 centimetres wide.										
45.04	48.40	<b>SEDIMENT</b> Highly sheared and boudinaged with 50% gray siltstone as beds up to 25 centimetres wide with no well defined internal bedding contacts. 15% quartz as veins to 13 centimetres wide, parallel to foliation. 15% dark green chloritic mudstone as boudinaged bands up to 2 centimetres wide. 15% pyrite as brecciated bands up to 9 centimetres wide. Less than 1% thinly laminated beige chert as contorted beds up to 1 centimetre wide.	45.04	46.04	1.00	FX 692335	228.	894.	5.	<0.400	1	-
			46.04	47.11	1.07	FX 692336	150.	138.	30.	<0.400	2	-
			47.11	48.40	1.29	FX 692337	307.	132.	<5.	<0.400	15	-

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**INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG**

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FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPH	NiX	CANG
		47.40 trace fuchsite.										
48.40	54.70	<b>ANDESITE</b> Fine grained to medium grained, light to medium gray and massive. Less than 1% quartz calcite veinlets at variable angles to core axis.	48.40	49.90	1.50	FX 692821	N/A	N/A	N/A	N/A	Tr	-
			49.90	51.40	1.50	FX 692822	N/A	N/A	N/A	N/A	Tr	-
			51.40	54.70	3.30	NS					Tr	-
54.70	56.03	<b>SEDIMENT</b> Thinly bedded to thickly bedded interbedded siltstone, mudstone, and chert. Locally weakly magnetic. beds range from a few millimetres to 5 centimetres thick. locally lean iron formation. Some of the thinner beds appear to be graded, and may be tuffaceous. 2 to 3% pyrite as disseminated crystals and as stringers up to 1 centimetre wide at variable angles to core axis. lower contact is sharp but upper contact is diffuse over 10 to 20 centimetres.	54.70	56.03	1.33	FX 692338	70.	98.	<5.	<0.400	1	;
56.03	56.40	<b>MASSIVE SULFIDE</b> 60% brecciated fine grained to coarse grained crystalline pyrite hosting 30% rounded fragments of recrystallized chert? or quartz vein up to 3 centimetres in diameter. 10% calcite as disseminated blebs up to 3	56.03	56.40	0.37	FX 692339	342.	50.	<5.	0.800	60	-

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**INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG**

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FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MIN%	CANG
56.40	57.90	<p><b>56.40 74.00 BASALT</b> Very fine grained to locally fine grained, dark green to dark gray, locally amygdaloidal and possibly pillowed. Banded with up to 7% light gray bands, possibly selvages up to 2 centimetres wide. The unit is highly stretched, so that nearly all bands are perpendicular to core axis. Less than 1% variably distributed stretched amygdules up to 3 millimetres long. Less than 1% quartz calcite veins up to 1 centimetre wide at variable angles to core axis. cut by numerous granodiorite dikes from 3 centimetres to 2 metres wide. The contacts of all dikes are very sharp and unaltered.</p> <p>58.40 58.60 Fine grained to medium grained, light gray granodiorite dike.</p> <p>61.93 63.90 Medium grained granodiorite with a salt and pepper texture, composed of 20% black biotite ? and 50% plagioclase feldspar phenocrysts up to 3 millimetres in diameter in a fine grained quartz rich matrix. Two inclusions of basalt up to 20 centimetres wide.</p> <p>65.22 66.30 Medium grained granodiorite as above, but with several very fine</p>	57.90	74.00	1.50	FX 692823	N/A	N/A	N/A	N/A	Tr	487
57.90	74.00		NS									Tr

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INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG

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FROM	TO	DESCRIPTION	FROM	TO	LENGTH	SAMPLE#	CU	ZN	AU	AG	MINX	CANG
m	m		m	m	m		PPM	PPM	PPB	PPM		
		grained light gray bands up to 10 centimetres wide.										
68.15	69.00	Medium grained gray salt and pepper textured granodiorite, pink medium grained granite and irregular quartz veins to 7 centimetres wide.										
69.90	70.40	Pink medium grained porphyritic granite or granodiorite with plagioclase feldspar phenocrysts up to 4 millimetres in diameter. Less than 3% mafic mins. 4 narrow granodiorite dikes rimmed by 1 to 3 millimetre wide light gray alteration zones.										
72.30	74.00	Foot of hole										

82486

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INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG

PRINT DATE : 12-JAN-1995 11:44

BOREHOLE : 82487-0  
 PROJECT : KNEE LAKE  
 PROPERTY NAME: KNEE LAKE  
 Latitude : 1600.00N  
 NTS/Quad : 53L15  
 Country : CANADA  
 Prov./state : MANITOBA  
 Twp/County :  
 Claim # : KNEE 17 - W49905

Departure : 155.00W  
 Logged by : D. Car  
 Drilled by : MIDWEST DRILLING  
 Drill type : BBS 17A  
 Core size : BQ  
 Section : 1600N

Elevation : 10000.00m  
 Assay req. : Cu,Zn,Ag,Au  
 Test Method : ACID  
 Started : MARCH 31, 1994  
 Completed : APRIL 3, 1994  
 Grid name : CANICO

Hole length : 229.60m  
 Level : SURFACE  
 Dip : -45.0  
 BL azimuth : 045  
 BH bearing : 270  
 Heading :

DEVIATION RECORDS

depth	azm	dip	depth	azm	dip	depth	azm	dip
0.00	315.00	-45.00	14.00	315.00	-48.00	74.00	315.00	-49.00
194.00	315.00	-46.00				134.00	315.00	-47.00

COMMENTS : LEFT IN HOLE: ALL CASING REMOVED.

FROM	TO	DESCRIPTION	FROM	TO	LENGTH	SAMPLE#	CU	ZN	AU	AG	MIN%	CANG
m	m		m	m	m		PPM	PPM	PPB	PPM		
0.00	7.90	OVERBURDEN clay.	0.00	7.90	7.90	NS						
7.90	140.10	GABBRO Fine grained to coarse grained, massive, medium gray to dark	7.90	134.20	126.30	NS					Tr	
			134.20	135.70	1.50	FX 692824	N/A	N/A	N/A	N/A	Tr	

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**INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG**

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FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPH	MIN%	CANG
135.70	137.20	1.50	FX 692825	N/A	N/A	N/A	N/A	Tr	-
137.20	138.25	1.05	FX 692826	N/A	N/A	N/A	N/A	Tr	-
138.25	140.10	1.85	FX 692827	N/A	N/A	N/A	N/A	Tr	-
<p>gray green and locally very weakly foliated. hornblende crystals are 2 to 4 millimetres in diameter and comprise up to 90% of the rock. Subhedral plagioclase up to 3 millimetres diameter comprises less than 10% to 30% in numerous zones up to 4 metres wide. trace leucoxene, several% chlorite, not magnetic with less than 1% quartz carbonate veinlets and veins up to 10 centimetres wide at variable angles to core axis.</p> <p>40.88 41.54 Lamprophyre dike with sharp chilled contacts. 10% biotite phenocrysts up to 5 millimetres in diameter and 30% light green plagioclase feldspar ? phenocrysts up to 6 millimetres in diameter in a very fine grained dark gray brown matrix.</p> <p>46.30 47.05 Inclusion of fine grained, dark gray basalt with 5 centimetre and 10 centimetre wide quartz carbonate veins along upper contact and lower contact.</p> <p>47.05 47.15 Fault gouge.</p> <p>50.10 50.17 Bull quartz vein with less than 1% chalcopyrite as blebs up to 4 millimetres in diameter.</p> <p>137.20 139.15 Fine grained to very fine grained, locally weakly foliated, light gray and bleached. the upper contact</p>									

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INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG

FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MIN%	CANG
		is very gradational and the lower contact is very sharp.										
		139.15 139.35 Graphitic mudstone and chert.										
		139.60 139.64 Brecciated chert and graphitic mudstone.										
		<b>140.10 154.40 IRON FORMATION</b>										
		Lean iron formation composed of 60 to 80% white to light gray chert, 30% dark gray magnetic mudstone, and 10% graphitic mudstone. The chert occurs as bands from 1 to 15 centimetres wide, the magnetic mudstone as bands from 1 millimetre to 10 centimetres wide, and the graphitic mudstone as a few bands up to 35 centimetres wide. Less than 1% pyrrhotite as irregular stringers and blebs within the graphitic mudstone.	140.10	141.60	1.50	FX 692340	453.	536.	<5.	<0.400	Tr	b50
		Locally weakly brecciated mainly within the graphitic mudstone. trace to 25% very fine grained yellow beige mineral as alteration bands up to 2 millimetres wide along contacts between the chert and magnetic mudstone beds.	141.60	142.87	1.27	FX 692341	127.	132.	<5.	<0.400	Tr	-
		very graphitic, highly brecciated and boudinaged mudstone with 10% boudinaged chert and quartz veins up to 4 centimetres wide, 7% pyrrhotite as irregular stringers and brecciated	142.87	144.00	1.13	FX 692342	612.	3786.	<5.	<0.400	1	-
			144.00	144.75	0.75	FX 692343	3057.	2662.	10.	0.800	7	-
			144.75	146.25	1.50	FX 692344	221.	58.	<5.	<0.400	Tr	-
			146.25	147.75	1.50	FX 692345	157.	74.	<5.	<0.400	Tr	-
			147.75	148.83	1.08	FX 692346	424.	588.	<5.	<0.400	Tr	b63
			148.83	149.65	0.82	FX 692347	702.	8596.	<5.	0.800	3	-
			149.65	151.15	1.50	FX 692348	223.	224.	<5.	<0.400	tr	-
			151.15	151.65	0.50	FX 692349	58.	64.	<5.	<0.400	Tr	-
			151.65	154.40	2.75	FX 692350	180.	98.	<5.	<0.400	Tr	b60

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INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG

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FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MINX	CANG
-----------	---------	-------------	-----------	---------	-------------	---------	-----------	-----------	-----------	-----------	------	------

bands up to 3 centimetres wide, and trace chalcopyrite as irregular wispy blebs up to 2 millimetres wide, intimately associated with the pyrrhotite.

highly boudinaged and brecciated with 25% brecciated chert and 25% pyrrhotite as stringers and as a brecciated mass up to 10 centimetres wide.

144.50 144.60 Massive siltstone ? with at least 30% very fine grained disseminated pyrrhotite.

144.60 144.75 Weakly brecciated massive chert. chalcopyrite occurs as stringers and fractures fillings up to 3 millimetres wide at variable angles to core axis and as irregular blebs up to a few millimetres in diameter within the pyrrhotite. Well bedded to locally brecciated lean iron formation composed of 50% white chert as beds up to 20 centimetres wide interbedded with up to 20%, 5 millimetre to 12 centimetre wide beds of very fine grained yellow beige alteration mineral and minor fine grained disseminated magnetite crystals. Some of the magnetite bearing beds are dominated by very fine grained light gray siltstone ?. minor inclusions of graphitic mudstone up to 4 millimetres wide occur within the

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**INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG**

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FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MIN%	CANG
		brecciated chert.										
		very graphitic, highly boudinaged and locally highly brecciated with less than 10% brecciated, light gray siliceous siltstone ? 1 to 2% pyrrhotite and pyrite as stringers up to 3 millimetres wide, 1% calcite veins up to 4 millimetres wide, sub parallel to foliation. trace chalcocopyrite as a few blebs up to a few millimetres in diameter.										
154.40	156.45	<b>MUDSTONE</b>	154.40	155.45	1.05	FX 692351	1199.	5044.	<5.	1.600	Tr	-
155.45	156.45	148.83 149.65 Very graphitic, weakly boudinaged and brecciated mudstone interbedded with 10% light gray siltstone beds from less than 1 millimetre to 2 centimetres wide. Less than 1% quartz carbonate veinlets up to 4 millimetres wide, parallel to foliation. less than 1% pyrite as irregular clots up to 8 millimetres wide.	155.45	156.45	1.00	FX 692352	1320.	6922.	<5.	2.400	3	-
156.45	156.10	155.45 156.10 As above, with 3 to 5% pyrite and minor pyrrhotite.										
156.10	156.17	Brecciated quartz calcite with trace chalcocopyrite and sphalerite as blebs.										
156.45	160.10	<b>DACITE</b> Massive, very fine grained	156.45	156.00	1.55	FX 692828	N/A	N/A	N/A	N/A	Tr	-

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INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG

FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPH	MINX	CANC
158.00	160.10	to fine grained purple gray massive flow. Locally, very weakly brecciated and very weakly foliated. dark gray alteration as irregular splotches from a few millimetres to several centimetres in diameter. 2% irregular calcite veinlets and veins up to 3 centimetres in diameter at variable angles to core axis.	158.00	160.10	2.10	FX 692829	N/A	N/A	N/A	N/A	Tr	-
160.10	161.00	160.10 163.43 DACITE LAPILLI TUFF Possibly dacite tuff breccia. Strongly deformed fragments include very angular chert up to 2 centimetres in diameter, light gray altered ? dacite or possibly rhyodacite up to several centimetres in diameter. Fragments locally have sharp to diffuse contacts, and contain elliptical gray spherulites ? up to 1 centimetre diameter, rimmed by yellow beige alteration. 160.95 sheared with trace fuchsite.	160.10	161.00	0.90	FX 692830	N/A	N/A	N/A	N/A	Tr	-
161.00	163.43		161.00	163.43	2.43	FX 692831	N/A	N/A	N/A	N/A	Tr	-
163.43	164.25	163.43 164.25 MASSIVE SULFIDE Highly brecciated, composed of 60% pyrite, 30% pyrrhotite and 10% chert. The pyrite is fine grained to coarse grained, subhedral and as very fine grained botryoidal masses up to 2 centimetres in diameter. Pyrrhotite is	163.43	164.25	0.82	FX 692353	367.	436.	<5.	0.800	90	-



**INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG**

FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MINX	CANG
		very fine grained and occurs as irregular stringers and as matrix to pyrite, and as a massive 25 centimetre wide band at the base of the unit. The chert occurs as sub rounded clasts up to 4 centimetres in diameter.										
		<b>164.25 166.25 DACITE</b> Gray, massive to locally foliated and locally fragmental. upper contact is sharp, but lower contact is more diffuse.	164.25	166.25	2.00	FX 692332	N/A	N/A	N/A	N/A	Tr	-
		166.05 166.25 Several inclusions of graphitic mudstone.										
		<b>166.25 173.78 IRON FORMATION</b> Lean iron formation composed of 80% white chert as beds up to 25 centimetres wide, interbedded with 15% highly magnetic light green to dark gray siltstone 2 beds from 2 millimetres to 3 centimetres wide. very graphitic, highly foliated mudstone with 10% light gray siltstone interbeds up to 2 centimetres wide. 2% calcite veinlets up to 4 millimetres wide, parallel to foliation. 2 to 3% pyrrhotite as stringers up to 1.5 centimetres wide, parallel to foliation. trace chalcocopyrite as irregular blebs within the pyrrhotite.	166.25	166.65	0.40	FX 692354	2029.	3616.	<5.	1.200	2	-
			166.65	168.15	1.50	FX 692355	135.	102.	45.	0.400	Tr	b70
			168.15	169.55	1.40	FX 692356	151.	44.	<5.	0.400	Tr	-
			169.55	171.05	1.50	FX 692357	257.	258.	<5.	0.400	Tr	b80
			171.05	173.20	2.15	FX 692358	102.	66.	<5.	<0.400	Tr	-
			173.20	173.78	0.58	FX 692359	197.	3868.	<5.	0.800	Tr	-

INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG

FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MINX	CANG
169.55	169.80	Graphitic mudstone.										
		70% graphitic black mudstone										
		interbedded with 20% gray siltstone and										
		10% white chert. Strongly foliated										
		with 1% pyrrhotite as irregular										
		stringers. Upper contact and lower										
		contact are sharp.										
173.78	196.42	MASSIVE SULFIDE	173.78	174.78	1.00	FX 692360	192.	442.	<5.	1.200	90	-
173.20	175.78	70 to 75% very fine grained	174.78	175.80	1.02	FX 692361	102.	100.	<5.	1.200	95	-
		to coarse grained pyrite, massive and	175.80	176.80	1.00	FX 692362	134.	56.	<5.	0.800	95	-
		weakly to strongly brecciated with	176.80	177.80	1.00	FX 692363	241.	32.	<5.	1.200	95	-
		fragments up to 2 to 3 centimetres in	177.80	178.80	1.00	FX 692364	218.	22.	<5.	0.800	75	-
		diameter. and massive sections up to	178.80	179.80	1.00	FX 692365	127.	28.	<5.	1.200	85	-
		25 centimetre wide. Moderately	179.80	181.34	1.54	FX 692366	116.	24.	<5.	0.800	95	-
		foliated where weakly brecciated. 2 to	181.34	182.17	0.83	FX 692367	329.	88.	<5.	0.800	70	-
		3% magnetite, and less than 5%	182.17	183.17	1.00	FX 692368	198.	298.	<5.	0.800	90	-
		inclusions of chert, graphitic	183.17	184.17	1.00	FX 692369	134.	164.	<5.	1.200	95	-
		mudstone, and silicate iron formation	184.17	184.80	0.63	FX 692370	260.	126.	<5.	0.400	90	-
		with less than 1% disseminated and rare	184.80	185.35	0.55	FX 692371	392.	42.	<5.	<0.400	90	-
		calcite veinlet. weakly to moderately	185.35	186.35	1.00	FX 692372	101.	164.	<5.	<0.400	85	-
		brecciated pyrite with less than 10%	186.35	187.35	1.00	FX 692373	74.	116.	<5.	<0.400	95	-
		pyrrhotite as irregular stringers up to	187.35	188.35	1.00	FX 692374	53.	96.	<5.	<0.400	95	-
		5 millimetres wide.	188.35	189.35	1.00	FX 692375	85.	134.	<5.	0.400	95	-
		173.88 173.93 Mudstone.	189.35	190.35	1.00	FX 692376	108.	242.	<5.	0.800	95	-
		173.93 176.10 As from 173.78 to 173.88.	190.35	191.35	1.00	FX 692377	87.	176.	<5.	2.000	95	-
		176.10 176.15 Magnetic silicate iron	191.35	192.35	1.00	FX 692378	89.	166.	<5.	1.600	95	-
		formation.	192.35	193.35	1.00	FX 692379	215.	282.	<5.	1.600	95	-
		176.80 178.30 Moderately to highly	193.35	194.35	1.00	FX 692380	154.	240.	<5.	0.800	95	-
		brecciated pyrite with 15 to 20%	194.35	195.55	1.20	FX 692381	131.	726.	<5.	0.400	95	-
		pyrrhotite as irregular stringers and										

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**INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG**

FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MIN%	CANG
		as matrix to brecciated pyrite.	195.55	196.10	0.55	FX 692382	69.	3910.	<5.	0.400	3	f75
		Numerous nearly pure magnetite bands up to 5 centimetres wide.	196.10	196.42	0.32	FX 692383	295.	2180.	<5.	1.200	90	-
		178.30 178.50 Chert.										
		178.50 178.90 As from 173.78 173.88.										
		178.90 179.05 Brecciated lean iron formation.										
		179.05 181.34 As from 176.80 to 178.30.										
		181.34 182.17 60% massive pyrrhotite, 30% brecciated white chert as clasts up to 8 centimetres wide, and less than 10% disseminated pyrite.										
		182.17 184.80 Foliated to weakly brecciated to intensely brecciated down hole. Pyrrhotite increases from 15% to 60% down hole.										
		184.80 185.35 75% massive pyrrhotite, 15% pyrite as massive bands and as fragments, and 10% bands of chert and silicate iron formation up to 2 centimetres wide. Trace chalcopyrite as a few wispy blebs in the massive pyrrhotite.										
		185.35 185.45 Non-magnetic garnet rich sediment ? at 185.35.										
		185.45 192.35 Very weakly brecciated pyrite with less than 10% pyrrhotite as irregular stringers and clots. highly contorted and locally brecciated light gray siltstone with a few angular inclusions of chert up to 4										

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**INCO EXPLORATION AND TECHNICAL SERVICES INC.**  
**DRILL LOG**

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FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPH	ZN PPH	AU PPB	AG PPH	MIN%	CANG
-----------	---------	-------------	-----------	---------	-------------	---------	-----------	-----------	-----------	-----------	------	------

centimetres long and relatively undeformed siltstone beds up to 8 millimetres wide. 3% pyrrhotite as irregular stringers and blebs up to 4 millimetres wide and 1% pyrite as disseminated crystals up to 2 millimetres in diameter. massive fine grained pyrrhotite with 5% inclusions of graphitic mudstone up to 2 centimetres wide, 2% disseminated pyrite as crystals up to 2 millimetres in diameter, 1 to 2% irregular blebs of calcite up to 2 millimetres wide. Both contacts are sharp.

**196.42 196.80 MUDSTONE**

196.10 196.42 Foliated, very graphitic black mudstone with 5% calcite as irregular veins up to 8 millimetres wide. 1 to 2% blebs and stringers of pyrrhotite up to 4 millimetres wide.

**196.80 197.83 SILTSTONE**

As at 195.55. 10% pyrrhotite as stringers up to 4 millimetres wide and as a few bands up to 6 centimetres wide, parallel to a weak foliation. upper contact is sharp, but lower contact is diffuse over at least 10 centimetres.

**197.83 212.00 RHYOLITIC LAPILLI TUFF**

196.42	196.80	0.38	FX 692384	93.	5828.	<5.	<0.400	2	-
196.80	197.83	1.03	FX 692385	192.	764.	<5.	<0.400	10	-

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**INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG**

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FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MIN%	CANG
197.83	199.30	Highly foliated, light to medium gray, very siliceous and sheared. Fragments are predominantly beige to light gray very fine grained quartz phyrlic rhyolite from a few millimetres to several centimetres in diameter and light to medium gray aphanitic rhyolite up to 1 centimetre long. Matrix supported, possibly due to sheared texture. Less than 2% pyrite as irregular to sub rounded clots and possibly clasts up to 5 centimetres in diameter. The lower contact is very poorly defined.	197.83	199.30	1.47	FX 692386	28.	172.	<5.	<0.400	2	-
199.30	200.80		199.30	200.80	1.50	FX 692832	N/A	N/A	N/A	N/A	5	-
200.80	202.30		200.80	202.30	1.50	FX 692833	N/A	N/A	N/A	N/A	2	-
202.30	203.80		202.30	203.80	1.50	FX 692834	N/A	N/A	N/A	N/A	1	-
203.80	209.50		203.80	209.50	5.70	NS						-
209.50	210.50		209.50	210.50	1.00	FX 692860	N/A	N/A	N/A	N/A		-
210.50	212.00		210.50	212.00	1.50	NS						-

**212.00 218.00 RHYOLITE**

Predominantly yellow beige with some light gray sections that have diffuse contacts, plagioclase feldspar and quartz phyrlic. Both phenocryst types are variably distributed. Less than 2% plagioclase occurs as subhedral to euhedral crystals up to 4 millimetres in diameter. The quartz occurs as rounded to sub rounded crystals up to 6 millimetres in diameter and comprises 10 to 15% of the unit. 1 to 2% quartz carbonate veinlets up to 1 centimetre wide, at variable angles to core axis. Both contacts are diffuse.

212.00	212.50	0.50	NS									
212.50	213.50	1.00	FX 692861	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
213.50	218.00	4.50	NS									

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INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG

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FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MIN%	CANG
218.00	229.60	<b>RHYOLITIC LAPILLI TUFF</b>	218.00	218.50	0.50	NS						
		Similar to the unit at 197.83, but only trace very fine grained disseminated pyrite and pyrrhotite.	218.50	219.50	1.00	FX 692862	N/A	N/A	N/A	N/A		
		220.95 220.96 Fuchsite rich fragment.	219.50	221.00	1.50	NS						
		228.00 228.90 10 to 15% plagioclase feldspar crystals up to 7 millimetres long, possibly crystal tuff. weak foliation at 60 to 70 degrees to core axis.	221.00	222.00	1.00	FX 692863	N/A	N/A	N/A	N/A		
		Foot of hole	222.00	224.00	2.00	NS						
			224.00	224.90	0.90	FX 692864	N/A	N/A	N/A	N/A		
			224.90	226.00	1.10	FX 692865	N/A	N/A	N/A	N/A		
			226.00	227.18	1.18	NS						
			227.18	228.00	0.82	FX 692866	N/A	N/A	N/A	N/A		
			228.00	229.10	1.10	FX 692867	N/A	N/A	N/A	N/A		
			229.10	229.60	0.50	FX 692868	N/A	N/A	N/A	N/A		

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INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG

PRINT DATE : 12-JAN-1995 11:44

BOREHOLE : 82488  
PROJECT : KNEE LAKE  
PROPERTY NAME: KNEE LAKE  
Latitude : 1800.00N  
NTS/quad : 53L15  
Country : CANADA  
Prov./state : MANITOBA  
Twp/County :  
Claim # : KNEE 17 - W49905

Departure : 100.00E  
Logged by : D. Car  
Drilled by : MIDWEST DRILLING  
Drill type : BBS 17A  
Core size : BQ  
Section : 1800N

Elevation : 10000.00m  
Assay req. : Cu,Zn,Ag,Au  
Test Method : ACID  
Started : APRIL 3, 1994  
Completed : APRIL 4, 1994  
Grid name : CANICO

Hole length : 98.00m  
Level : SURFACE  
Dip : -45.0  
BL azimuth : 045  
BH bearing : 270  
Heading :

DEVIATION RECORDS

depth	azm	dip	depth	azm	dip	depth	azm	dip
0.00	315.00	-45.00	11.00	315.00	-49.00	71.00	315.00	-48.00

COMMENTS : LEFT IN HOLE: ALL CASING REMOVED.

FROM	TO	DESCRIPTION	FROM	TO	LENGTH	SAMPLE#	CU	ZN	AG	AU	PPB	PPM	MIN%	CANG
m	m		m	m	m		PPM	PPM	PPM	PPB	PPM	PPM		
0.00	6.60	OVERBURDEN clay.	0.00	6.60	6.60	NS								
6.60	67.65	ANDESITE Very massive, fresh, medium to dark gray, medium grained to locally fine grained flow, possibly	6.60	66.15	59.55	NS							Tr	
			66.15	67.65	1.50	FX 692835	N/A	N/A	N/A	N/A	N/A	N/A	Tr	

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0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300 310 320 330 340 350 360 370 380 390 400 410 420 430 440 450 460 470 480 490 500 510 520 530 540 550 560 570 580 590 600 610 620 630 640 650 660 670 680 690 700 710 720 730 740 750 760 770 780 790 800 810 820 830 840 850 860 870 880 890 900 910 920 930 940 950 960 970 980 990 1000

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INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG

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FROM	TO	DESCRIPTION	FROM	TO	LENGTH	SAMPLE#	CU	ZN	AU	AG	MIN%	CANG
m	m		m	m	m		PPM	PPM	PPB	PPM		
		intermediate sill. Gradational to basalt, possibly gabbro, down hole. 50% to 60% amphibole as anhedral to subhedral crystals from less than 2 millimetres in diameter to 5 millimetres long, 40 to 50% plagioclase feldspar as anhedral to subhedral crystals less than 2 millimetres long. Internal variations in grain size are gradual. less than 1% calcite veinlets up to 4 millimetres wide at variable angles to core axis, 1% quartz carbonate veins up to 15 centimetres wide at variable angles to core axis. Some of the quartz carbonate veins are rimmed by very fine grained mafic phases up to several centimetres wide. trace pyrite, pyrrhotite and rare highly bleached alteration zones up to 30 centimetres wide with sharp to diffuse contacts.										
	34.60	34.75										
	45.80	47.40										
	50.60	50.85										

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**INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG**

FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MIN%	CANG
		grained mafic dike.										
67.65	68.57	<b>68.57 MAFIC DIKE</b> Very fine grained to fine grained, with a well defined one centimetre wide upper chill margin. The lower contact is sharp.	67.65	68.57	0.92	FX 692836	N/A	N/A	N/A	N/A	Tr	-
68.57	71.02	<b>71.02 IRON FORMATION</b> Variably graphitic and magnetic siltstone and mudstone as beds up to 12 centimetres wide with less than 5% pyrite mainly as a 9 centimetre wide bed of semi massive sulfide. Trace pyrrhotite as blebs up to 3 millimetres diameter, less than 1% calcite veinlets up to 6 millimetres wide at variable angles to core axis.	68.57	71.02	2.45	FX 692387	80.	34.	<5.	<0.400	Tr	b53
71.02	73.85	<b>73.85 SILTSTONE</b> 45% light to medium gray siltstone interbedded with 40% variably graphitic mudstone and 10% chert. Most beds are about 1 centimetre wide and variably boudinaged. 3 to 5% pyrite as botryoidal masses up to 1.5 centimetres in diameter and as irregular stringers sub parallel to foliation. 71.30 71.80 Lamprophyre dike with 2 to 3% biotite phenocrysts up to 4 millimetres in diameter and 20% light	71.02	73.85	2.83	FX 692388	159.	78.	30.	<0.400	5	;

INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG

FROM m	TO m	DESCRIPTION	FROM m	TO m	LENGTH m	SAMPLE#	CU PPM	ZN PPM	AU PPB	AG PPM	MIN%	CANG
		gray phenocrysts of plagioclase feldspar ? up to 6 millimetres long.										
73.85	74.90	<b>74.90 MUDSTONE</b> Very graphitic, highly conductive, highly foliated and boudinaged with less than 5% light gray interbedded siltstone. 2 to 3% irregular calcite veinlets up to 6 millimetres wide, at variable angles to core axis, 1 to 2% pyrite as stringers up to 1.5 centimetres wide, and as a few stretched botryoids up to 4 centimetres long and 8 millimetres wide.	73.85	74.90	1.05	FX 692339	119.	140.	<5.	<0.400	2	-
74.90	76.85	<b>76.85 BASALT</b> Fine grained, medium gray green, weakly bleached, with 10% calcite veinlets up to 4 millimetres wide at variable angles to core axis, and 10% quartz carbonate vein as a 15 centimetre wide vein. Highly foliated adjacent to veins. 74.90 75.00 Brecciated white chert.	74.90	76.85	1.95	FX 692390	80.	54.	5.	<0.400	Tr	-
76.85	98.00	<b>98.00 BASALT</b> Very fine grained to medium grained, medium to dark gray, massive, with trace quartz carbonate veinlets up to 2 centimetres wide at variable	76.85	78.35	1.50	FX 692837	N/A	N/A	N/A	N/A	Tr	-
			78.35	79.85	1.50	FX 692838	N/A	N/A	N/A	N/A	Tr	-
			79.85	98.00	18.15	NS					Tr	-

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

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INCO EXPLORATION AND TECHNICAL SERVICES INC.  
DRILL LOG

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FROM	TO	DESCRIPTION	FROM	TO	LENGTH	SAMPLE#	CU	ZN	AU	AG	MIN%	CANG
m	m		m	m	m		PPM	PPM	PPB	PPM		

angles to core axis, but mainly sub  
parallel to weak fractures.  
Foot of hole

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**Appendix 2**

**Chemex ICP - 9g Analyses - Mineralized Samples**



# Chemex Labs Ltd.

Analytical Chemists • Geochemists • Registered Assayers  
 5175 Timberlea Blvd., Mississauga,  
 Ontario, Canada L4W 2S3  
 PHONE: 416-624-2806

To: INCO EXPLORATION AND TECHNICAL SERVICES INC.

60 SEAL ROAD  
 THOMPSON, MANITOBA  
 R8N 1S4

Page Number : 1  
 Total Pages : 2  
 Certificate Date: 27-APR-94  
 Invoice No. : 19414841  
 P.O. Number :  
 Account : KPU

Project: 60410 66010  
 Comments: ATTN: JEAN RIFFEL

## CERTIFICATE OF ANALYSIS A9414841

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm Aqua R	As ppm	Bi ppm	Cu ppm	Hg ppm	Mo ppm	Pb ppm	Sb ppm	Zn ppm
FX692201	268 229	< 5	< 0.2	< 2	< 2	77	< 1	< 1	< 2	8	192
FX692202	268 229	< 5	0.6	< 2	< 2	273	< 1	< 1	48	16	76
FX692203	268 229	< 5	< 0.2	60	< 2	56	< 1	< 1	< 1	116	116
FX692204	268 229	< 5	< 0.2	4	< 2	75	< 1	< 1	12	8	62
FX692205	268 229	< 5	0.4	62	< 2	115	< 1	< 1	14	1.6	64
FX692206	268 229	< 5	< 0.2	< 2	< 2	64	< 1	< 1	4	4	166
FX692207	268 229	< 5	0.4	< 2	< 2	175	< 1	10	16	18	34
FX692208	268 229	< 5	< 0.2	< 2	< 2	112	< 1	< 1	< 1	12	104
FX692209	268 229	< 5	< 0.2	< 2	< 2	163	< 1	< 1	< 1	8	50
FX692210	268 229	< 5	< 0.2	82	< 2	55	< 1	< 1	< 2	6	150
FX692211	268 229	< 5	< 0.2	< 2	< 2	109	< 1	< 1	< 2	4	128
FX692212	268 229	< 5	< 0.2	< 2	< 2	116	< 1	< 1	< 2	6	82
FX692213	268 229	< 5	< 0.2	8	< 2	79	< 1	< 1	6	6	64
FX692214	268 229	15	0.8	< 2	< 2	285	< 1	< 1	16	12	22
FX692215	268 229	5	0.4	< 2	< 2	156	< 1	< 1	12	12	4
FX692216	268 229	< 5	0.2	< 2	< 2	83	< 1	< 1	< 2	4	30
FX692217	268 229	< 5	0.2	< 2	< 2	194	< 1	< 1	< 2	4	118
FX692218	268 229	15	1.0	< 2	< 2	121	< 1	< 1	8	20	5
FX692219	268 229	< 5	0.8	10	< 2	286	< 1	< 1	6	20	72
FX692220	268 229	< 5	0.6	78	< 2	250	< 1	< 1	10	18	22
FX692221	268 229	< 5	0.4	< 2	< 2	402	< 1	< 1	< 2	24	16
FX692222	268 229	< 5	0.8	< 2	< 2	445	< 1	< 1	< 2	24	14
FX692223	268 229	< 5	0.2	340	< 2	1595	< 1	< 1	12	30	20
FX692224	268 229	< 5	0.2	2	< 2	124	< 1	< 1	10	14	286
FX692225	268 229	< 5	0.4	2	< 2	213	< 1	< 1	2	6	100
FX692226	268 229	< 5	0.6	132	< 2	185	< 1	2	14	14	1580
FX692227	268 229	< 5	< 0.2	30	< 2	80	< 1	2	< 2	12	2130
FX692228	268 229	45	0.6	260	< 2	119	< 1	< 1	28	20	196
FX692229	268 229	< 5	0.2	80	< 2	140	< 1	< 1	12	12	1410
FX692230	268 229	< 5	< 0.2	110	< 2	80	< 1	< 1	6	16	1260
FX692231	268 229	50	0.4	128	< 2	144	< 1	< 1	14	16	110
FX692232	268 229	30	0.2	80	< 2	80	< 1	< 1	12	18	74
FX692233	268 229	< 5	0.2	132	< 2	109	< 1	17	4	12	896
FX692234	268 229	15	0.4	56	< 2	99	< 1	< 1	16	20	254
FX692235	268 229	< 5	0.2	76	< 2	68	< 1	< 1	10	22	72
FX692236	268 229	< 5	0.2	86	< 2	99	< 1	< 1	8	26	68
FX692237	268 229	10	0.2	40	< 2	77	< 1	< 1	< 2	22	266
FX692238	268 229	< 5	0.2	4	< 2	68	< 1	< 1	4	22	134
FX692239	268 229	5	< 0.2	2	< 2	21	< 1	< 1	< 2	14	880
FX692240	268 229	30	1.2	12	< 2	116	< 1	18	90	22	426

CERTIFICATION: *Stark Buchler*



# Chemex Labs Ltd.

Analytical Chemists • Geochemists • Registered Assayers  
5175 Timberlea Blvd., Mississauga,  
Ontario, Canada L4W 2S3  
PHONE: 416-624-2806

To: INCO EXPLORATION AND TECHNICAL SERVICES INC.

60 SEAL ROAD  
THOMPSON, MANITOBA  
R8N 1S4

Project: 60410 66010  
Comments: ATTN: JEAN RIFFEL

Page Number : 2  
Total Pages : 2  
Certificate Date: 27-APR-94  
Invoice No. : 19414841  
P.O. Number :  
Account : KPU

CERTIFICATE OF ANALYSIS											A9414841	
SAMPLE	PREP CODE	Au Ppb FA+AA	Ag ppm Aqua R	As ppm	Bi ppm	Cu ppm	Hg ppm	Mo ppm	Pb ppm	Sb ppm	Zn ppm	
FX692241	268 229	10	0.2	6	< 2	45	< 1	< 1	54	12	244	
FX692242	268 229	20	0.4	58	< 2	77	< 1	< 1	6	20	32	
FX692243	268 229	< 5	0.2	52	< 2	62	< 1	< 1	8	22	56	
FX692244	268 229	< 5	0.4	24	< 2	131	< 1	< 1	4	20	228	
FX692245	268 229	< 5	0.4	< 2	< 2	191	< 1	< 1	6	16	216	
FX692246	268 229	< 5	0.2	< 2	< 2	111	< 1	< 1	14	18	380	
FX692247	268 229	< 5	0.4	< 2	< 2	104	< 1	< 1	6	22	220	
FX692248	268 229	< 5	< 0.2	< 2	< 2	18	< 1	< 1	10	10	248	
FX692249	268 229	< 5	< 0.2	< 2	< 2	25	< 1	< 1	4	8	198	

*Handwritten signature*

CERTIFICATION:

# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
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To: INCO EXPLORATION AND TECHNICAL SERVICES INC.

60 SEAL ROAD  
 THOMPSON, MANITOBA  
 R8N 1S4

Page Number : 1  
 Total Pages : 2  
 Certificate Date: 18-MAY-94  
 Invoice No. : 19415635  
 P.O. Number :  
 Account : KPU

Project: 60410-66010  
 Comments: ATTN: JEAN RIFFEL

CERTIFICATE OF ANALYSIS A9415635												
SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm Aqua R	As ppm	Bi ppm	Cu ppm	Hg ppm	Mo ppm	Pb ppm	Sb ppm	Zn ppm	
FX692250	208 226	60	< 0.4	8	2	< 1	1	2	6	4	44	
FX692251	208 226	20	< 0.4	8	2	< 1	1	2	< 2	< 2	42	
FX692252	208 226	< 5	< 0.4	8	< 2	249	< 1	1	< 2	< 2	68	
FX692253	208 226	15	< 0.4	8	< 2	260	< 1	4	20	< 2	840	
FX692254	208 226	< 5	< 0.4	8	< 2	198	< 1	< 1	< 2	< 2	158	
FX692255	208 226	< 5	< 0.4	8	< 2	172	3	4	16	< 2	1495	
FX692256	208 226	10	< 0.4	8	< 2	544	< 1	3	20	< 2	942	
FX692257	208 226	< 5	< 0.4	8	< 2	461	< 1	3	30	< 2	232	
FX692258	208 226	< 5	< 0.4	8	< 4	426	< 1	2	14	< 2	188	
FX692259	208 226	10	< 0.8	8	2	980	< 1	6	34	< 2	22	
FX692260	208 226	< 5	< 0.4	8	2	223	< 1	< 1	< 2	< 2	60	
FX692261	208 226	< 5	1.6	64	< 2	48	< 1	6	8	< 2	120	
FX692262	208 226	10	2.0	32	< 2	28	< 1	4	< 2	4	106	
FX692263	208 226	< 5	1.6	40	< 2	22	< 1	6	< 2	< 2	94	
FX692264	208 226	< 5	1.6	32	< 2	13	< 1	5	< 2	< 2	52	
FX692265	208 226	< 5	1.2	32	< 2	9	< 1	8	4	< 2	24	
FX692266	208 226	< 5	0.8	8	< 2	15	< 1	6	6	< 2	18	
FX692267	208 226	< 5	0.8	8	< 2	63	< 1	4	24	< 2	44	
FX692268	208 226	< 5	0.8	8	< 2	77	< 1	5	42	< 2	158	
FX692269	208 226	< 5	< 0.4	8	< 2	69	< 1	2	32	< 2	158	
FX692270	208 226	< 5	0.8	8	< 2	83	< 1	8	12	< 2	20	
FX692271	208 226	5	< 0.4	8	< 2	87	< 1	7	12	< 2	86	
FX692272	208 226	10	0.4	< 8	< 2	104	< 1	4	20	< 2	92	
FX692273	208 226	< 5	0.4	8	< 2	89	< 1	6	< 2	< 2	244	
FX692274	208 226	< 5	0.8	8	< 2	50	< 1	7	< 2	< 2	346	
FX692275	208 226	< 5	0.8	< 8	< 2	117	< 1	11	16	< 2	178	
FX692276	208 226	< 5	0.8	< 8	< 2	105	< 1	10	8	< 2	230	
FX692277	208 226	< 5	0.4	8	< 2	88	< 1	10	10	< 2	272	
FX692278	208 226	< 5	0.8	48	< 2	65	< 1	4	< 2	< 2	64	
FX692279	208 226	< 5	0.4	8	< 2	107	< 1	6	< 6	< 2	160	
FX692280	208 226	< 5	0.4	8	< 2	71	< 1	2	12	< 2	310	
FX692281	208 226	< 5	0.8	8	< 2	85	< 1	17	22	< 2	300	
FX692282	208 226	< 5	0.8	8	< 2	73	< 1	7	6	< 2	522	
FX692283	208 226	< 5	0.4	8	< 2	46	< 1	12	20	< 2	470	
FX692284	208 226	< 5	< 0.4	8	< 2	52	< 1	44	6	< 2	352	
FX692285	208 226	< 5	< 0.4	8	< 2	17	< 1	8	18	< 2	342	
FX692286	208 226	< 5	< 0.4	8	< 2	3	< 1	2	8	< 2	14	
FX692287	208 226	< 5	< 0.4	8	< 2	26	< 1	20	8	< 2	142	
FX692288	208 226	< 5	< 0.4	8	< 2	8	< 1	6	4	< 2	24	
FX692289	208 226	< 5	< 0.4	8	< 2	10	< 1	56	4	< 2	384	

CERTIFICATION:

*David Buchan*



# Chemex Labs Ltd.

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PHONE: 416-624-2806

To: INCO EXPLORATION AND TECHNICAL SERVICES INC.

50 SEAL ROAD  
THOMPSON, MANITOBA  
R8N 1S4

Project: 60410-66010  
Comments: ATTN: JEAN RIFFEL

Page Number : 2  
Total Pages : 2  
Certificate Date: 18-MAY-94  
Invoice No. : 19415635  
P.O. Number :  
Account : KPU

## CERTIFICATE OF ANALYSIS A9415635

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm Aqua R	As ppm	Bi ppm	Cu ppm	Hg ppm	Mo ppm	Pb ppm	Sb ppm	Zn ppm
FX6922290	208 226	< 5	< 0.4	32	6	162	< 1	4	14	6	136
FX6922291	208 226	15	0.8	72	< 2	11	< 1	2	14	2	122
FX6922292	208 226	< 5	0.8	8	< 2	85	< 1	4	26	2	28
FX6922293	208 226	< 5	0.8	16	< 2	39	< 1	4	< 2	4	28
FX6922294	208 226	< 5	0.8	40	< 2	47	< 1	5	6	8	18
FX6922295	208 226	< 5	0.4	48	< 2	37	< 1	3	4	< 2	16
FX6922296	208 226	< 5	0.8	32	< 2	50	< 1	1	6	4	28
FX6922297	208 226	< 5	0.4	16	< 2	54	< 1	< 1	2	2	30
FX6922298	208 226	< 5	0.8	48	< 2	54	< 1	< 1	12	< 2	16
FX6922299	208 226	< 5	1.2	80	< 2	30	< 1	< 1	10	< 2	16
FX692300	208 226	< 5	0.8	72	< 2	31	< 1	< 1	6	2	28
FX692301	208 226	< 5	0.8	120	< 2	24	< 1	< 1	< 2	6	50
FX692302	208 226	< 5	0.8	72	< 2	53	< 1	< 1	10	2	18
FX692303	208 226	< 5	0.8	72	< 2	61	< 1	< 1	< 2	2	142
FX692304	208 226	< 5	0.8	80	< 2	52	< 1	< 1	24	< 2	18
FX692305	208 226	< 5	0.8	56	< 2	42	< 1	< 1	24	< 2	18
FX692306	208 226	< 5	0.8	56	< 2	53	< 1	< 1	24	4	20
FX692307	208 226	< 5	0.8	32	< 2	100	< 1	< 1	14	< 2	40
FX692308	208 226	< 5	0.8	8	< 2	119	< 1	< 1	48	< 2	32
FX692309	208 226	< 5	1.2	8	< 2	91	< 2	5	6	2	40
FX692310	208 226	< 5	1.2	8	< 2	118	< 1	5	14	< 2	40
FX692311	208 226	< 5	< 0.4	8	< 2	76	< 1	1	18	6	70
FX692312	208 226	< 5	< 0.4	8	< 2	118	< 1	48	22	2	52
FX692313	208 226	15	0.8	16	< 2	316	< 1	3	36	4	102
FX692314	208 226	25	0.8	18	< 2	186	< 1	2	30	2	52
FX692315	208 226	< 5	< 0.4	80	< 2	164	< 1	2	16	2	50
FX692316	208 226	< 5	< 0.4	8	< 2	221	< 1	2	10	4	60
FX692317	208 226	10	0.8	8	< 2	316	< 1	< 1	12	< 2	124
FX692318	208 226	65	0.8	8	< 2	375	< 1	6	40	< 2	880
FX692319	208 226	5	0.8	40	< 2	363	< 1	7	48	2	2920
FX692320	208 226	< 5	0.8	8	< 2	556	< 1	9	56	2	2200
FX692321	208 226	< 5	< 0.4	8	< 2	565	< 1	3	8	< 2	474
FX692322	208 226	< 5	< 0.4	8	< 2	1115	< 1	4	4	2	1285
FX692323	208 226	< 5	< 0.4	8	< 2	479	< 1	6	< 2	< 2	1135
FX692324	208 226	< 5	1.2	8	< 2	88	< 1	1	8	2	180
FX692325	208 226	< 5	0.8	8	< 2	101	< 1	7	24	4	266
FX692326	208 226	< 5	< 0.4	8	< 2	148	< 1	3	16	2	352
FX692327	208 226	< 5	0.8	8	< 2	313	< 1	3	30	2	292
FX692328	208 226	30	0.4	144	< 2	23	< 1	3	32	2	146
FX692329	208 226	30	< 0.4	181	< 2	181	< 1	3	22	4	700

CERTIFICATION:

*Walt Becker*





# Chemex Labs Ltd.

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PHONE: 416-624-2806

To: INCO EXPLORATION AND TECHNICAL SERVICES INC.

60 SEAL ROAD  
THOMPSON, MANITOBA  
R8N 1S4

Project: 60410-66010  
Comments: ATTN: JEAN RIFFEL

Page Number : 1  
Total Pages : 2  
Certificate Date: 18-MAY-94  
Invoice No. : 19415636  
P.O. Number :  
Account : KPU

## CERTIFICATE OF ANALYSIS A9415636

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm Aqua R	As ppm	Bi ppm	Cu ppm	Hg ppm	Mo ppm	Pb ppm	Sb ppm	Zn ppm
FX692330	208 226	< 5	< 0.4	< 8	< 2	168	< 1	23	58	6	456
FX692331	208 226	< 5	< 0.4	< 8	< 2	222	< 1	78	12	4	168
FX692332	208 226	< 5	< 0.4	< 8	< 2	12	< 1	56	20	2	94
FX692333	208 226	100	< 0.8	80	< 2	339	< 1	31	16	12	238
FX692334	208 226	5	< 0.4	< 8	< 2	20	< 1	8	6	4	56
FX692335	208 226	55	< 0.4	32	< 2	228	< 1	15	16	4	894
FX692336	208 226	30	< 0.4	16	< 2	150	< 1	2	8	4	138
FX692337	208 226	< 5	< 0.4	40	< 2	307	< 1	7	24	4	132
FX692338	208 226	< 5	< 0.4	< 8	< 2	70	< 1	8	12	2	98
FX692339	208 226	< 5	< 0.8	< 8	< 2	342	< 1	9	22	4	50
FX692340	208 226	< 5	< 0.4	24	< 2	453	< 1	1	24	4	536
FX692341	208 226	< 5	< 0.4	< 8	< 2	127	< 1	2	14	2	132
FX692342	208 226	< 5	< 0.4	168	< 2	612	< 1	5	88	4	3790
FX692343	208 226	10	< 0.8	96	< 2	3060	< 1	3	170	4	2660
FX692344	208 226	< 5	< 0.4	< 8	< 2	221	< 1	1	6	< 2	58
FX692345	208 226	< 5	< 0.4	< 8	< 2	157	< 1	1	4	< 2	74
FX692346	208 226	< 5	< 0.8	376	< 2	424	< 1	< 1	132	< 2	588
FX692347	208 226	< 5	< 0.4	< 8	< 2	702	< 1	10	6	< 2	8600
FX692348	208 226	< 5	< 0.4	< 8	< 2	223	< 1	< 1	6	< 2	224
FX692349	208 226	< 5	< 0.4	< 8	< 2	58	< 1	< 1	6	< 2	64
FX692350	208 226	< 5	< 0.4	< 8	< 2	180	< 1	2	14	< 2	98
FX692351	208 226	< 5	1.6	224	< 2	1200	< 1	8	114	< 2	5040
FX692352	208 226	< 5	2.4	208	< 2	1320	< 1	11	128	< 2	6920
FX692353	208 226	< 5	0.8	< 8	< 2	367	< 1	11	56	< 2	436
FX692354	208 226	< 5	1.2	< 8	< 2	2030	< 1	8	50	< 2	3620
FX692355	208 226	45	0.4	< 8	< 2	135	< 1	3	< 2	< 2	102
FX692356	208 226	< 5	0.4	< 8	< 2	151	< 1	2	2	< 2	44
FX692357	208 226	< 5	0.4	< 8	< 2	257	< 1	2	8	< 2	258
FX692358	208 226	< 5	< 0.8	< 8	< 2	102	< 1	4	< 2	< 2	66
FX692359	208 226	< 5	0.8	< 8	< 2	197	< 1	8	136	< 2	3870
FX692360	208 226	< 5	1.2	< 8	< 2	192	< 1	11	6	< 2	442
FX692361	208 226	< 5	1.2	< 8	< 2	102	< 1	12	< 2	< 2	100
FX692362	208 226	< 5	0.8	< 8	< 2	134	< 1	11	< 2	< 2	56
FX692363	208 226	< 5	1.2	< 8	< 2	241	< 1	8	< 2	< 2	32
FX692364	208 226	< 5	0.8	< 8	< 2	218	< 1	12	< 2	< 2	22
FX692365	208 226	< 5	1.2	< 8	< 2	127	< 1	13	< 2	< 2	28
FX692366	208 226	< 5	0.8	< 8	< 2	116	< 1	10	< 2	< 2	24
FX692367	208 226	< 5	0.8	< 8	< 2	329	< 1	8	< 2	< 2	88
FX692368	208 226	< 5	0.8	< 8	< 2	198	< 1	9	< 2	< 2	298
FX692369	208 226	< 5	1.2	16	< 2	134	< 1	6	< 2	< 2	164

CERTIFICATION: *David B. Suckler*



# Chemex Labs Ltd.

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To: INCO EXPLORATION AND TECHNICAL SERVICES INC.

60 SEAL ROAD  
 THOMPSON, MANITOBA  
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Project: 60410-66010  
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Page Number : 2  
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## CERTIFICATE OF ANALYSIS A9415636

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm Aqua R	As ppm	Bi ppm	Cu ppm	Hg ppm	Mo ppm	Pb ppm	Sb ppm	Zn ppm
FX692370	208 226	< 5	0.4	< 8	< 2	260	1	6	< 2	< 2	126
FX692371	208 226	< 5	< 0.4	< 8	< 2	392	< 1	6	< 2	< 2	42
FX692372	208 226	< 5	< 0.4	< 8	< 2	101	< 1	4	8	< 2	164
FX692373	208 226	< 5	< 0.4	< 8	< 2	74	< 1	6	14	< 2	116
FX692374	208 226	< 5	< 0.4	24	< 2	53	< 1	7	< 2	< 2	96
FX692375	208 226	< 5	0.4	16	< 2	85	< 1	8	6	< 2	134
FX692376	208 226	< 5	0.8	56	< 2	108	< 1	7	12	< 2	242
FX692377	208 226	< 5	2.0	72	< 2	87	< 1	5	34	< 2	175
FX692378	208 226	< 5	1.6	64	< 2	89	< 1	4	60	< 2	166
FX692379	208 226	< 5	1.6	72	< 2	215	< 1	6	64	< 2	282
FX692380	208 226	< 5	0.8	48	< 2	154	< 1	7	22	< 2	240
FX692381	208 226	< 5	0.4	136	< 2	131	< 1	6	48	< 2	726
FX692382	208 226	< 5	0.4	8	< 4	69	< 1	6	30	< 2	3910
FX692383	208 226	< 5	1.2	< 8	< 4	295	< 1	5	294	< 2	2180
FX692384	208 226	< 5	< 0.4	< 8	< 6	93	< 3	11	70	< 2	5830
FX692385	208 226	< 5	< 0.4	< 8	< 4	192	< 1	6	28	< 2	764
FX692386	208 226	< 5	< 0.4	< 8	< 2	28	< 1	4	24	< 2	172
FX692387	208 226	< 5	< 0.4	< 8	< 2	80	< 1	< 1	8	< 2	34
FX692388	208 226	30	< 0.4	56	< 4	159	< 1	1	36	< 2	78
FX692389	208 226	< 5	< 0.4	40	< 2	119	< 1	8	10	< 2	140
FX692390	208 226	5	< 0.4	8	< 2	80	< 1	< 1	36	< 4	54

CERTIFICATION: *David Buchler*

**Appendix 3**  
**XRAL Whole Rock Analyses**

**XRAL**

XRF - WHOLE ROCK ANALYSIS

22-SEP-94

REPORT 28660

WORKORDER 19483

SAMPLE \ %	SI02	AL2O3	CAO	MGO	NA2O	K2O	FE2O3	MNO	TIO2	P2O5	CR2O3	LOI	SUM
FX692801	59.2	11.1	5.62	2.20	1.15	1.90	15.7	1.23	.225	.09	<.01	1.55	100.1
FX692802	58.7	11.3	5.37	1.81	1.15	2.16	16.3	.88	.250	.08	<.01	1.55	99.7
FX692803	49.3	14.1	8.95	6.36	3.14	.76	7.53	.22	.803	.09	.04	8.00	99.4
FX692804	50.3	13.8	8.53	6.45	2.65	.70	7.82	.22	.758	.10	.04	7.90	99.5
FX692805	68.6	14.2	1.81	.99	3.01	2.90	3.73	.12	.336	.10	<.01	2.05	98.0
FX692806	69.9	14.8	2.50	1.06	5.04	1.64	2.92	.09	.393	.12	<.01	.95	99.6
FX692807	53.9	13.9	7.49	5.76	2.10	.94	10.4	.26	.791	.10	.03	2.60	98.5
FX692808	48.1	13.9	8.24	4.52	3.33	1.15	9.17	.26	.827	.10	.01	6.60	96.6
FX692809	50.5	14.0	10.7	6.65	.60	.95	13.6	.37	.718	.08	.08	1.85	100.2
FX692810	50.6	15.5	7.93	7.78	1.29	1.19	12.7	.30	.827	.08	.09	1.80	100.2
FX692811	47.8	11.7	9.45	12.7	1.11	.39	12.4	.25	.657	.07	.15	2.20	98.9
FX692812	52.9	13.5	7.25	9.19	2.29	.76	10.6	.22	.724	.19	.06	2.25	100.0
FX692813	54.6	13.9	8.75	6.43	3.34	.32	9.95	.20	.790	.10	.02	1.10	99.6
FX692814	54.2	14.3	10.5	6.20	3.02	.23	9.52	.20	.800	.10	.02	.55	99.7
FX692815	71.1	14.8	1.55	.85	5.88	2.32	1.92	.06	.337	.11	<.01	.25	99.3
FX692816	70.1	14.7	1.51	.91	6.16	1.63	1.78	.07	.334	.10	<.01	.50	97.9
FX692817	71.0	14.5	3.09	1.05	2.63	3.18	1.67	.09	.325	.10	<.01	1.95	99.7
FX692818	66.7	13.9	4.37	1.49	.16	3.47	5.66	.25	.301	.11	<.01	2.45	98.9
FX692819	45.2	12.5	7.80	7.21	.02	3.39	10.9	.36	.617	.07	.08	12.3	100.5
FX692820	46.1	13.2	9.23	5.11	.03	2.74	10.2	.25	.632	.08	.05	11.6	100.3
FX692821	49.1	13.5	9.50	5.80	1.90	1.10	8.36	.21	.761	.10	.02	8.70	99.1
FX692822	54.0	14.2	9.65	6.14	1.58	.39	8.45	.17	.748	.10	.03	3.35	98.9
FX692823	55.2	14.2	10.2	5.94	1.76	.53	9.33	.20	.812	.11	.03	1.70	100.1
FX692824	53.7	13.2	9.37	8.20	1.21	.23	10.4	.25	.742	.09	.06	2.00	99.5
FX692825	54.2	13.4	8.77	7.91	1.27	.15	9.65	.24	.775	.10	.06	2.65	99.2
FX692826	51.8	13.0	9.09	6.54	.87	.77	8.71	.26	.745	.09	.04	8.05	100.0
FX692827	46.7	14.0	9.18	5.13	.98	2.40	9.83	.32	.808	.20	.03	8.60	98.3
FX692828	52.3	17.0	8.41	5.13	3.42	.34	5.78	.14	.850	.09	.06	3.55	97.1
FX692829	54.4	18.6	7.51	5.25	3.71	.34	5.37	.12	.943	.10	.08	2.60	99.1
FX692830	50.4	16.2	5.68	7.12	.79	1.52	10.1	.21	.814	.08	.07	4.50	97.4
FX692831	54.6	15.9	8.48	5.41	1.21	.47	8.01	.19	.799	.08	.07	2.80	98.1
FX692832	47.9	17.7	10.5	4.71	2.06	1.21	7.53	.25	.859	.09	.06	3.65	96.6
FX692833	69.3	13.9	3.13	.78	3.99	1.72	3.06	.05	.364	.10	<.01	1.55	98.1
FX692834	64.6	14.0	4.51	.84	4.14	1.74	4.17	.05	.333	.10	<.01	2.00	96.6
FX692835	54.3	14.5	10.6	6.09	1.55	.53	10.2	.22	.733	.09	.03	.70	100.2
FX692836	53.3	14.8	11.7	5.70	1.36	.72	10.8	.25	.745	.10	.02	.55	100.1
FX692837	55.0	14.5	9.87	5.99	1.97	.55	9.23	.19	.834	.10	.02	1.10	99.4
FX692838	55.2	14.6	8.80	6.10	2.32	.35	9.29	.20	.833	.11	.02	1.30	99.2
FX692839	60.6	12.1	2.82	.85	2.39	1.77	11.7	.05	.324	.09	<.01	6.05	98.8
FX692840	74.3	10.8	.73	.71	.46	7.45	2.78	.07	.238	.04	.02	1.30	99.1

\*\*\* XRF W.R.A. SUMS INCLUDE ALL ELEMENTS DETERMINED. FOR SUMMATION, ELEMENTS ARE CALCULATED AS OXIDES \*\*\*

**XRAL**

XRF - WHOLE ROCK ANALYSIS

22-SEP-94

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SAMPLE \ #	SiO2	AL2O3	CAO	MGO	NA2O	K2O	FE2O3	MNO	TiO2	P2O5	CR2O3	LOI	SUM
FX692841	60.8	11.4	4.01	2.02	2.83	1.10	15.7	.93	.229	.09	<.01	.80	100.0
FX692842	65.5	12.6	3.20	1.42	3.70	1.45	9.90	.51	.260	.09	<.01	.70	99.4
FX692843	60.1	11.2	3.45	2.10	2.90	1.20	15.0	.91	.219	.08	<.01	2.60	99.8
FX692844	68.6	13.2	3.12	1.13	3.36	2.07	5.38	.24	.263	.09	<.01	.70	98.3
FX692845	62.2	11.9	4.67	2.12	1.93	1.47	13.4	.77	.238	.09	<.01	1.00	99.9
FX692846	68.3	13.1	3.30	1.10	2.58	1.91	7.23	.33	.316	.10	<.01	.95	99.3
FX692847	48.5	14.3	8.89	7.28	2.75	.36	13.7	.24	1.01	.09	.03	1.35	98.6
FX692848	57.2	11.0	5.12	1.93	1.32	1.79	18.5	.92	.216	.08	<.01	2.05	100.2
FX692849	55.0	10.2	6.42	2.40	.86	.85	21.6	1.24	.207	.08	<.01	1.20	100.1
FX692850	70.4	13.5	4.36	1.14	1.78	2.10	5.46	.29	.269	.09	<.01	1.05	100.5
FX692851	69.7	14.1	1.62	1.07	3.93	2.05	5.04	.15	.293	.10	<.01	1.35	99.5
FX692852	71.9	14.7	1.80	.79	5.72	1.96	1.87	.07	.295	.10	<.01	.60	100.1
FX692853	72.7	13.9	1.85	.75	5.36	1.44	2.31	.07	.280	.09	<.01	.80	99.7
FX692854	55.2	14.6	9.05	6.49	1.36	1.36	8.41	.23	.787	.10	.04	1.80	99.5
FX692855	70.2	14.6	2.22	.81	4.79	2.40	1.80	.07	.337	.10	<.01	1.25	98.8
FX692856	67.3	14.5	3.14	1.24	5.48	1.14	4.64	.22	.323	.10	<.01	1.30	99.6
FX692857	67.6	13.9	4.09	1.20	2.45	2.50	5.95	.32	.294	.10	<.01	.90	99.4
FX692858	69.4	14.4	2.73	.78	4.64	1.99	2.64	.14	.337	.10	<.01	.65	98.0
FX692859	72.0	14.9	2.52	.63	4.29	2.95	1.29	.05	.337	.10	<.01	.65	99.9
FX692860	66.4	16.9	3.02	.94	3.97	2.79	2.15	.04	.501	.15	<.01	3.00	100.0
FX692861	63.7	18.7	1.89	.50	9.88	.41	1.30	.05	.477	.18	<.01	1.55	98.7
FX692862	61.3	17.7	3.73	.52	9.51	.31	1.91	.06	.518	.19	<.01	2.20	98.1
FX692863	61.4	17.2	4.01	1.02	6.19	1.66	2.23	.05	.550	.16	<.01	3.55	98.2
FX692864	59.4	17.3	4.56	1.03	9.14	.29	2.08	.07	.525	.18	<.01	4.35	99.1
FX692865	63.5	15.2	4.25	1.10	6.38	.95	2.69	.07	.522	.16	<.01	3.75	98.7
FX692866	62.4	17.4	3.47	.75	9.21	.33	1.48	.07	.504	.17	<.01	3.30	99.2
FX692867	63.2	17.9	3.33	.29	9.90	.20	.56	.05	.545	.18	<.01	2.25	98.5
FX692868	71.0	15.5	1.70	.33	7.44	.71	1.05	.04	.497	.14	<.01	1.10	99.7
FX692869	52.1	13.1	8.48	4.85	2.47	.87	10.0	.35	1.23	.14	<.01	5.80	99.4
FX692870	52.6	10.0	4.82	2.94	1.93	1.19	24.1	1.44	.200	.08	<.01	.80	100.2
D FX692801	58.9	13.1	5.60	2.18	1.18	1.92	15.6	1.19	.234	.09	<.01	1.75	99.8
D FX692814	54.5	14.4	10.6	6.17	3.05	.23	9.56	.20	.815	.10	.02	.70	100.4
D FX692828	52.5	17.1	8.44	5.13	3.45	.32	5.79	.14	.844	.09	.06	3.50	97.4
D FX692842	65.5	12.5	3.19	1.44	3.69	1.44	9.92	.52	.258	.09	<.01	.70	99.4
D FX692856	67.0	14.4	3.16	1.26	5.46	1.13	4.66	.22	.329	.10	<.01	1.45	99.3
D FX692869	52.0	13.1	8.49	4.87	2.44	.88	10.1	.35	1.24	.14	<.01	5.80	99.5

D - QUALITY CONTROL DUPLICATE

\*\*\* XRF W.R.A. SUMS INCLUDE ALL ELEMENTS DETERMINED. FOR SUMMATION, ELEMENTS ARE CALCULATED AS OXIDES \*\*\*



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**XRAL**

XRF - WHOLE ROCK ANALYSIS

22-SEP-94

REPORT 28660

WORKORDER 19483

SAMPLE \ PPM	RB	SR	Y	ZR	NB	BA
FX692801	63	132	<10	113	22	464
FX692802	62	144	<10	119	18	545
FX692803	16	657	20	79	24	518
FX692804	27	877	16	84	18	742
FX692805	98	231	<10	140	<10	980
FX692806	47	384	<10	153	21	761
FX692807	12	576	16	85	46	910
FX692808	13	1160	<10	22	35	1850
FX692809	33	90	24	49	18	496
FX692810	40	72	<10	74	39	489
FX692811	14	145	55	27	15	111
FX692812	30	178	<10	97	23	330
FX692813	<10	185	25	76	34	128
FX692814	13	154	23	53	28	102
FX692815	60	348	<10	142	24	867
FX692816	50	401	15	152	24	597
FX692817	92	182	<10	147	19	672
FX692818	87	73	<10	156	15	449
FX692819	155	198	16	46	<10	309
FX692820	107	143	11	48	19	225
FX692821	48	94	<10	95	162	223
FX692822	13	181	<10	93	11	194
FX692823	18	121	30	87	56	154
FX692824	<10	102	14	336	25	88
FX692825	<10	134	11	80	25	84
FX692826	29	118	<10	80	32	335
FX692827	75	95	13	37	18	983
FX692828	13	371	18	53	<10	179
FX692829	33	392	<10	62	20	369
FX692830	47	208	52	59	18	519
FX692831	16	244	<10	67	31	221
FX692832	40	314	15	55	15	259
FX692833	47	229	<10	95	<10	589
FX692834	52	343	<10	136	13	587
FX692835	<10	116	<10	71	18	187
FX692836	<10	86	20	50	<10	279
FX692837	<10	134	19	89	30	153
FX692838	<10	154	14	95	25	120
FX692839	102	181	<10	134	15	377
FX692840	95	31	144	276	35	880

**XRAL**

XRF - WHOLE ROCK ANALYSIS

22-SEP-94

REPORT 28660

WORKORDER 19483

SAMPLE \ PPM	RB	SR	Y	ZR	NB	BA
FX692841	30	177	<10	117	12	472
FX692842	31	238	14	140	22	610
FX692843	46	202	<10	129	13	389
FX692844	63	253	<10	151	23	531
FX692845	56	195	15	137	27	314
FX692846	51	139	<10	146	<10	392
FX692847	26	311	<10	50	19	177
FX692848	45	118	<10	123	25	424
FX692849	22	65	<10	127	<10	179
FX692850	68	183	<10	162	16	431
FX692851	67	175	<10	172	22	664
FX692852	48	330	<10	727	19	1420
FX692853	49	284	<10	156	20	655
FX692854	29	117	11	89	34	420
FX692855	51	452	<10	<10	30	1040
FX692856	32	526	<10	150	30	739
FX692857	65	207	<10	135	17	500
FX692858	47	424	11	161	31	588
FX692859	61	328	<10	151	12	804
FX692860	82	503	11	184	14	649
FX692861	11	256	13	167	24	346
FX692862	11	505	<10	191	12	194
FX692863	58	614	<10	168	15	662
FX692864	18	634	<10	179	23	186
FX692865	32	607	<10	162	21	479
FX692866	15	445	14	172	<10	225
FX692867	<10	419	<10	193	17	183
FX692868	25	405	<10	174	30	822
FX692869	13	99	17	93	34	252
FX692870	34	120	<10	127	75	300
D FX692801	60	135	<10	103	15	446
D FX692814	<10	154	19	78	25	94
D FX692828	<10	382	14	62	<10	162
D FX692842	47	227	23	150	19	625
D FX692856	36	514	<10	147	24	730
D FX692869	13	100	27	85	49	264

D - QUALITY CONTROL DUPLICATE



Member of the SGS Group (Société Générale de Surveillance)


**Appendix 4**  
**Statement of Expenditures**



**Statement of Expenditures - Knee Lake-Cinder Lake Diamond Drill Programme**

Field Salaries/Casual Labour	\$ 23,790
Fuels	136
Exploration Equipment and Supplies	62
Telephone	110
External Repairs and Maintenance	96
External Assaying and Sampling	3,111
Aircraft - Fixed Wing Charter	3,045
Truck	876
Contract Drilling - Exploration	116,956
<b>TOTAL:</b>	<b>\$148,182</b>

I certify that the above expenditures as outlined were obtained from the accounting records and represent the charges that are applicable to the diamond drilling programme completed on W53283-CIN3, W53284-CIN4, W49903-KNEE 15 and W49905-KNEE 17.

  
.....  
N. Leroux  
Administrative Assistant

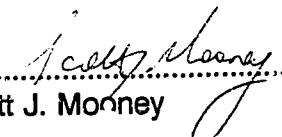
**Appendix 5**  
**Certificate of Qualifications**

Certificate of Qualifications

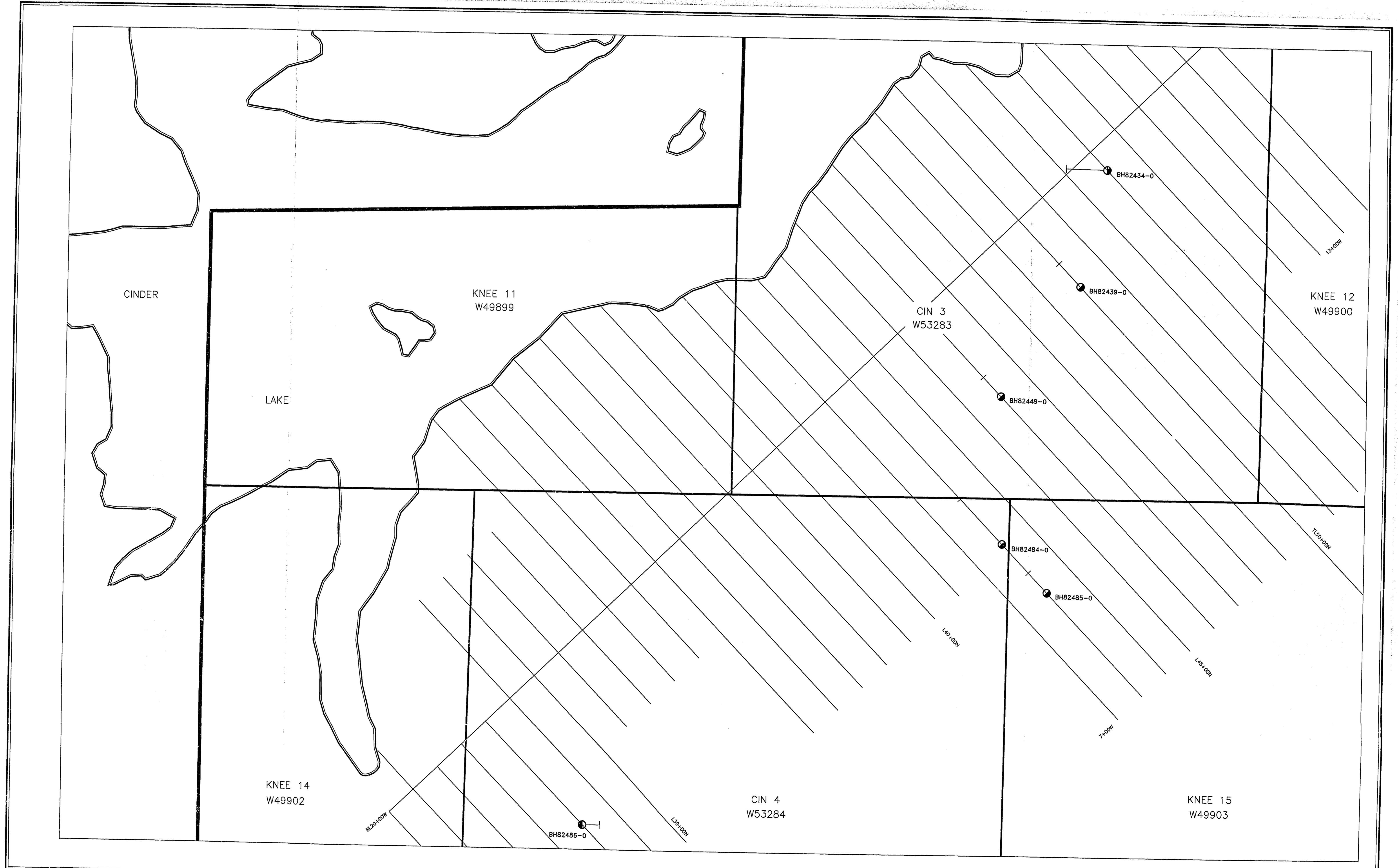
I, **Scott J. Mooney**, of the city of Thompson, in the province of Manitoba, **Hereby Certify:**



1. That I reside at 63 Oak Street, Thompson, Manitoba, R8N 1L9.
2. That I am a graduate of Lakehead University, Thunder Bay, Ontario and have received the following degrees: H.BSc.- Geology with Energy and Fuel Science (1984) and M.Sc - Geology (1991).
3. That I have practiced my profession as a geologist since 1984, having worked in Manitoba, Ontario, Quebec, Nova Scotia and the Northwest Territories.
4. That I am employed as a Project Geologist with Inco Exploration and Technical Services, Inc., 60 Seal Road, Thompson, Manitoba, R8N 1S4.
5. That I visited the areas described in this report.
6. That the work summarized in this report was completed under my supervision.


Dated at Thompson, Manitoba, this 15th day of February, 1995.

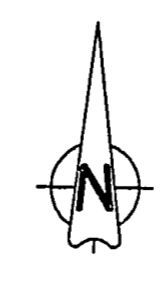
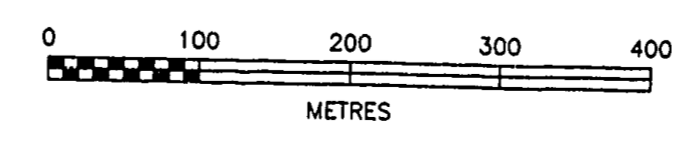
  
.....  
Scott J. Mooney

..... 72875



 Property boundary  
 Claim Line

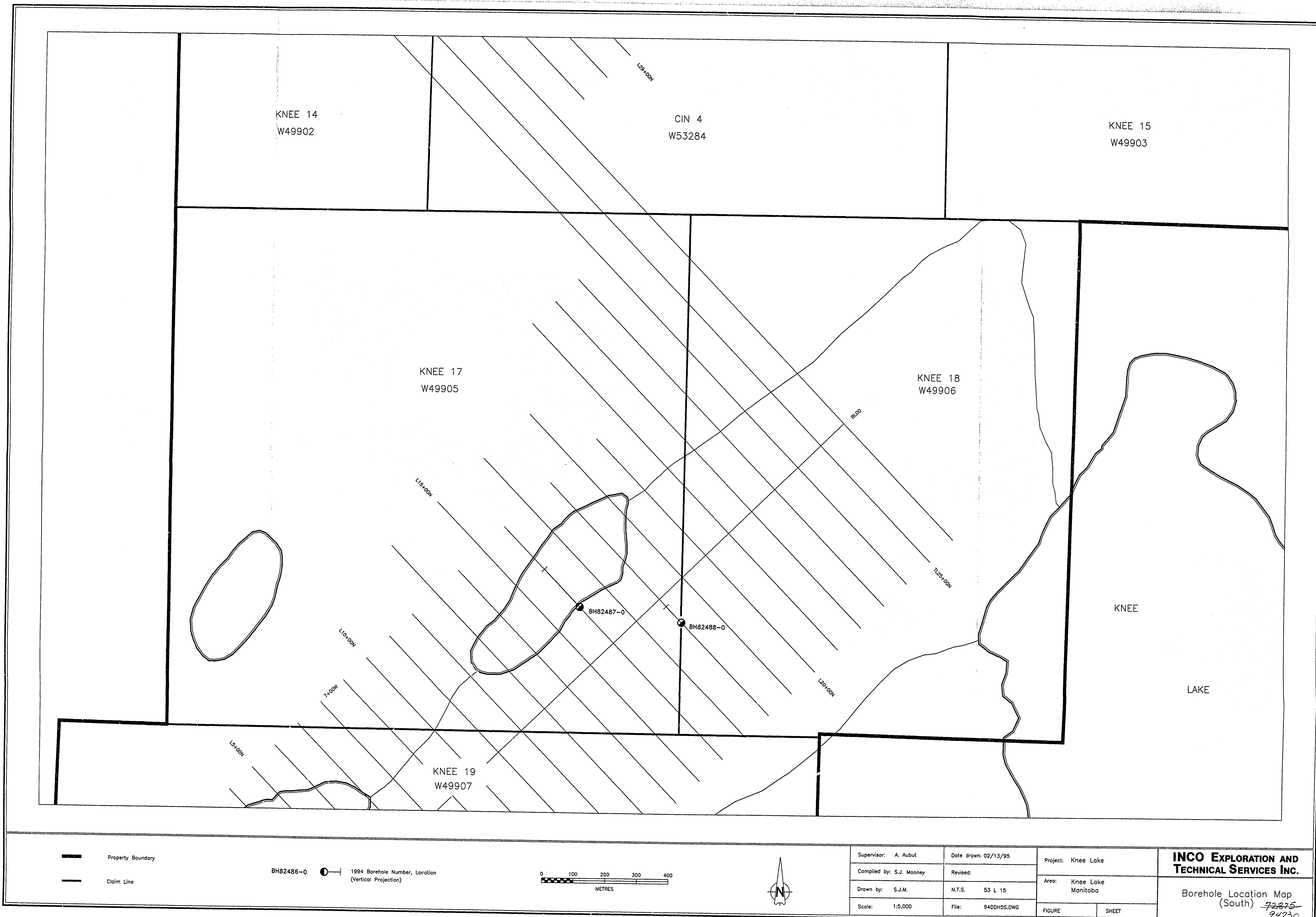
BH82456-0  1994 Borehole Number, Location  
 (Vertical Projection)



Supervisor: A. Aubut	Date drawn: 12/02/94	Project: Knee Lake
Compiled by: S.J. Mooney	Revised:	Area: Knee Lake Manitoba
Drawn by: S.J.M.	N.T.S. 53 L 15	FIGURE
Scale: 1:5,000	File: 94CDH5N.DWG	SHEET

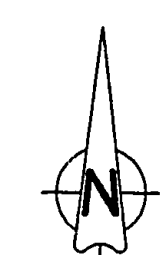
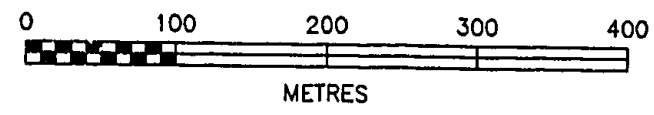
**INCO EXPLORATION AND TECHNICAL SERVICES INC.**

Borehole Location Map  
 (North) 942875  
 94730



— Property Boundary  
 - - - Claim Line

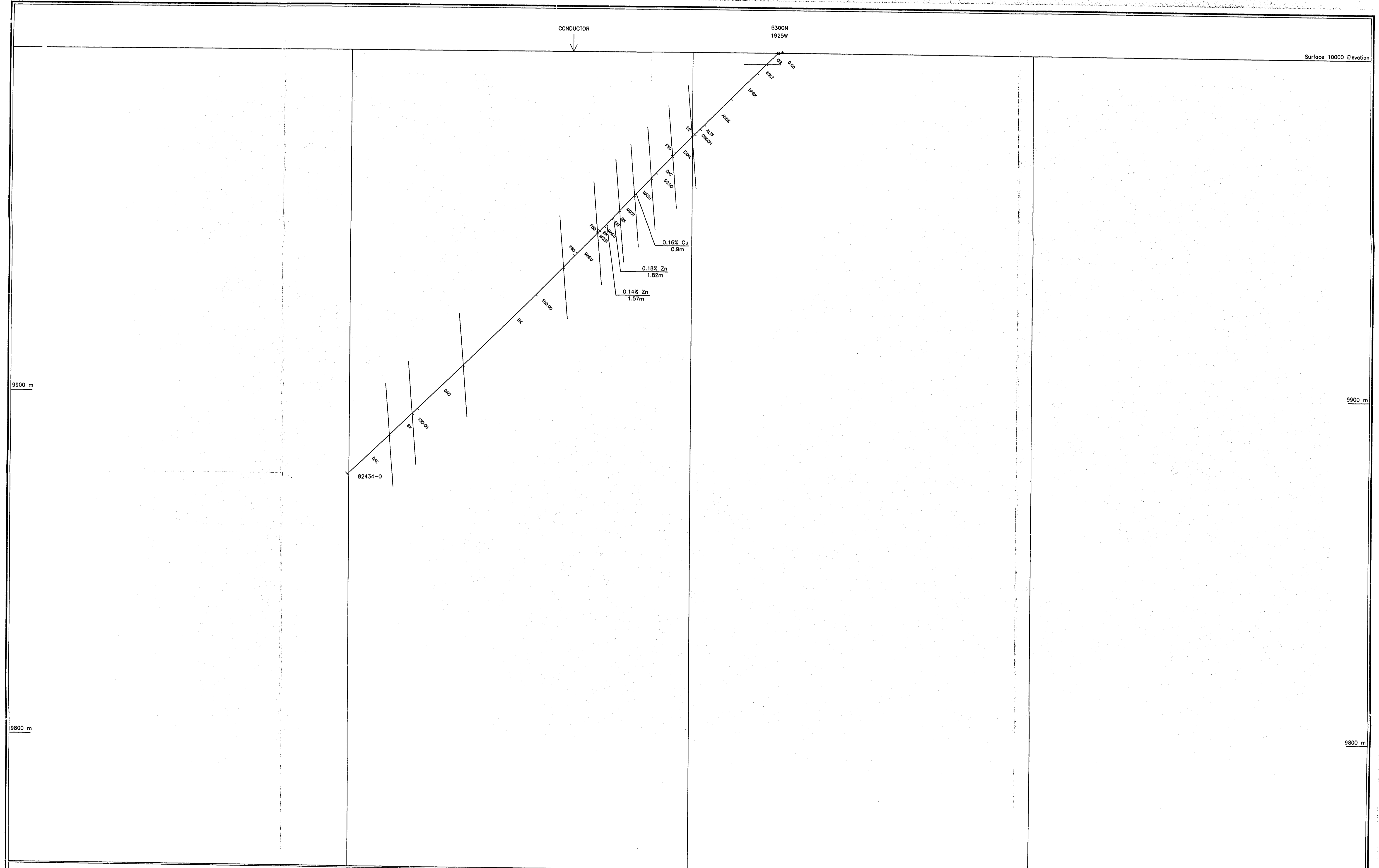
BHB2486-0 ● 1994 Borehole Number, Location  
 (Vertical Projection)



Supervisor: A. Aubut	Date drawn: 02/13/95
Compiled by: S.J. Mooney	Revised:
Drawn by: S.J.M.	N.T.S. 53 L 15
Scale: 1:5,000	File: 94DDH55.DWG

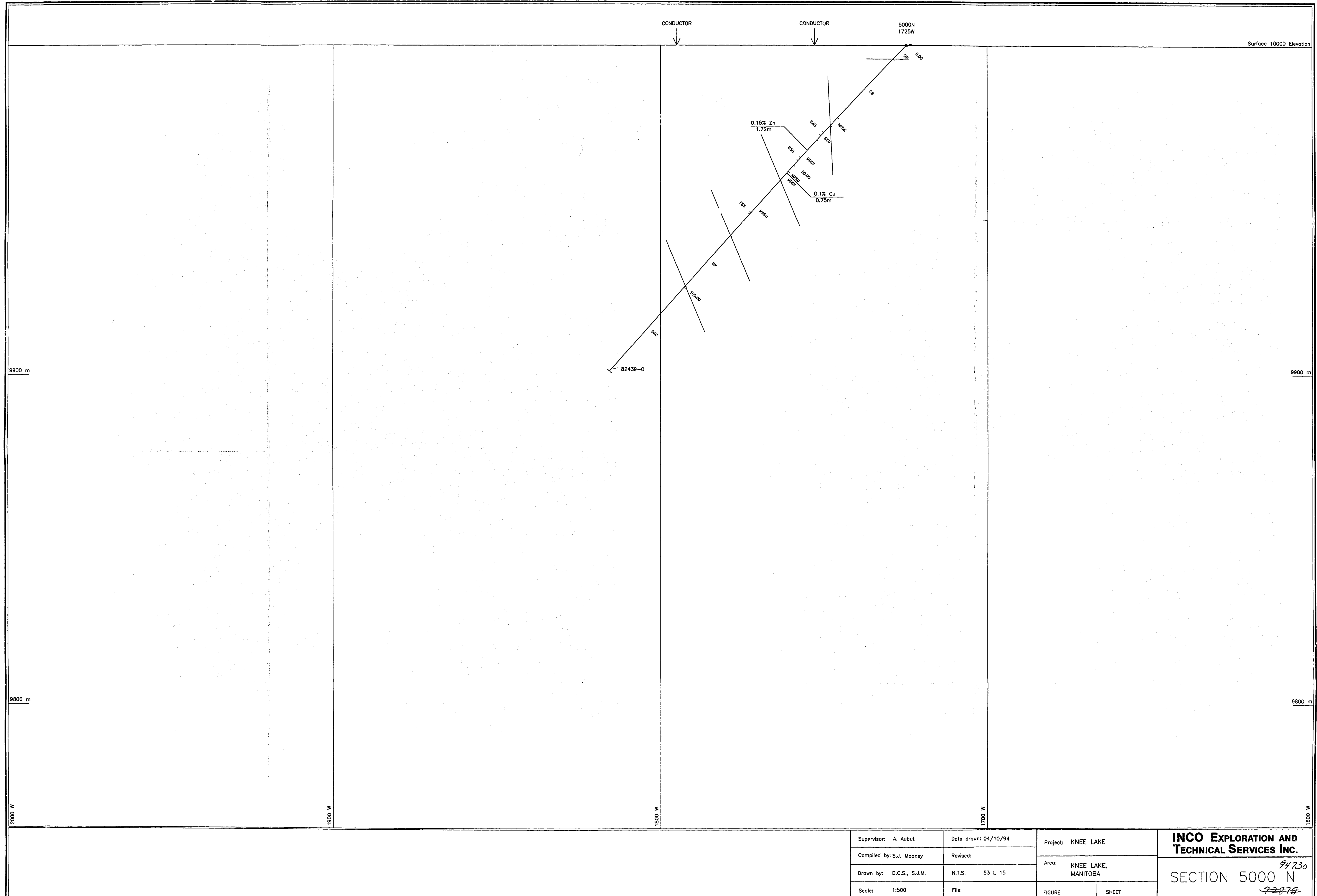
Project: Knee Lake
Area: Knee Lake Manitoba
FIGURE
SHEET

**INCO EXPLORATION AND  
 TECHNICAL SERVICES INC.**  
 Borehole Location Map  
 (South) 922875  
 92730



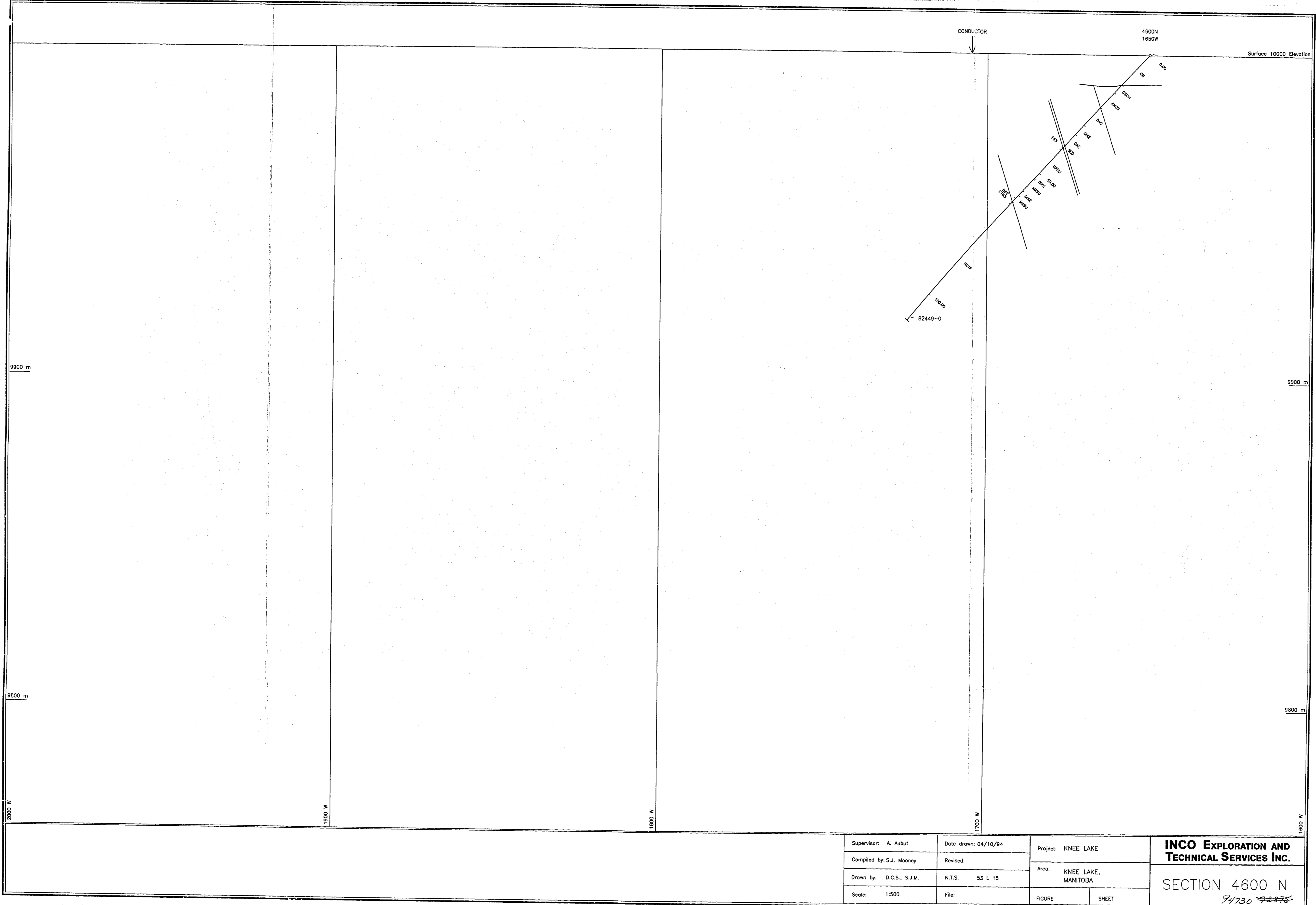
Supervisor: A. Aubut	Date drawn: 04/10/94	Project: KNEE LAKE	<b>INCO EXPLORATION AND TECHNICAL SERVICES INC.</b>
Compiled by: S.J. Mooney	Revised:	Area: KNEE LAKE, MANITOBA	
Drawn by: D.C.S., S.J.M.	N.T.S. 53 L 15	FIGURE	BH 82434 <sup>72878</sup> 94730
Scale: 1:500	File:	SHEET	





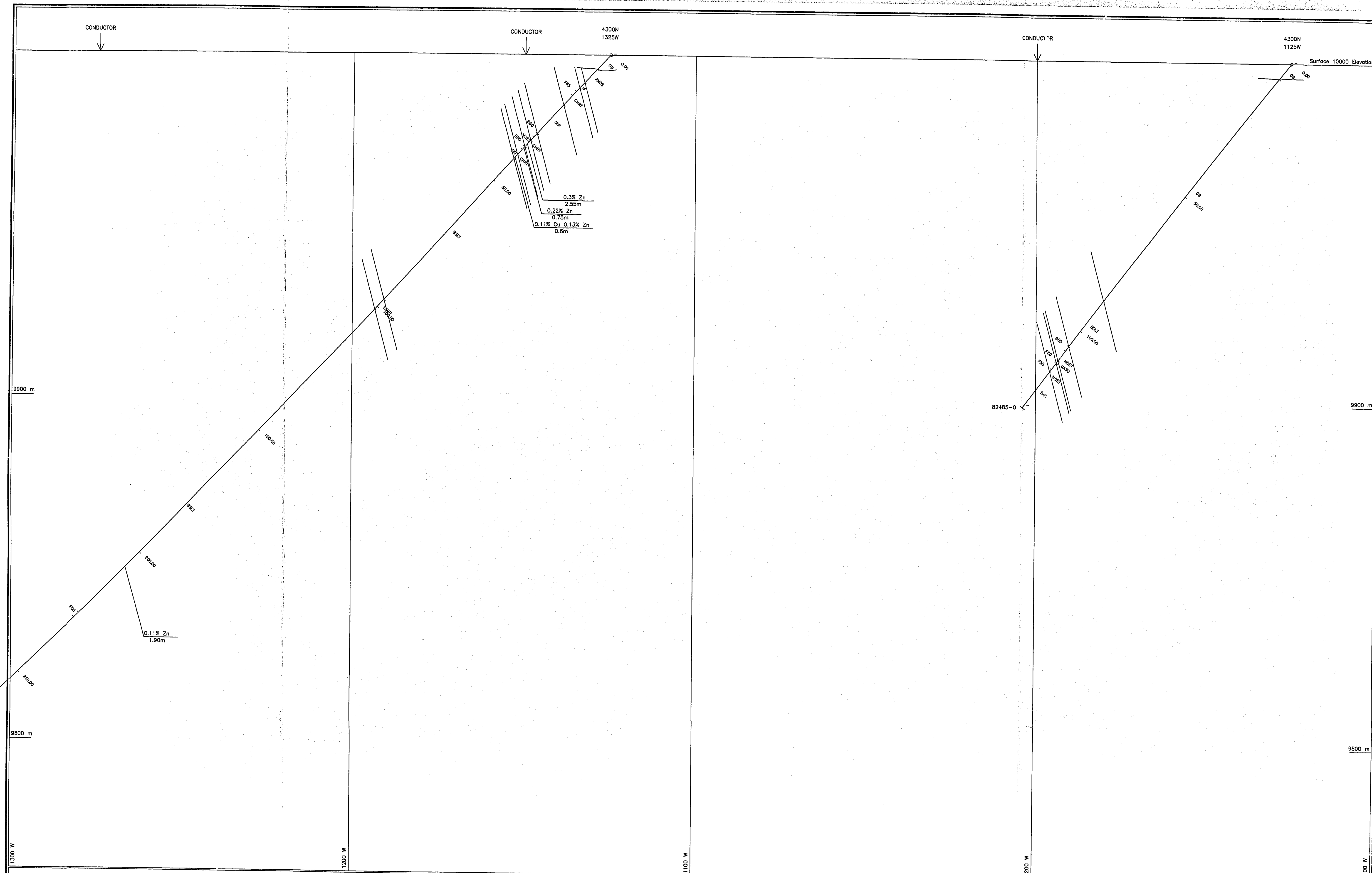
Supervisor: A. Aubut	Date drawn: 04/10/94	Project: KNEE LAKE		<b>INCO EXPLORATION AND TECHNICAL SERVICES INC.</b>
Compiled by: S.J. Mooney	Revised:	Area: KNEE LAKE, MANITOBA		
Drawn by: D.C.S., S.J.M.	N.T.S. 53 L 15	FIGURE	SHEET	SECTION 5000 N 94730 9-28-76
Scale: 1:500	File:			



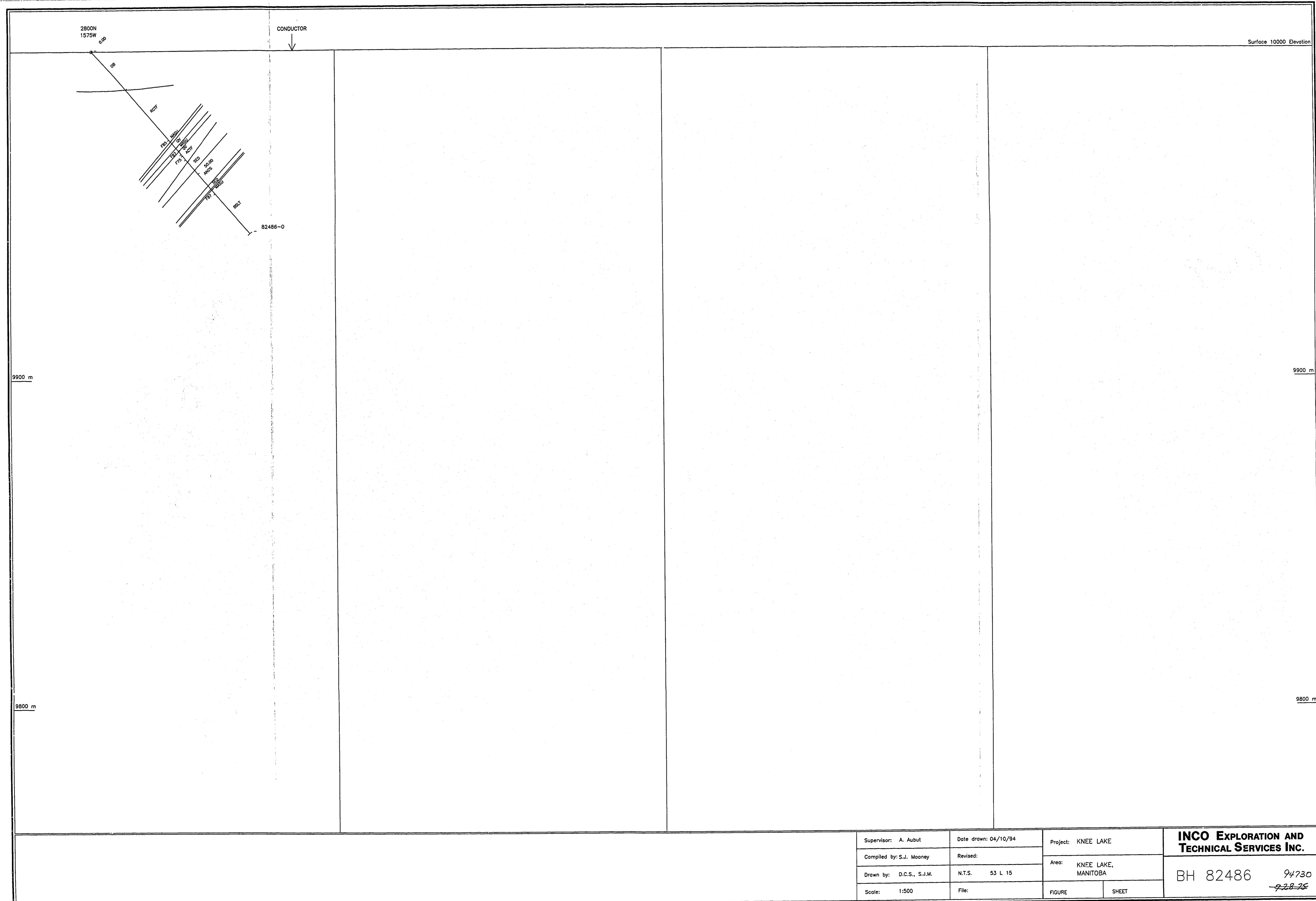


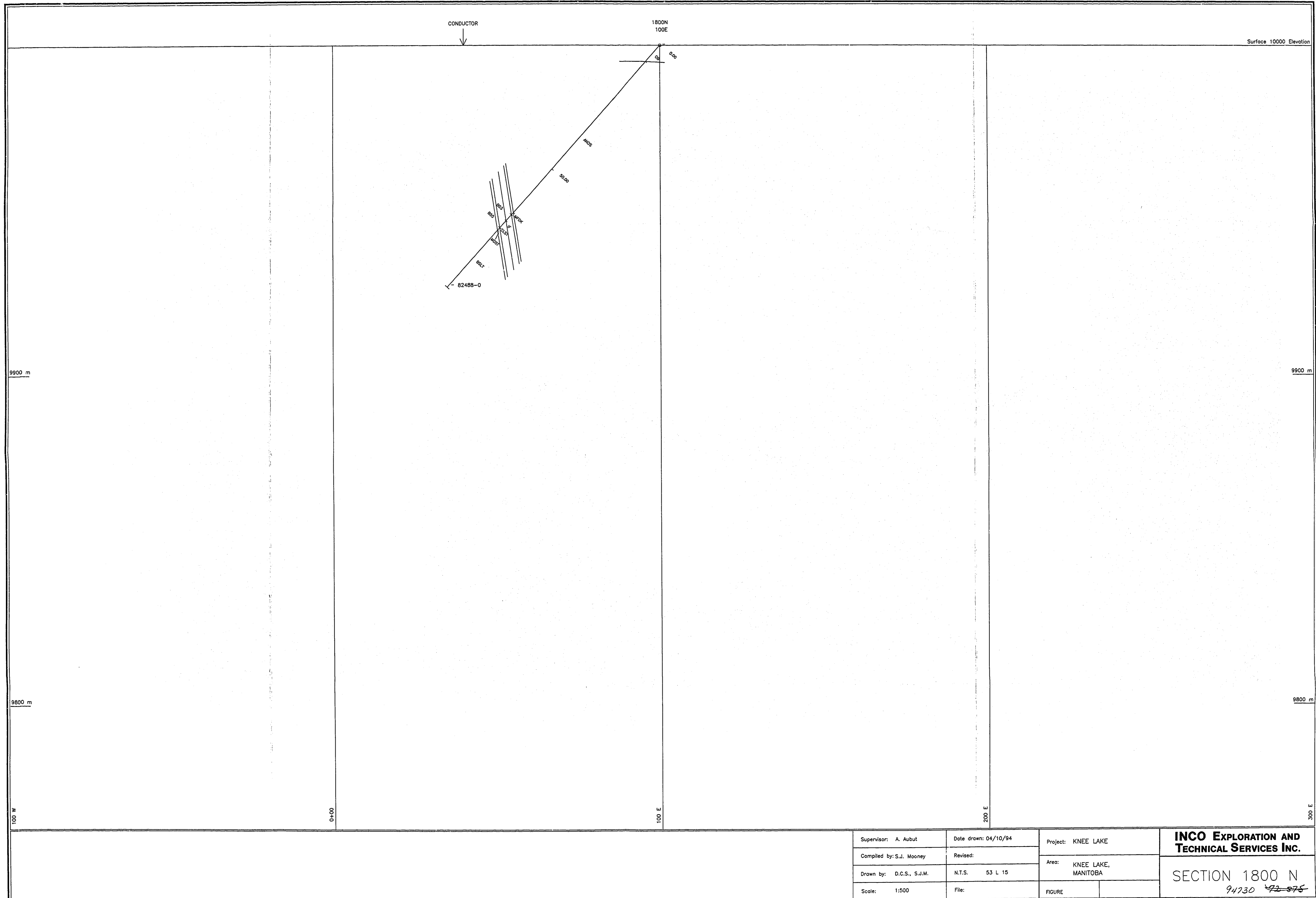
Supervisor: A. Aubut	Date drawn: 04/10/94	Project: KNEE LAKE	<b>INCO EXPLORATION AND TECHNICAL SERVICES INC.</b>  SECTION 4600 N <i>94730 92875</i>
Compiled by: S.J. Mooney	Revised:	Area: KNEE LAKE, MANITOBA	
Drawn by: D.C.S., S.J.M.	N.T.S. 53 L 15	FIGURE SHEET	
Scale: 1:500	File:		

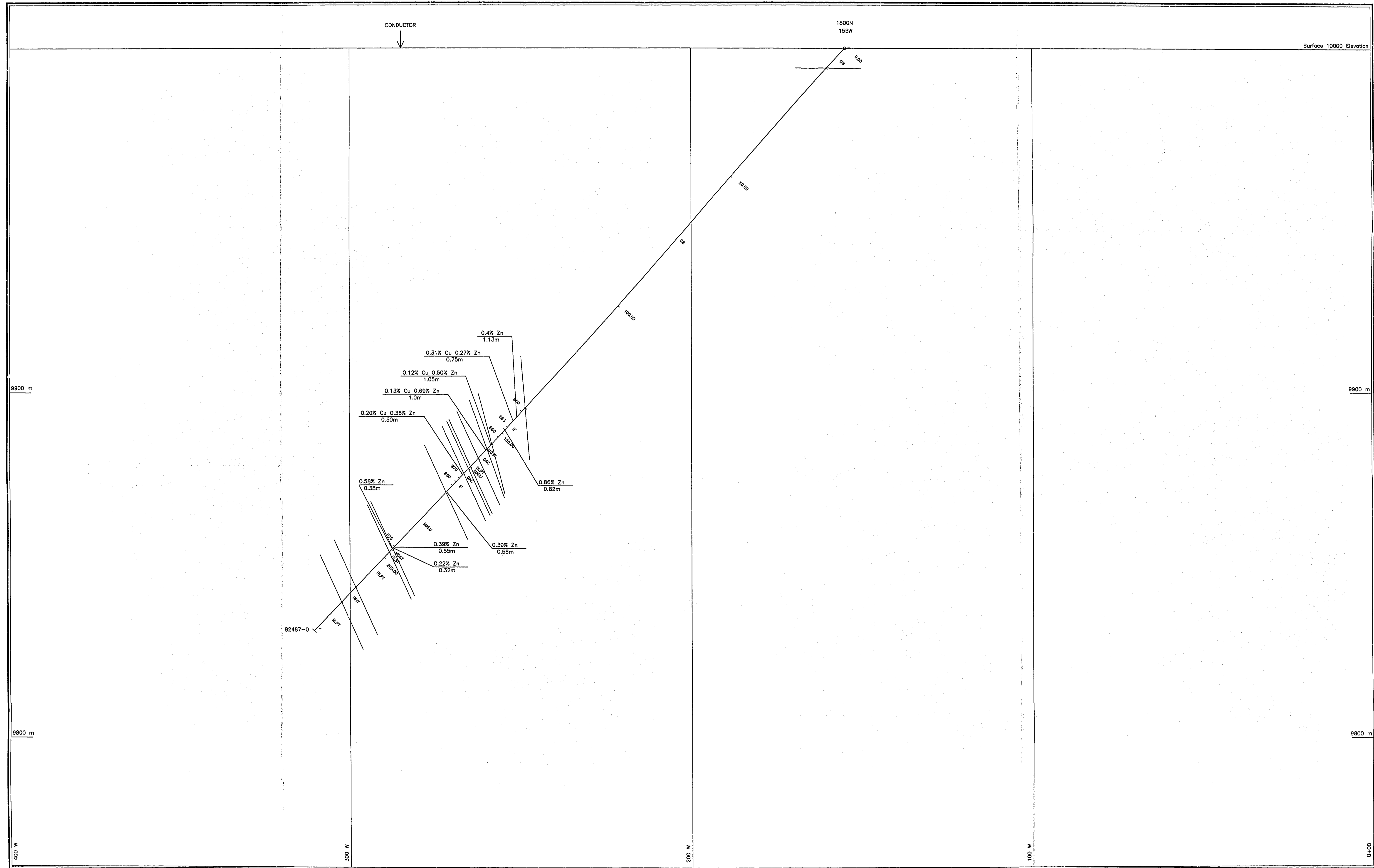




Supervisor: A. Aubut	Date drawn: 04/10/94	Project: KNEE LAKE	<b>INCO EXPLORATION AND TECHNICAL SERVICES INC.</b>  <b>SECTION 4300 N</b> <i>94730-228-75</i>
Compiled by: S.J. Mooney	Revised:	Area: KNEE LAKE, MANITOBA	
Drawn by: D.C.S., S.J.M.	N.T.S. 53 L 15	FIGURE SHEET	
Scale: 1:500	File:		







Supervisor: A. Aubut	Date drawn: 04/10/94	Project: KNEE LAKE	<b>INCO EXPLORATION AND TECHNICAL SERVICES INC.</b>
Compiled by: S.J. Mooney	Revised:	Area: KNEE LAKE, MANITOBA	
Drawn by: D.C.S., S.J.M.	N.T.S. 53 L 15	FIGURE	SECTION 1600 N 92875-94730
Scale: 1:500	File:	SHEET	