



52J045W8926 2.14823 DRAYTON

TECK EXPLORA

010

NORTH BAY, ONTARIO

2.14823

REPORT ON
THE 1992 EXPLORATION PROGRAM
ON THE
MINNITAKI PROPERTY
DRAYTON TOWNSHIP, NORTHWESTERN ONTARIO



by

J. Janzen

RECEIVED

DEC 01 1992

MINING LANDS BRANCH

Report No. 1201NB

N.T.S. 52 J/04

10-13-92



SUMMARY

The Minnitaki property consists of 21 unpatented contiguous mining claims (43 units) located approximately 12 km southeast of Sioux Lookout, Ontario. Teck can earn a 100% interest in the property by making option payments totalling \$25,000 by July 15, 1993. The agreement is subject to a 2% net smelter return royalty.

Highly anomalous gold values (2.9 to 4.4 g/t Au) occur within a carbonate silica-altered sheared contact zone between volcanics and sediments at the main trench on the property. The contact zone with pyrite and molybdenite mineralization and silicification resembles siliceous ore at Hemlo.

The 1992 programs of magnetometer, VLF-EM and I.P. surveying, trenching and diamond drilling were implemented to evaluate the contact zones' economic potential.

The 1992 exploration expenditures are approximately \$151,000.

Results obtained from the 1992 program were not encouraging and no further work is recommended.





52J045W8926 2.14823 DRAYTON

TABLE OF CONTENTS

010C

	<u>Page</u>
INTRODUCTION	1
LOCATION AND ACCESS	1
TOPOGRAPHY AND VEGETATION	1
THE PROPERTY	2
PREVIOUS WORK	2
GEOLOGY	2
Regional Geology	2
Property Geology	3
Mafic Volcanics:	3
Metasediments:	4
Structure	4
Alteration and Mineralization	5
1992 EXPLORATION PROGRAM	5
Magnetic and VLF-EM Surveys	6
Induced Polarization Survey	6
Trenching	6
Diamond Drilling	6
EXPENDITURES	7
RESULTS	8
Geophysics	8
Magnetometer Survey	8
VLF-EM Survey	9
Induced Polarization Survey	9
Trenching	9
Trench 10+00mE	9
Trench 11+00mE	10
Trench 13+00mE	10
Trench 14+00mE-South	11
Trench 14+00mE-North	11
Trench 15+25mE	11

Diamond Drilling	12
DDH MN-1	12
DDH MN-2	12
DDH MN-3	13
DDH MN-4	14
DDH MN-5	14
DDH MN-6	15
DDH MN-7	16
DDH MN-8	16
DDH MN-9	16
Lithogeochemistry	17
CONCLUSIONS AND RECOMMENDATIONS	17
REFERENCES	19

APPENDICES

APPENDIX A	Claim Status
APPENDIX B	Agreement Summary
APPENDIX C	I.P. Report
APPENDIX D	Drill Logs and Sections
APPENDIX E	Assay Certificates
APPENDIX F	Instrument Specifications

TABLES

TABLE 1	Diamond Drill Hole Summary	7
TABLE 2	1992 Expenditures	8
TABLE 3	DDH MN-2 Assay Summary	13
TABLE 4	DDH MN-4 Assay Summary	15

ILLUSTRATIONS

<u>Figures</u>			<u>After Page</u>
1	Location Map	1 inch = 32 miles	1
2	Claim Sketch	1 inch = 1/2 mile	2
3	Regional Geology	1 inch = 1/2 mile	2
4	Trench 10+00mE	.....	10
5	Trench 11+00mE	.....	10
6	Trench 13+00mE	.....	10
7	Trench 14+00mE-South	.....	11
7	Trench 14+00mE-North	.....	11
8	Trench 15+25mE	.....	11
 <u>Drawings</u>			
6706	Geology	1:5 000	In Pocket
6853	VLF-EM Fraser Filter	1:5 000	In Pocket
6854	VLF-EM Profiles	1:5 000	In Pocket
6855	Magnetic Contours	1:5 000	In Pocket
6856	Magnetic Postings	1:5 000	In Pocket

INTRODUCTION

Teck can earn a 100% interest in the 21 claim (43 units) Minnitaki property from Sioux Lookout prospector Ken Bernier. The property is located in Drayton township, Patricia Mining Division approximately 12 km southeast of Sioux Lookout, Ontario. A contact shear zone separating volcanics and sediments observed in the main trench, returned assays up to 4.4 g Au and prompted Teck to enter into the agreement.

An exploration program including magnetometer, VLF-EM survey and I.P. surveys, trenching and diamond drilling was completed in 1992. The results of the 1992 program indicate the contact zone is not of economic consequence. This report summarizes the work performed and results obtained from the 1992 exploration program.

LOCATION AND ACCESS

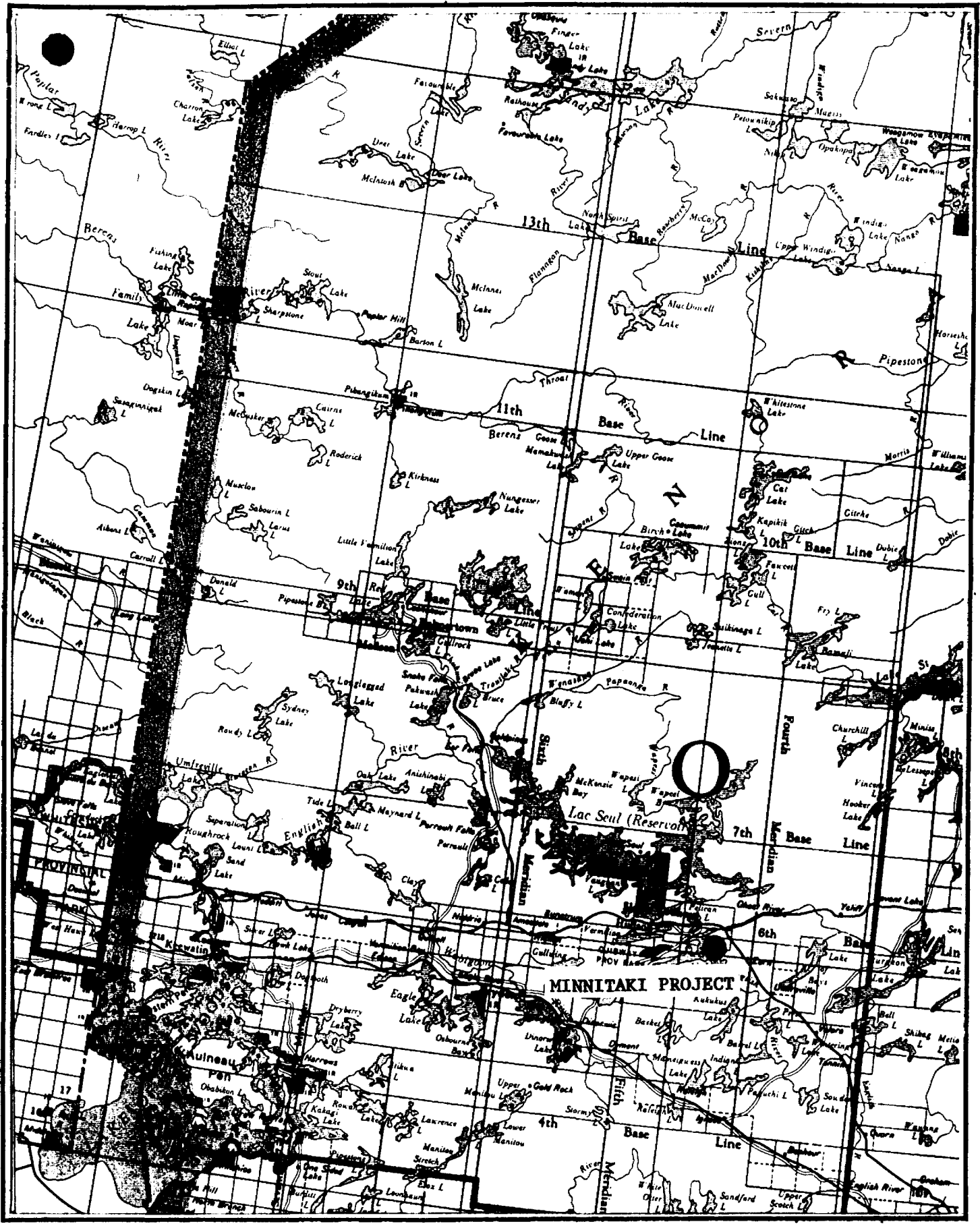
The Minnitaki property is located in Drayton township on the north shore of East Bay of Minnitaki Lake, approximately 12 km southeast of the town of Sioux Lookout, northwestern Ontario (N.T.S. 52 J/04).

Access to the property is easily attainable by boat on the waters of Minnitaki Lake. Terrain access is possible (via snowmobile or A.T.V.) by a skidder trail branching off a forestry access road located approximately 1.5 km east-northeast of the eastern property boundary.

TOPOGRAPHY AND VEGETATION

Approximately 40% of the property underlies Minnitaki Lake. The remainder of the property is in the form of a peninsula. Topography is generally comprised of low rolling hills. Steep rock ridges are localized and usually near the shoreline. The east-central part of the property is low lying with little exposed bedrock.

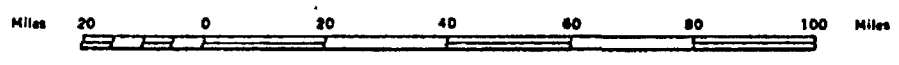
Vegetation on the property is predominantly mixed forest containing balsam, poplar, birch, cedar and black spruce. The north-central to northeastern portion of the property is



LOCATION MAP

Figure 1

1 inch equals approximately 32 miles



characterized by a mature stand of jack pine. The forestry department of the Ministry of Natural Resources has indicated that this block of timber is scheduled to be harvested sometime in 1993.

THE PROPERTY

The property consists of 21 unpatented contiguous mining claims containing 43 units within Drayton township, Patricia Mining Division. The property encompasses an area of approximately 690 hectares.

A list of the claims and their status is presented in Appendix A and their locations are illustrated in Figure 2.

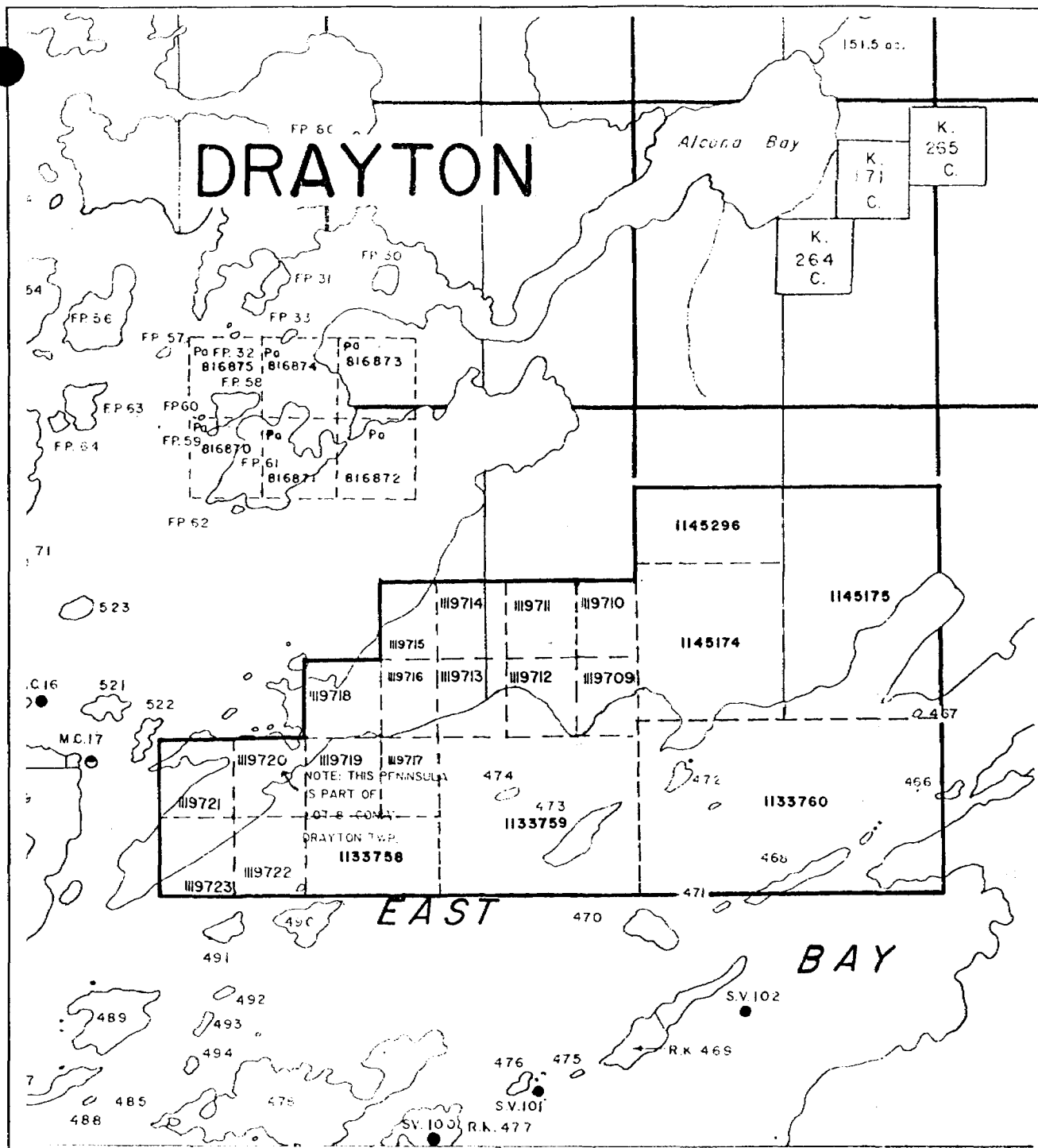
PREVIOUS WORK

1948	Wright-Hargreaves	Trenching and 4 (x-ray) diamond drill holes; 5.00 g Au over narrow width best reported value.
1951	McCombe Mines	Geological mapping, sampling.
1958	McCombe Mines	Mag, VLF-EM survey.
1989	Bernier, K.	Mag, VLF-EM, flagged grid.
1990	Bernier, K.	Trenching, sampling.
1991	Teck Exploration Ltd.	Line cutting, geological mapping.

GEOLOGY

Regional Geology

The Minnitaki property is situated within the Wabigoon subprovince of the Superior Province. The "Sioux Lookout terrane" has been defined as a collisional zone separating the Wabigoon and English River subprovinces (Beakhouse, 1988). The property lies within the



CLAIM SKETCH

MINNITAKI PROPERTY

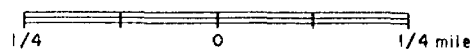
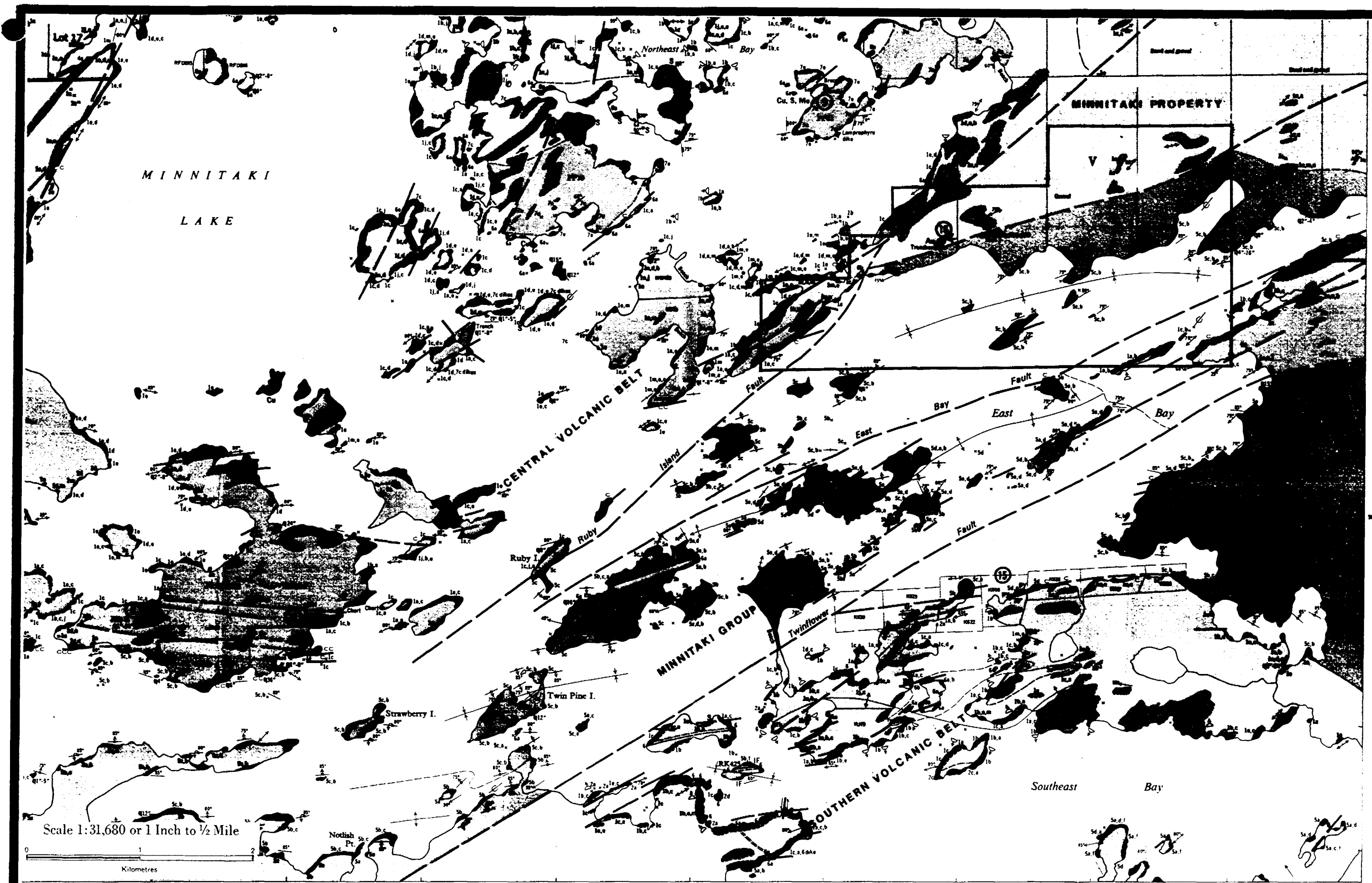


Figure 2



Scale 1:31,680 or 1 Inch to 1/2 Mile
 0 1 2
 Kilometres

Reference: O.G.S. Map 2243 - Abram Lake Sheet

Figure 3. Regional geology of the Minnitaki Property.

Sioux Lookout terrane.

The Sioux Lookout terrane, in the Minnitaki Lake area, contains six easterly trending belts of Archean age. From north to south through the terrane the belts are named accordingly: northern metaplutonic complex, northern volcanic belt, northern sedimentary belt (Patara and Abram group), central volcanic belt, southern sedimentary belt and southern volcanic belt (see Figure 3).

The Minnitaki property locally straddles the unconformable/fault contact between the southern sedimentary belt (Minnitaki group) and the central volcanic belt.

Property Geology

The Minnitaki property is underlain primarily by west-southwest trending mafic volcanics (central volcanic belt) and metasediments (Minnitaki group). The volcanics lie to the north and are interpreted to be in fault contact with the metasediments to the south (Dwg. 6676). The contact, exposed in the Main Trench, is observed to be silicified, carbonate-altered, pyritic, sheared and auriferous.

Mafic Volcanics:

The mafic volcanics outcrop west of L10+00mE and north of the base line east of L10+00mE (Dwg. 6676).

The mafic volcanics are predominantly weakly altered massive flows. They are very fine-grained, dark green, weakly mineralized (nil to trace pyrite) and weakly foliated. Flows of andesitic and dacitic composition outcrop very locally. Mafic to intermediate crystal tuffs and agglomerate also outcrop locally within the mafic flow sequence. The crystal tuffs (pyroclastic flows) contain approximately 5-15% fine-grained feldspar phenocrysts. The agglomerates contain 5-10% lapilli-sized feldspathic fragments.

Strongly foliated mafic volcanics were mapped as mafic tuffs. These rocks have a

tuffaceous appearance due to their strong foliation but may be sheared or schistose flows.

Metasediments:

The sediments outcrop predominantly east of L9+00mE and south of the base line (Dwg. 6676). Greywacke and argillite are the most common sediments observed on the property. The greywackes are very fine-grained, light to dark grey and moderately foliated. Occasionally the greywackes are interbedded with argillite. The argillites (varved slates of Johnston, 1972) are very fine-grained, dark green, thinly bedded/laminated and moderately to strongly foliated. Both the greywacke and argillites are non to weakly mineralized with pyrite (nil to trace).

A unit of sericite schist interpreted as a sediment lies proximal to the volcanic-sediment contact. This unit is strongly sericitized, light green, very fine-grained, moderately to strongly foliated and weakly mineralized with pyrite (trace to 1%). Occasionally the unit contains 1-4% feldspar phenocrysts yielding a porphyritic texture locally. Fine-grained, tan-brown iron-carbonate (ankerite) crystals are observed locally. Although this unit was mapped in the field as a sericitized wacke, its origin is unclear and could be the altered equivalent of a feldspar porphyry or feldspar crystal tuff.

Structure

Three main faults, (Ruby Island, East Bay and Twinflower faults) recognized by Pettijohn in 1936 lie just south of the Minnitaki property. Both the East Bay and Twinflower faults trend N 65°E and the Ruby Island fault trends N 45°E and is theorized to intersect the property grid at approximately L5+00mE, 0+50mS (not observed in outcrop). An anticlinal structure is enclosed by the East Bay and Twinflower faults. The limbs of the fold have been removed by faulting; the remaining block is elevated and moved southeast (sinistrally) relative to adjacent geology (Johnston, 1972; Figure 3). O.G.S. map 2243 also indicates the presence of a synclinal structure (under the waters of Minnitaki Lake immediately south of the eastern portion of the property) enclosed by the East Bay and Ruby Island faults. The O.G.S. indicates that bedding tops in this area are overturned to the south.

Within the property, volcanics and sediments trend west-southwesterly (250°) and are generally vertically to steeply dipping to the north ($77-89^{\circ}$). Foliation observed in outcrop is parallel to bedding and/or flow direction.

The contact between the central volcanics and metasediments (Minnitaki group) is in part marked by the Ruby Island fault (Johnston, 1972). The Ruby Island fault, although not observed in outcrop on the property, is theorized to intersect the grid at approximately L5+00mE and 0+50mS (Figure 3). An inferred bend and/or splay of the Ruby Island fault is thought to traverse the Minnitaki property from approximately L5+00mE; 0+50mS to L35+00mE; 0+60mS (Dwg. 6676). This fault is assumed to be the property-wide contact separating volcanics to the north and sediments to the south.

Several other local shears/faults were observed in outcrop during the 1991 mapping program. The two strongest are a north-northeast trending shear observed within a greywacke at L34+00mE; 1+60mS and an east-northeast trending shear within argillite and greywacke from L25+00mE; 6+15mS to L29+00mE; 5+30mS.

Alteration and Mineralization

The strongest altered and mineralized rocks are within the contact zone which is a strongly silicified, carbonate alteration zone approximately 5 m thick. The zone is mineralized with 1-3% pyrite, trace molybdenite and is auriferous.

The contact shear zone constituted the main exploration target for the 1992 exploration program.

1992 EXPLORATION PROGRAM

During the course of 1992 a comprehensive exploration program was undertaken and completed on the Minnitaki property. The program consisted of ground geophysical surveys including magnetic, VLF-EM and Induced Polarization, followed by trenching and diamond drilling.

Magnetic and VLF-EM Surveys

Thirty-five kilometers of magnetic and VLF-EM was contracted to Vytal Exploration Services of Thunder Bay, Ontario. All picket lines were read at 25m stations with a Scintrex MP-2 magnetometer and a Geonics EM-16 VLF unit.

Induced Polarization Survey

A total of 9.3 kms of induced polarization survey were completed on the Minnitaki property during the month of February 1992.

Remy Belanger of Evain, Quebec carried out a time domain dipole-dipole survey utilizing four potential dipoles (n=1 to 4) and a dipole spacing of 25m. The survey was performed on selective lines, L1300mE, L1400mE, L1600mE, L1800mE, L2000mE, L2200mE, L2400mE, L2600mE, L2800mE, L3000mE, L3200mE and L3400mE and totalled 9.3 kms.

Instruments used were a Phoenix I.P. V-4 Turbo receiver and a Phoenix I.P. T-1 TX transmitter. The generator supplied 1.0 kw of power.

Trenching

A total of 6 trenches were excavated on the Minnitaki property. Wilf Perron Contracting of Sioux Lookout, Ontario was hired to dig four of the trenches with a John Deere 590-D backhoe. The two remaining trenches were hand-stripped.

All trenches were drilled, blasted, sampled and mapped with the assistance of Angus MacDonnell.

Diamond Drilling

A total of 1029m of diamond drilling in 9 holes (MN-1 to MN-9) was completed between July 10, 1992 and July 27, 1992 (Table 1).

Drilling was contracted to Morissette Diamond Drilling Ltd. BQ core (1-7/16 inch diameter) was produced using a Longyear 38 machine.

TABLE 1
DIAMOND DRILL HOLE SUMMARY

Hole #	Location	Azimuth	Inclination	Depth	Cumulative Depth
MN-1	L7+00mE, 0+07mN	160°	-50°	84m	84m
MN-2	L9+50mE 0+30mN	160°	-50°	89m	173m
MN-3	L13+00mE 0+85mN	160°	-50°	77m	250m
MN-4	L16+00mE 0+73mN	160°	-52°	95m	345m
MN-5	L18+00mE 0+02mS	160°	-56°	185m	530m
MN-6	L20+00mE 0+00	160°	-50°	110m	640m
MN-7	L24+00mE 5+35mS	160°	-50°	97m	737m
MN-8	L30+00mE 0+97mS	160°	-55°	107m	844m
MN-9	L17+00mE 0+85mN	160°	-60°	185m	1029m

Drill core intersections with mineralization, alteration or structure were split and analyzed for gold by the atomic absorption method. Systematic sampling of selective holes was performed at approximately 20m intervals for major oxide analyses. T.S.L. Laboratories in Thunder Bay and Saskatoon performed elemental analyses. Whole rock work was performed by Bondar-Clegg of Ottawa, Ontario.

EXPENDITURES

Expenditures to the end of the 1992 program are \$151,345.13. A breakdown of the

costs is presented in Table 2.

TABLE 2
1992 EXPENDITURES

Option Payment	\$ 10,000.00
Diamond Drilling	66,231.03
Geophysics	19,908.00
Trenching	3,852.80
Geology	17,456.35
Labour	5,756.80
Drafting	5,595.78
Assaying	3,258.02
Living	5,079.13
Travel and Transport	4,647.07
Supervision	3,223.33
Staking	912.80
Line Cutting	1,416.80
Field Exploration Cost	1,161.76
Maps and Prints	994.27
Expediting	435.45
Miscellaneous	1,415.74
Total	<u>\$151,345.13</u>

RESULTS

Geophysics

Magnetometer Survey

The predominant magnetic feature on the property is a 4.3 km long magnetic break which bisects the property. The break trends northeast and is characterized by a strong magnetic signature of the volcanics to the north and weak magnetic signature of the

sediments to the south. This feature was extremely useful in locating the "contact-zone" which is located along the volcanic-sediment contact. The results of the magnetic survey are presented on Dwgs. 6855 and 6856.

VLF-EM Survey

Several linear northeast trending VLF-EM anomalies are apparent from the survey. The majority of the anomalies are located south of the magnetic break within the sediments. Drilling has indicated that the source of these anomalies is graphite and graphitic argillite. The results of the VLF-EM survey are presented on Dwgs. 6853 and 6854.

Induced Polarization Survey

The induced polarization survey identified six anomalous zones. A report submitted by Remy Belanger ("Induced Polarization Survey - Teck Exploration Ltd. - Minnitaki Property") adequately summarizes the results of the survey. The report and pseudo-sections are presented in Appendix C.

Trenching

A total of six trenches were completed during the 1992 field season. Five trenches were designed to expose the contact zone at strategic locations from L9+50mE to L15+25mE. Excavating east of L15+25mE proved to be impossible due to thick overburden cover. Drilling was employed to evaluate the contact zone in this area. A single trench, trench 14+00mE-North was excavated north of the contact zone to follow up on an anomalous gold value (134 ppb Au) returned from the initial 1991 mapping program.

Trench 10+00mE

Trench 10+00mE was excavated on L10+00mE from 0+06mN to 0+19mS. The purpose of the trench was to expose the contact zone for sampling purposes. Due to the thick overburden limited (approximately 20%) sub-crop was cleared.

The northern extent of the trench is underlain by mafic volcanics. From approximately 0+05mN to 0+16mS patchy sub-crop was encountered. Moderately silicified volcanics with weak carbonate alteration and 1-2% disseminated pyrite was observed over the interval. This section is assumed to be the contact zone. The entire section was sampled with the best assays being 240 ppb Au from a grab, and 230 ppb Au from a 1 m chip sample. The southern extent of the trench is underlain by a dark green massive rock that is either mafic volcanic or mudstone.

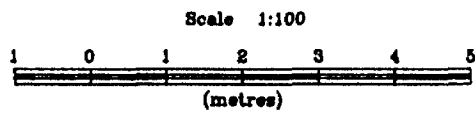
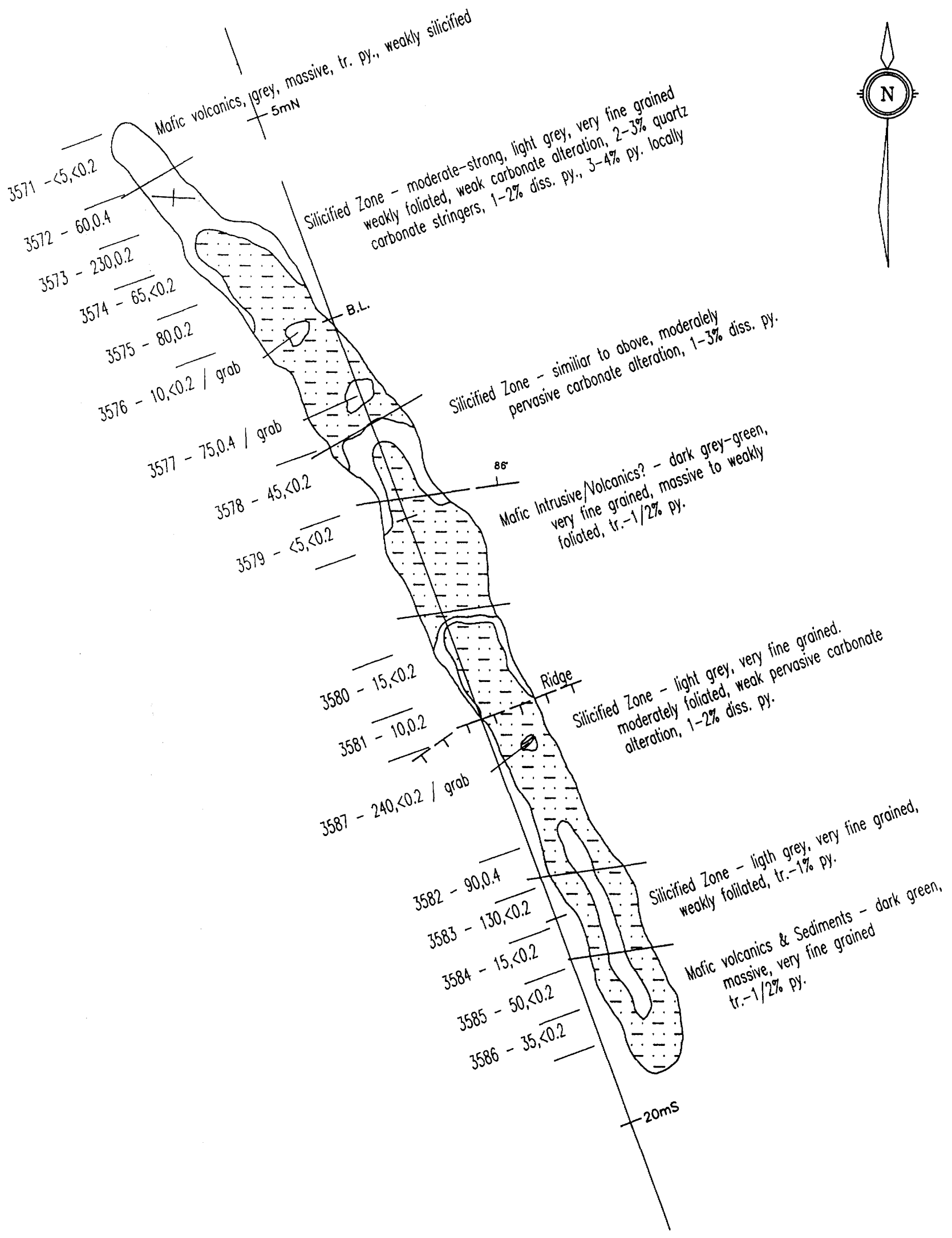
Detailed geology and assays are presented in Figure 4.

Trench 11+00mE


Trench 11+00mE was stripped near L11+00mE from approximately 0+23mN to 0+05mN. A continuous section of outcrop was exposed revealing mafic volcanics to the north and argillite mudstone to the south. At the central part of the trench a sericite schist and a mafic dyke were exposed. The sericite schist contains nil to 2% disseminated pyrite and is locally laden with smoky blue quartz veins. Silicification was not evident and no significant gold assays were returned. A sketch illustrating the detailed geology and assay locations and results is presented in Figure 5.

Trench 13+00mE

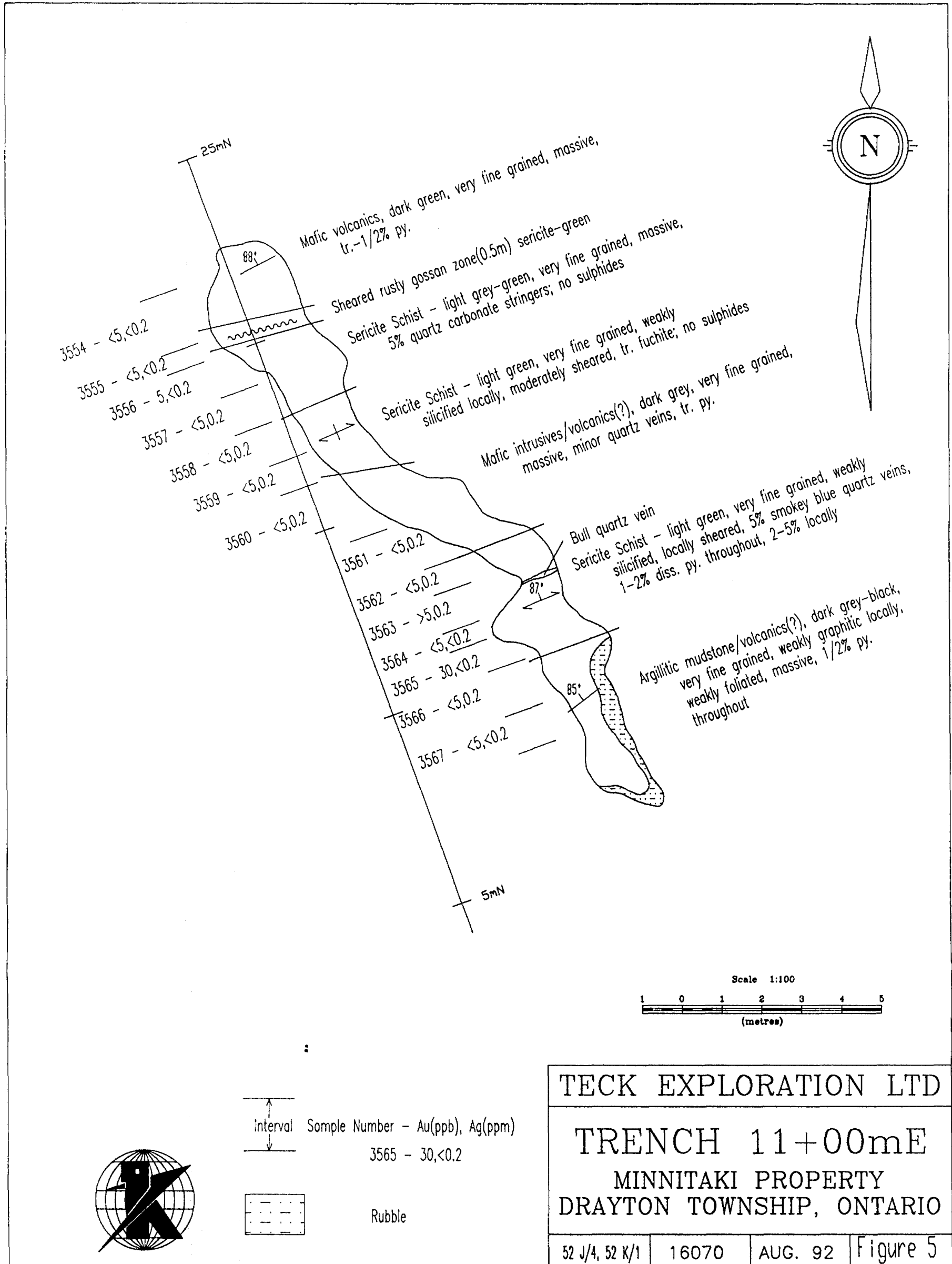
Trench 13+00mE was established on L13+00mE from 0+58mN to 0+26mN. Thick sandy overburden hampered the stripping effort and only about 20% outcrop exposure was attained. At the north end of the trench mafic volcanics were observed. The north-central part of the trench, where the contact zone is thought to be, remains buried in thick sandy cover. Sericite schist was exposed at the southern extent of the trench. No significant assays were returned from sampling. The geology and sample results are presented in Figure 6.



Interval Sample No. - Au(ppb), Ag(ppm)
3537 - 230, 0.2

 Rubble

TECK EXPLORATION LTD			
TRENCH 10+00mE			
MINNITAKI PROPERTY			
DRAYTON TOWNSHIP, ONTARIO			
52 J/4, 52 K/1	16070	AUG. 92	Figure 4



TECK EXPLORATION LTD

TRENCH 11+00mE

MINNITAKI PROPERTY

DRAYTON TOWNSHIP, ONTARIO

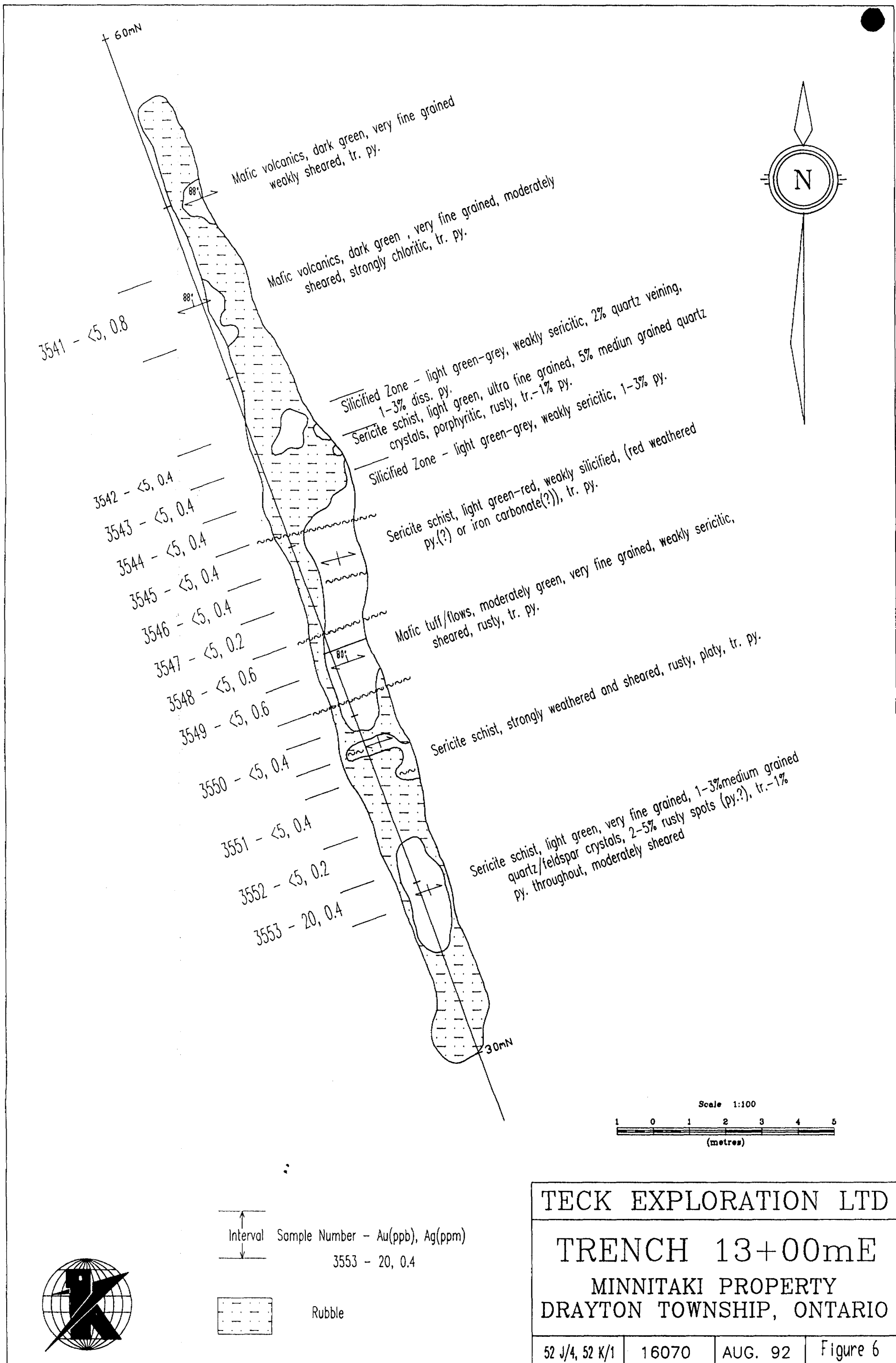
52 J/4, 52 K/1	16070	AUG. 92	Figure 5
----------------	-------	---------	----------



Interval Sample Number - Au(ppb), Ag(ppm)

3565 - 30, <0.2

Rubble



Trench 14+00mE-South

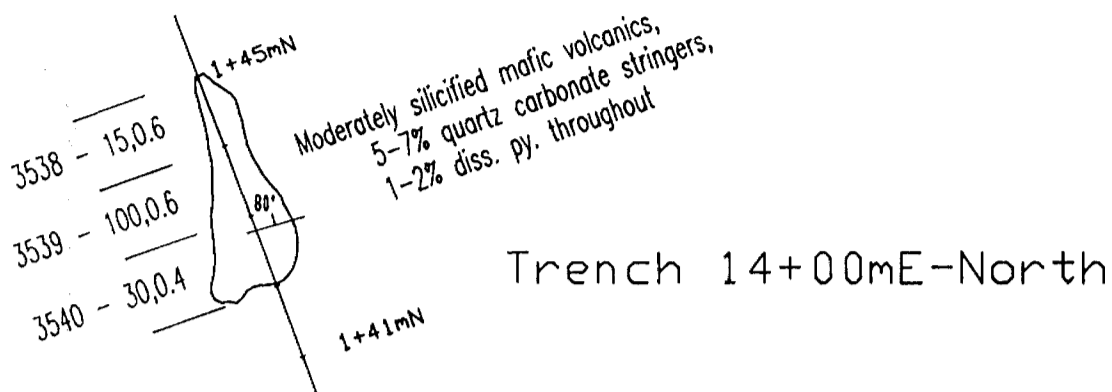
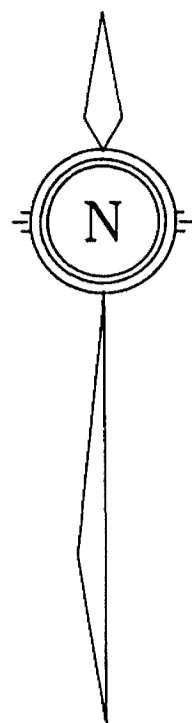
Due to rough terrain conditions a backhoe could not be walked into this location. Hand stripping and blast-clearing exposed a small area from 0+53mN to 0+48mN on L14+00mE. Sheared mafic volcanics and patchy strong silicification with 5% quartz-carbonate stringers were observed and probably represents a portion of the contact zone. The best assay value of 410 ppb Au is from a 1 m chip taken from a silicified section. The geology and assays results are presented on Figure 7.

Trench 14+00mE-North

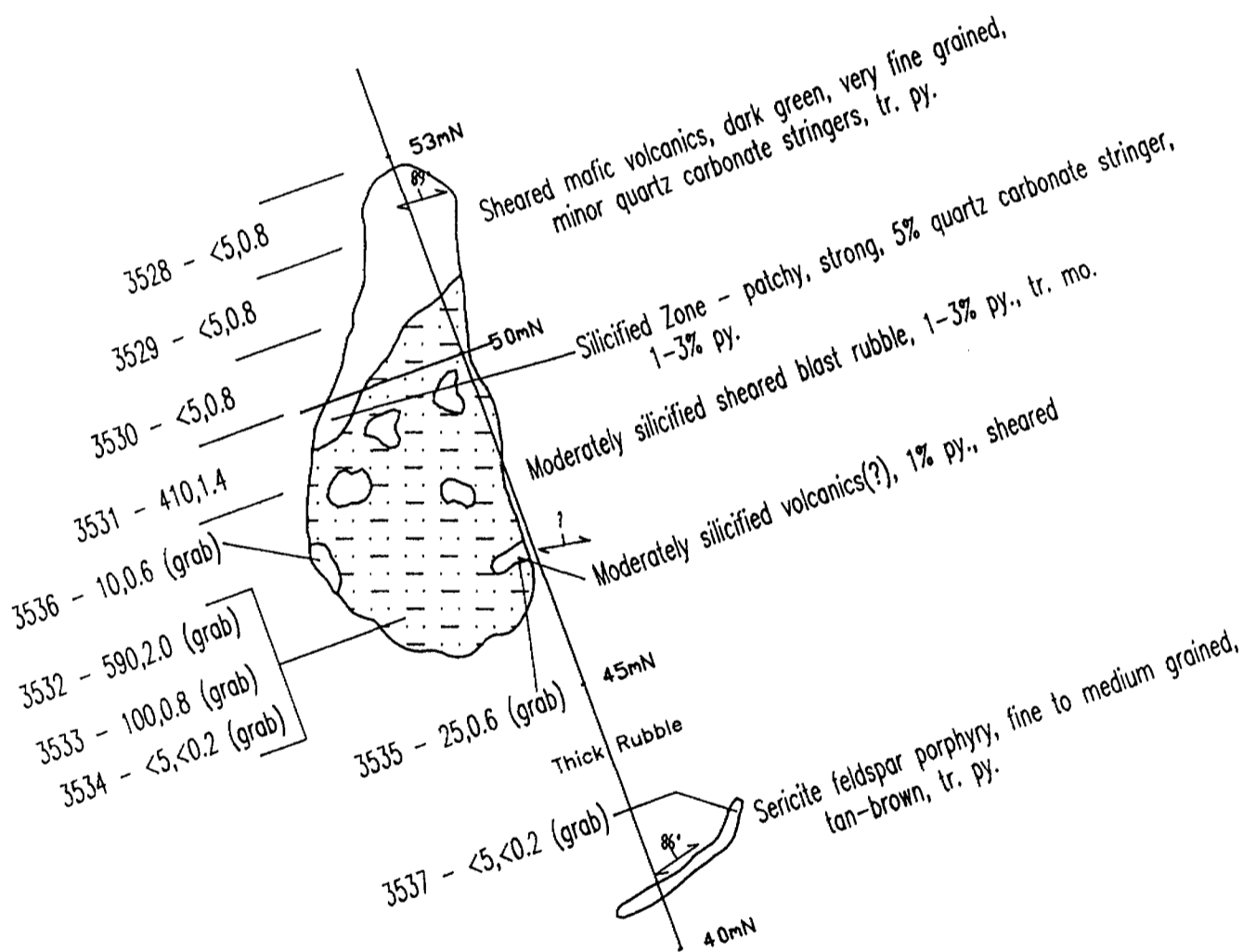
A small area from 1+45mN to 1+41mN on L14+00mE was hand stripped and blasted. The stripping was implemented to follow up on an anomalous gold assay (134 ppb) returned from the 1991 mapping program. Minor quartz-carbonate stringers within a mafic volcanic were observed and returned 100 ppb Au over a 1m chip. The results from this trench are presented on Figure 7.

Trench 15+25mE

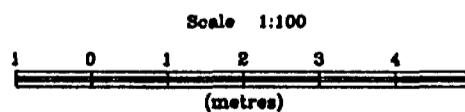
Trench 15+25mE was stripped between 0+10mN and 0+51mN on L15+25mE. The purpose of excavation was to expose the contact zone for sampling purposes. Good sub-crop was encountered under relatively thin cover yielding a nearly continuous section of geology. The north section of the trench from 0+42mN to 0+51mN is mafic volcanic. The contact zone lies from 0+42mN to 0+25mN. The zone is strongly silicified with pervasive carbonate alteration with trace to 3% pyrite and trace molybdenite. The best assay is 2.47 g/t Au over a 1m chip. The majority of the zone was only weakly auriferous with assays in the range from <5 ppb to 420 ppb Au. The south portion of the trench (0+25mN to 0+15mN) is sericite schist with local silicification. No significant assays were returned from this section. Figure 8 presents the geology, assay locations and values.



Trench 14+00mE-South



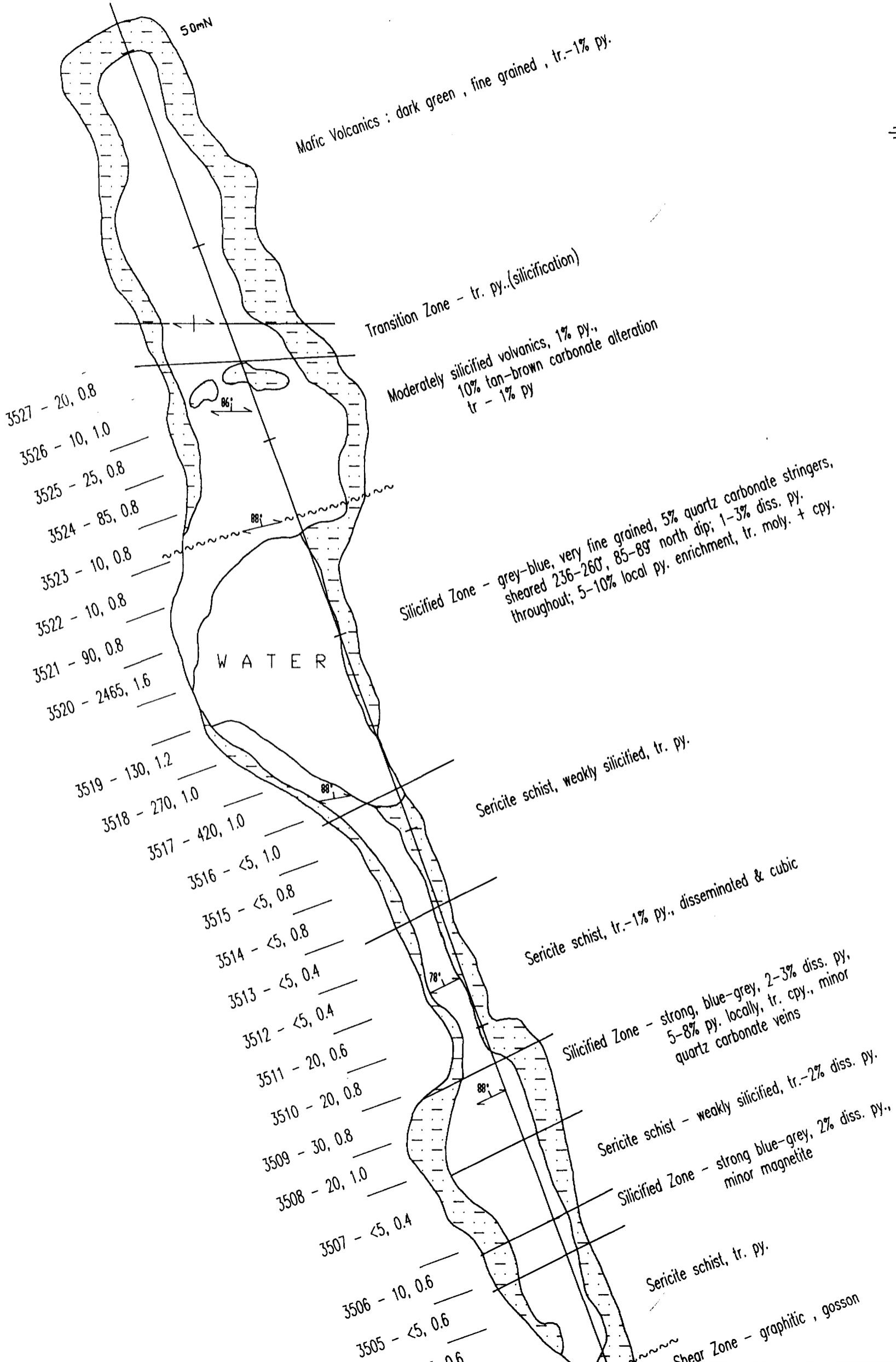
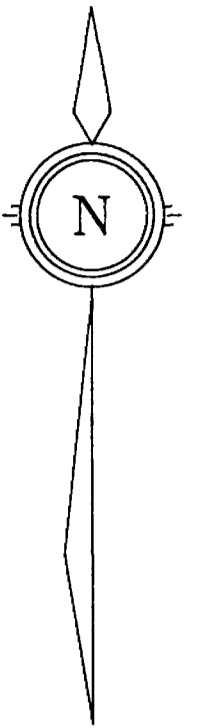
Interval Sample Number - Au(ppb), Ag(ppm)
 3532 - 590, 2.0



 Rubble



TECK EXPLORATION LTD			
TRENCH 14+00mE			
MINNITAKI PROPERTY			
DRAYTON TOWNSHIP, ONTARIO			
52 J/4, 52 K/1	16070	AUG. 92	Figure 7



3519 - 130, 1.2

3518 - 270, 1.0

3517 - 420, 1.0

3516 - <5, 1.0

3515 - <5, 0.8

3514 - <5, 0.8

3513 - <5, 0.4

3512 - <5, 0.4

3511 - 20, 0.6

3510 - 20, 0.8

3509 - 30, 0.8

3508 - 20, 1.0

3507 - <5, 0.4

3506 - 10, 0.6

3505 - <5, 0.6

3504 - <5, 0.6

3503 - 15, 0.6

3502 - 70, 0.4

3501 - 10, 0.8

Sericite schist, weakly silicified,

Sericite schist, tr.-1% py., disseminated & cubic

Silicified Zone - strong, blue-grey, 2-3% diss. py.,
5-8% py. locally, tr. cpy., minor
quartz carbonate veins

Sericite schist - weakly silicified, tr.-2% diss. py.

Silicified Zone - strong blue-grey, 2% diss. py.,
minor magnetite

Sericite schist, tr. py.

Shear Zone - graphitic, gossion

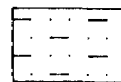
Sericite schist, 1-2% py.

10mN

Scale 1:100



Interval Sample Number - Au(ppb), Ag(ppm)
3502 - 70, 0.4



Rubble



TECK EXPLORATION LTD

TRENCH 15+25mE

MINNITAKI PROPERTY
DRAYTON TOWNSHIP, ONTARIO

52 J/4, 52 K/1

16070

AUG. 92

Figure 8

Diamond Drilling

The 1992 diamond drilling program on the Minnitaki property consisted of nine holes. The holes were primarily targeted on the geological contact zone to evaluate its quality as an auriferous structure. One drill hole (MN-7) was targeted on a strong I.P. anomaly. The diamond drill hole sections are presented in Figures 9 through to Figure 17. The drill logs are available in Appendix D.

DDH MN-1

Hole MN-1 was drilled to test the contact zone on L7+00mE.

The hole intersected a sequence of mafic volcanics, mafic tuffs, the contact zone, a sericite schist and sediments. The contact zone was intersected from 66.8m to 69.85m. The zone is light grey, very fine-grained, moderately to strongly silicified and is sericitized downhole. Weak carbonate alteration appears throughout with local sections of 10% quartz-carbonate stringers. Mineralization consists of 1% finely disseminated pyrite as well as coarse cubic pyrite with local enrichments of 2-3% pyrite. Assays within the zone returned <5 ppb Au.

DDH MN-2

Diamond drill hole MN-2 was performed to test the contact zone 30m below the main trench on L9+50mE.

The hole intersected a sequence of mafic volcanics, the contact zone, a sericite schist and sediments. The contact zone is light grey-cream in colour, very fine-grained to aphanitic, strongly silicified with a weak to moderate pervasive carbonate alteration. Approximately 3% of the interval is veined or flooded with quartz-carbonate. The zone is mineralized with ½-1% pyrite throughout. Up to 10% pyrite occurs locally over narrow widths (<10 cm). Molybdenite occurs very rarely. Strongly anomalous, but sub-economic gold values were returned from the zone and assay results are summarized in Table 3. The

average grade of the section from 37.0 m to 48.0 m is 657 ppb Au including 1.7 m that averages 1.705 g/t Au.

DDH MH-3

Hole MN-3 was designed to test the contact zone at depth on L13+00mE immediately below Trench 13+00mE.

**TABLE 3
DDH MN-2 ASSAY SUMMARY**

Interval (m)	Length (m)	Au (ppb)	Comments
35.25 to 36.00m	0.75	60	contact zone, trace pyrite
36.00 to 37.00m	1.0	25	contact zone, 1% pyrite
37.00 to 38.00m	1.0	130	contact zone, 1-2% pyrite
38.00 to 39.00m	1.0	75	contact zone, trace-1% pyrite
39.00 to 40.00m	1.0	130	contact zone, strongly silicified, trace pyrite
40.00 to 41.00m	1.0	310	contact zone, 3% pyrite locally
41.00 to 41.50m	0.5	410	strongly silicified, 1-2% pyrite, trace molybdenite
41.50 to 42.50m	1.0	900	strongly silicified, 2-3% pyrite
42.50 to 43.50m	1.0	2030	strongly silicified, 10% quartz-carbonate veins, 3-5% pyrite, 10% pyrite locally
43.50 to 44.20m	0.7	1240	strongly silicified, 5% quartz-carbonate veins, 2-5% pyrite
44.20 to 44.50m	0.3	225	strongly silicified, 1% pyrite
44.50 to 45.50m	1.0	680	strongly silicified, 5% quartz-carbonate veins, 2% pyrite, blue tint-molybdenite?
45.50 to 46.20m	0.7	810	as above
46.20 to 47.00	0.8	490	as above, 1% pyrite
47.00 to 48.00	1.0	460	strong fe-carbonate, silica alteration, 2% pyrite, contact zone ends at 48.00m

The hole intersected a sequence of mafic volcanics, the contact zone, a sericite schist and sediments. The contact zone is not well developed at this location and consists of mafic volcanic with approximately 30% weakly silicified carbonatized grey-cream bands 1 to 10 cm thick. Trace pyrite was observed throughout with local pyrite enrichment up to 1%. Gold values are weak and range from <5 to 90 ppb.

DDH MN-4

Diamond drill hole MN-4 was drilled on L16+00mE to test the eastern extent of the contact zone.

The hole intersected a sequence of mafic volcanics, the contact zone and a sericite schist. The zone is 9.10 m thick and is characterized by strong blue-grey silicification. The section is weakly altered with iron carbonate and contains scattered quartz-carbonate stringers. The unit contains ½% pervasive pyrite mineralization with local sections containing up to 5% pyrite. Molybdenite, although not observed, is suspected due to the blue tint observed in the intersection. Strongly anomalous sub-economic gold assays (up to 2.1 g/t Au) were returned. A summary of the assay results returned from DDH MN-4 is summarized in Table 4. The average grade of the mineralized section from 72.0 to 78.9 m is 654 ppb Au including a section from 77.1 to 78.9 m that averages 1.167 g/t Au.

DDH MN-5

Hole MN-5 was collared on L18+00mE to test both the eastern extent of the contact zone and an I.P. anomaly.

The hole intersected mafic volcanics, the contact zone, sericite schist and sediments. The contact zone is 6m thick at this location and is characterized by blue-grey silicification and weak pervasive carbonate alteration. Minor quartz-carbonate stringers were observed and mineralization is in the order of ½% pyrite with local sections up to 3%. The best gold assay returned was 540 ppb Au over 0.9m. The average of the mineralization from 71.9 to 75.5 m is 270 ppb Au.

TABLE 4
DDH MN-4 ASSAY SUMMARY

Interval (m)	Length (m)	Au (ppb)	Comments
71.10 to 72.00m	0.9	20	contact zone, trace pyrite
72.00 to 72.50m	0.5	1520	contact zone, 4 cm quartz vein, ½% pyrite
72.50 to 73.50m	1.0	260	contact zone, strongly silicified, trace-½% pyrite
73.50 to 74.50m	1.0	570	contact zone, strongly silicified, 2 cm quartz vein, 1% pyrite
74.50 to 75.50m	1.0	340	as above, ½% pyrite
75.50 to 76.30m	0.8	310	as above, 4 cm quartz vein
76.30 to 77.10m	0.8	130	contact zone, strongly silicified, ½% pyrite
77.10 to 77.70m	0.6	2140	contact zone, strongly silicified, 10% quartz-carbonate stringers, 3% pyrite, trace chalcopyrite
77.70 to 78.50m	0.8	260	contact zone, 3-5% pyrite
78.50 to 78.90m	0.4	1520	contact zone, 2 - 1 cm quartz-carbonate veins, 3-5% pyrite
78.90 to 79.80m	0.9	20	contact zone, weakly sericitized, 10% quartz-carbonate stringers, trace pyrite
79.80 to 80.20m	0.4	5	contact zone, ½% pyrite

The hole was pushed further south to evaluate a moderate I.P. anomaly lying within the sediments. The source of the anomaly is probably narrow bands of graphitic argillite within the sediment sequence.

DDH MN-6

Hole MN-6 was drilled to test the contact zone on L20+00mE.

The hole intersected mafic volcanics, sericite schist, sericite porphyry, and sediments.

The contact zone, or more specifically silica alteration was not encountered at the volcanic-sediment contact. The sericite schists and sericitic quartz-feldspar porphyry were observed at the contact and were extensively sampled. The best assay returned was 40 ppb Au over 0.5 m. The favourable silica alteration is theorized to pinch out somewhere between L18+00mE (DDH MN-5) and L20+00mE (DDH MN-6).

DDH MN-7

Diamond drill hole MN-7 was drilled on L24+00mE to evaluate a strong I.P. anomaly. The hole intersected interbedded greywacke and argillite. Thin bands of interbedded graphitic argillite were observed throughout the hole. Narrow local sections (1-3m thick) contain up to 70% graphitic argillite. The source of the I.P. anomaly is probably the cumulative effect of these graphitic argillite interbands. No significant assays were returned from hole MN-7.

DDH MN-8

Hole MN-8 was designed to test an I.P. anomaly possibly representing the contact zone on L30+00mE. The hole intersected a sequence of mafic volcanics, altered sediments, graphitic argillite and argillite. The altered sediments are beige in colour with strong carbonate alteration and minor local weak silica alteration. Mineralization within this section is weak with trace pyrite. All assays returned <5 ppb Au. Graphitic argillite, which was encountered below the altered sediments, is considered the source of the I.P. anomaly.

DDH MN-9

Diamond drill hole MN-9 was collared on L17+00mE to test the contact zone at depth.

The hole intersected a sequence of mafic volcanics, intermediate tuffs and sericite schists. The contact zone was not seen and is assumed not to be developed at depth at this location. No significant assays were returned from the hole.

Lithogeochemistry

Systematic lithogeochemical samples were taken in diamond drill holes MN-2, MN-4, MN-6 and MN-8. High LOI (Loss-on-Ignition) up to 13.5% and averaging 9% were returned from all samples. This indicates strong carbonate alteration is common within the mafic volcanics, contact zone, sericite schist and sediments. This phenomenon was visually apparent from logging the core.

CONCLUSIONS AND RECOMMENDATIONS

The Minnitaki property was acquired on the potential merit of an auriferous structure (the contact zone) discovered by the property vendor.

The main trench exposed a mineralized contact separating a unit of mafic volcanics to the north, and a unit of metasediments to the south. The contact zone is a carbonate (ankerite)-silica altered shear, approximately 5 m thick, with 3-5% pyrite and trace molybdenite mineralization. The pyrite \pm molybdenite (\pm Au) mineralization is unusual and somewhat resembles siliceous ore at Hemlo.

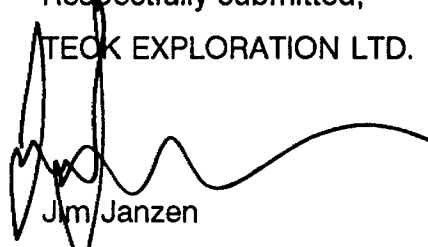
During 1992 an exploration program consisting of ground geophysical surveys, trenching and diamond drilling was completed. The results of the program indicate that the contact zone has a minimum strike length of 1100m from L7+00mE to L18+00mE. The zone has been extensively sampled across strike by trenching and drilling. The altered structure (silica + carbonate) persisted across 1100m but only returned anomalous sub-economic gold grades. The best gold assay of 2.45 g/t over 1 m was returned from trench 15+25mE. Diamond drill hole MN-2 intersected 0.9 g/t Au over 6.5m. The contact zone, albeit auriferous, does not appear to improve in grade at depth or along strike. Therefore the zone is now considered anomalous but of no economic consequence.

The I.P. survey indicated a strong I.P. response from L18+00mE, 4+00mS to L34+00mE, 2+00mS. This feature was tested by a diamond drill hole MN-7 on L24+00mE. The results from the hole suggest the source of the anomaly is graphitic argillite.

The main exploration target on the Minnitaki property was the contact zone. The results of the 1992 exploration program indicate the zone is sub-economic. Potential for an economic deposit elsewhere on the claim group is not apparent and therefore no further work is recommended.

Respectfully submitted,

TECK EXPLORATION LTD.

A handwritten signature in black ink, appearing to read "Jim Janzen", is written over the printed name. The signature is fluid and somewhat stylized, with a long horizontal stroke extending to the right.

Jim Janzen

October 13, 1992

REP-0131/ec

REFERENCES

Beakhouse, G.P.

1988: OGS Misc. paper 141; 13. Project Number 88-7. The Wabigoon-Winnipeg River Subprovince Boundary Problem, pg. 108-114.

Hurst, M.E. and Thomson, J.E.

1933: ODM Geological Report Vol. XLI, Part VI, 1932: Geology of the Sioux Lookout Area, by M.E. Hurst pgs. 1-33.

Janzen, J.

1991: Report on the 1991 Exploration Program on the Minnitaki Property, Drayton Township, Northwestern Ontario, November 11, 1991.

Johnston, F.J.

1972: ODM Geological Report 101: Geology of the Vermilion-Abram Lakes Area, District of Kenora.

Marsh, H.W.

1951: Geological Report on the McCombe Group, Drayton Township, Minnitaki Lake Area of Ontario.

Page, R.O. and Clifford, P.M.

1977: Physical Volcanology of an Archean Vent Complex, Minnitaki Lake Area, Northwestern Ontario, Report of Activities, Part A; Geol. Surv. Can., Paper 77-1A (1977).

Page, R.O.

1991: Inter-Office Memorandum Re: K. Bernier Property, East Bay-Minnitaki Lake.

Page, R.O.

1991: Teck Exploration Ltd. - Property Submittal, Bernier - Minnitaki Lake.

Turner, C.C. and Walker, R.G.

1973: Sedimentology, Stratigraphy, and Crustal Evolution of the Archean Greenstone Belt near Sioux Lookout, Ontario. Can. J. Earth Sci 10, pg 817 (1973).

Walker, R.G. and Pettijohn F.J.

1971: Archean Sedimentation: Analysis of the Minnitaki Basin, Northwestern Ontario, Canada; Geological Society of America Bulletin, v. 82, p. 2099-2130, August, 1971.

**APPENDIX A
CLAIM STATUS**

APPENDIX A

Claim Status

Claim No.		No. of Units	Date Recorded	Due date
P.A. 1119709-723	(15)	15	January 29, 1990	January 29, 1993
P.A. 1145174	(1)	4	July 11, 1991	July 11, 1993
P.A. 1145175	(1)	6	July 11, 1991	July 11, 1993
P.A. 1145296	(1)	2	February 4, 1992	February 4, 1994
P.A. 1133758	(1)	2	April 14, 1992	April 14, 1994
P.A. 1133759	(1)	6	April 14, 1992	April 14, 1994
P.A. 1133760	(1)	8	April 14, 1992	April 14, 1994
Total		43 units		

APPENDIX B
AGREEMENT SUMMARY

AGREEMENT SUMMARY

PROPERTY: Minnitaki ✓
CLAIM CODE: TC274
JOB #: 16070

=====

TOWNSHIP: Drayton
PROVINCE: Ontario
N.T.S.: 052J04, 052K01

=====

DATE: July 15, 1991

PARTIES:

1. Teck Corporation; Ste. 600, 200 Burrard St., Vancouver, B.C. V6C 3L9
2. Kenneth Bernier; P.O. Box 1481, Sioux Lookout, Ontario, P0V 2T0

SCHEDULES:

1. Property Description
2. Net Smelter Royalty

TYPE: Purchase Option

PREPARED BY: Frank Palmay

=====

TERMS:

1. Teck has option to earn 100% interest in property subject to 2% NSR.
2. Acquisition Date - date Teck earns 100% interest.
3. Down Payment \$5,000 due within 10 days of receipt of transfers and signed agreement.
4. Payment Schedule:

July 15, 1992	\$10,000
July 15, 1993	\$10,000
5. Work Requirements
None
6. Royalty Interest
2% NSR
7. Advance Royalties
Commencing July 15, 1994, minimum Royalty payments of \$10,000 (Schedule 2).
8. Purchase Option
Teck has option to purchase Bernier's NSR for \$1,000,000 at anytime.
9. Right of First Refusal
Bernier can not sell his rights to property, NSR or Agreement.
10. Reporting
On written request, Teck will supply to Bernier 1 copy of reports submitted to the Government of Ontario.
11. Area of Interest
Area within 1 mile of external perimeter of original property. The other party must be notified of the acquisition by Staking of any claims within the area of interest and has 60 days to decide whether the property shall be made subject to the terms of the agreement.

12. Maintenance of Claims

- (i) Teck to keep property free of liens and in good standing;
- (ii) Teck to obtain and maintain insurance;
- (iii) Teck to conduct work in mine like manner.

13. Abandonment of Claims

- (i) Prior to Acquisition Date, Teck must notify Bernier of intent to abandon, within 30 days of notice, Bernier may elect to have the claims retransferred. Claims must have sufficient assessment credit for 1 year good standing;
- (ii) After Acquisition Date, Teck must notify Bernier of intent to abandon, within 30 days of notice, Bernier may elect to have the claims retransferred. Claims must have sufficient assessment credit for 1 year good standing.

14. Termination of Option

- (i) Failure to make payments;
- (ii) By notice of termination prior to Acquisition Date - the property must have sufficient assessment work filed to keep it in good standing for 1 year.

Termination of Agreement

- (i) By written notice;
- (ii) By termination of Option;
- (iii) On purchase of NSR.

OTHER PROVISIONS:

1. Governing Law - Ontario, Single Arbitrator - Arbitration Act of Ontario.
2. Data confidential - Bernier to consult with Teck before issuing any press releases.

APPENDIX C

I.P. REPORT

INDUCED POLARIZATION SURVEY

TECK EXPLORATION LIMITED

MINNITAKI PROPERTY

Drayton TWP., Sioux Lookout

Ontario

March 10, 1992

CONTENTS

I- INTRODUCTION.....2

II- LOCATION & ACCESSIBILITY.....2

III- INDUCED POLARIZATION SURVEY.....2

IV- DATA PRESENTATION.....3

V- DISCUSSION & INTERPRETATION.....3

VI- CONCLUSIONS & RECOMMANDATIONS.....5

I- INTRODUCTION

During the month of february 1992, an induced polari-
tion survey was carried out on the Minnitaki property in an
attempt to outline stratigraphic horizons of disseminated
sulphides.

II- LOCATION & ACCESSIBILITY

The Minnitaki property is situated in the Drayton Twp.
of Sioux Lookout, Ontario.

The property can be reach by ski-doo from Sioux Lookout
on Minnitaki Lake about 14 to 16 kilometers, south-east of
Sioux Lookout.

The property covered by the survey consist of 6 claims
numbered as follows:

# 1119709	# 1119712
1119710	1145174
1119711	1145175

III- INDUCED POLARIZATION SURVEY

The survey (25 meters spreads N=1 to N=4 dipole-dipole
array) was used to carry out the survey over 12 lines for a
total of about 9.3 Km.

Twelve lines of survey numbered as follows: L-1300 E,
L-1400 E, L-1600 E, L-1800 E, L-2000 E, L-2200 E, L-2400 E,
L-2600 E, L-2800 E, L-3000 E, L-3200 E, L-3400 E.

The instrument used is Phoinix I.P. V-4 Turbo receiver
with 1.0 Hz frequency measuring the resistivity in Ohm-meters
and the phase in millirads. Transmitter used is Phoenix I.P.
T-1 TX with a generator of 1.0 Kw of power.

The data has been plotted on pseudo-sections. The induced polarization method is mainly used to detect disseminated metallic sulphides.

The phase increase is related mainly to conductive material like disseminated sulphide grains and the percentage of disseminated sulphides in the rock.

IV- DATA PRESENTATION

The maps and pseudo-sections of the calculated apparent resistivity and the phase in millirads are included in this report.

- 1) Surface projection of the interpreted I.P. anomalous zone.
- 2) Surface projection of filter fraser of resistivity in Ohm-meters.
- 3) Surface projection of filter fraser of phase in millirads.

V- DISCUSSION & INTERPRETATION

Examination of the pseudo-section reveals 6 anomalous zones numbered as 1 to 6.

Anomalous zone #1

Anomalous zone #1, start on line 1300 E to line 3000E show a good response on phase of up to 30.0 millirads in a lower resistivity.

Line 1300 E show a good response between 4 S to 4+40 S with a increase in phase of up to 20.0 millirads and no change in resistivity.

Line 1400 E show a good phase increase with a no change in resistivity.

Line 1600 E show a good response in phase of up to 36.0 millirads between 2+50 S to 3+50 S. This zone is coming up to surface with a lower resistivity around 3+25 S probably cause by a fault zone.

Line 2200 E to 3000 E show a good response on phase with some lower resistivity in some lines.

Anomalous zone #1-A

Analous zone #1-A from, line 2400 E to line 3400 E show a weaker response on line 2400 E and 2600 E. Line 2800 E show a good response between 4+50 S to 5+00 S phase up to 18.0 millirads in a lower resistivity of about 380 Ohm-meters.

Line 3000 E to 3400 E show a good response in phase.

Anomalous zone #2

Anomalous zone #2 from line 1400 E to 3400 E show a weaker response between line 1400 E to 2600 E and from 2800 E to 3400 E show a medium conductor with an increase in phase a higher resistive rock.

Anomalous zone #3

Anomalous zone #3 show a weak response from line 1400 E to line 2600 E with a higher phase and high resistivity zone.

Line 2800 E and 3000 E show a more higher phase in a higher resistivity zone.

Anomalous zone #4

Anomalous zone #4 show a weak response on two lines. Line 2200 E and line 2400 E between 0+75 N to 1+25 N higher phase with a very high resistivity of around 20,000 Ohm-meters.

Anomalous zone #5

Anomalous zone #5 show a weak response on line 3200 E and 3400 E, high phase with very high resistivity.

Anomalous zone #6

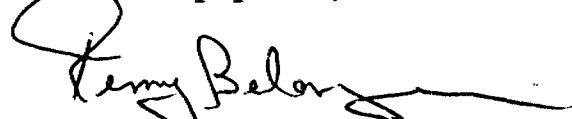
Anomalous zone #6 show a weak response between line 3000 E to 3400 E, higher phase with high resistivity.

VI- CONCLUSIONS & RECOMMANDATIONS

Results of the induced polarization survey carried out over the Minnitaki property show good response over zone #1, 1-A, 2, 3 and weak response over zone #4, 5, and 6.

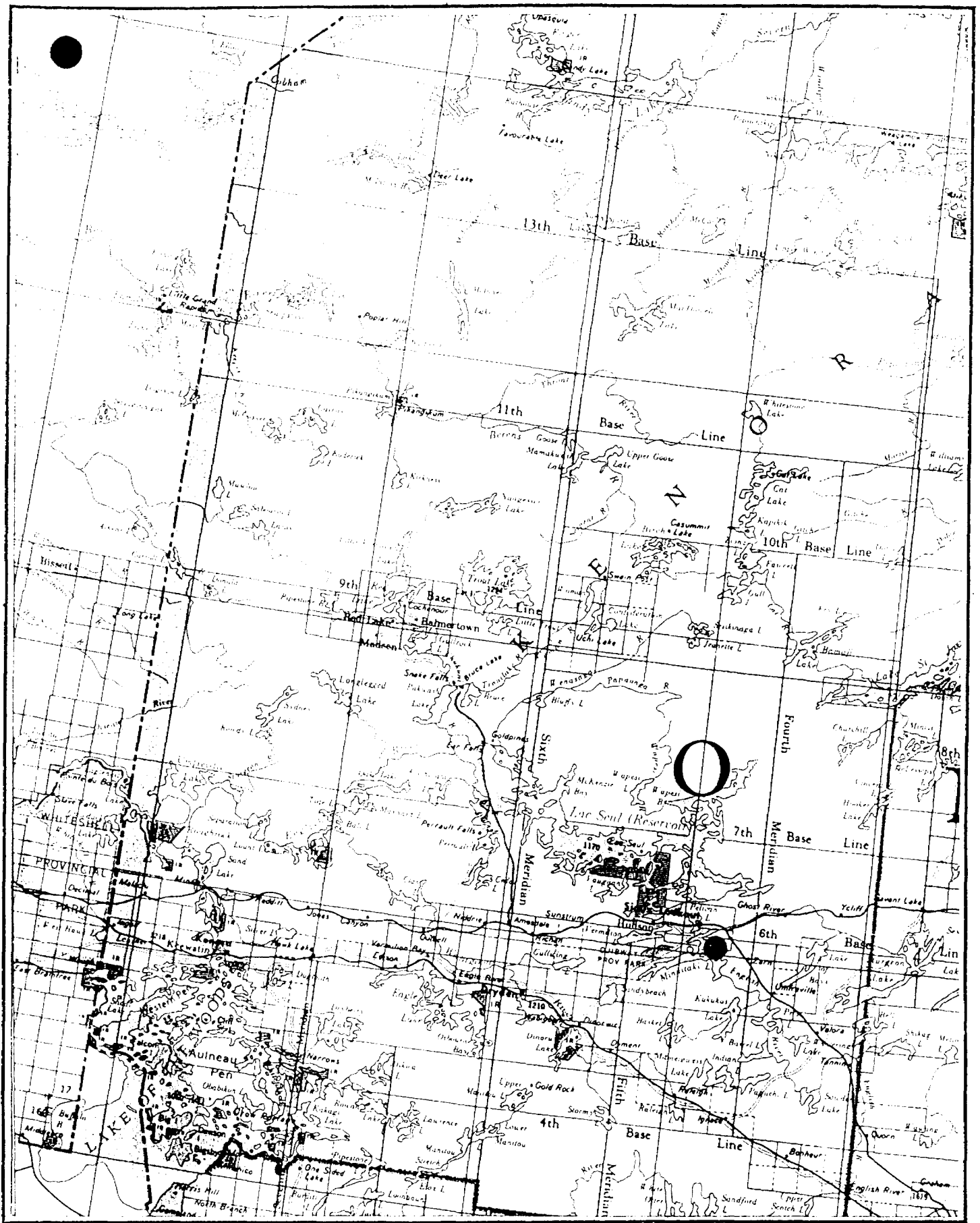
Most of these conductors could be tested by drilling or by trenches in summer months.

Sincerely yours,



REMY BELANGER

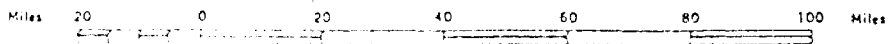
Geophysical contractor

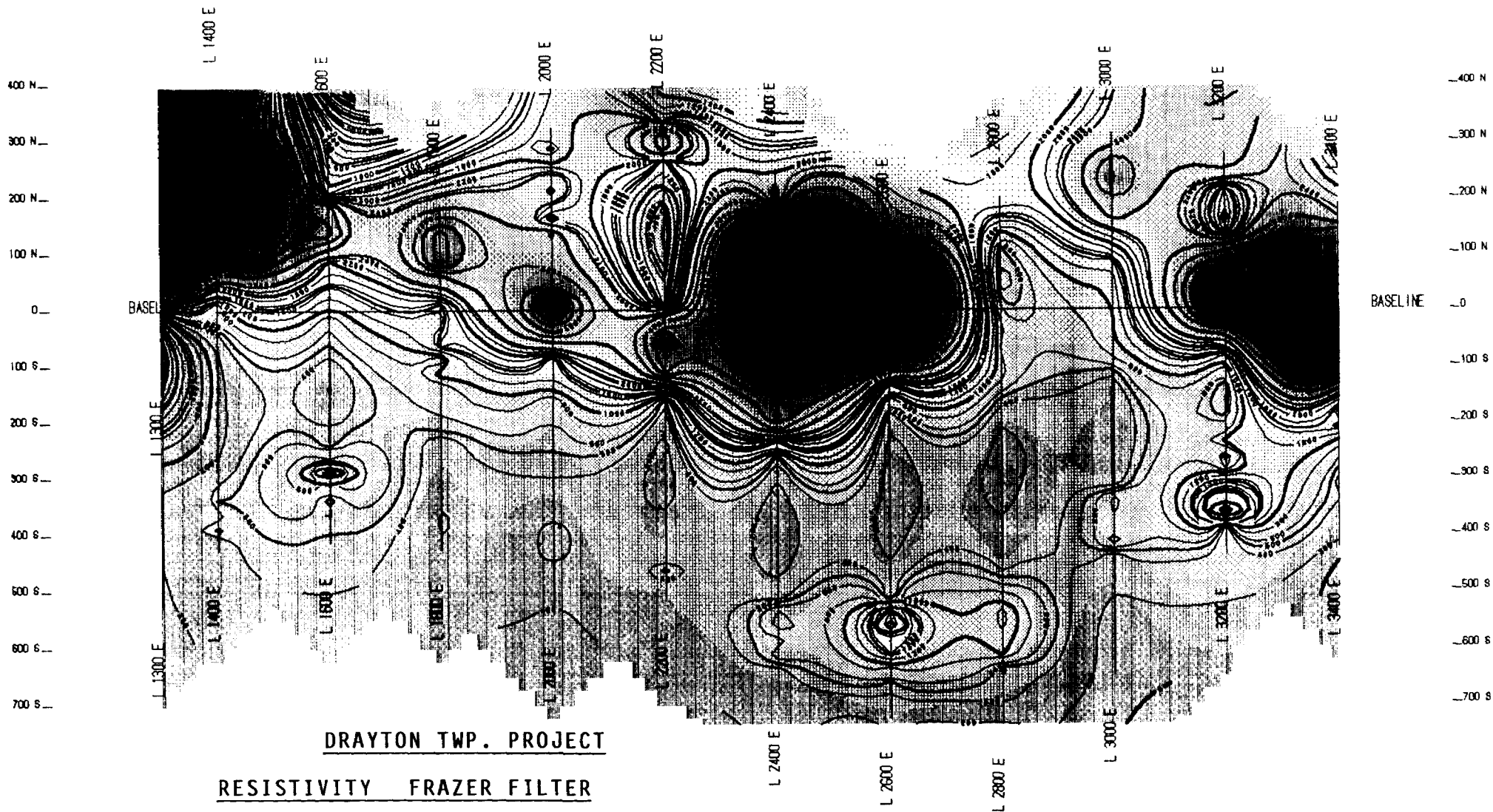


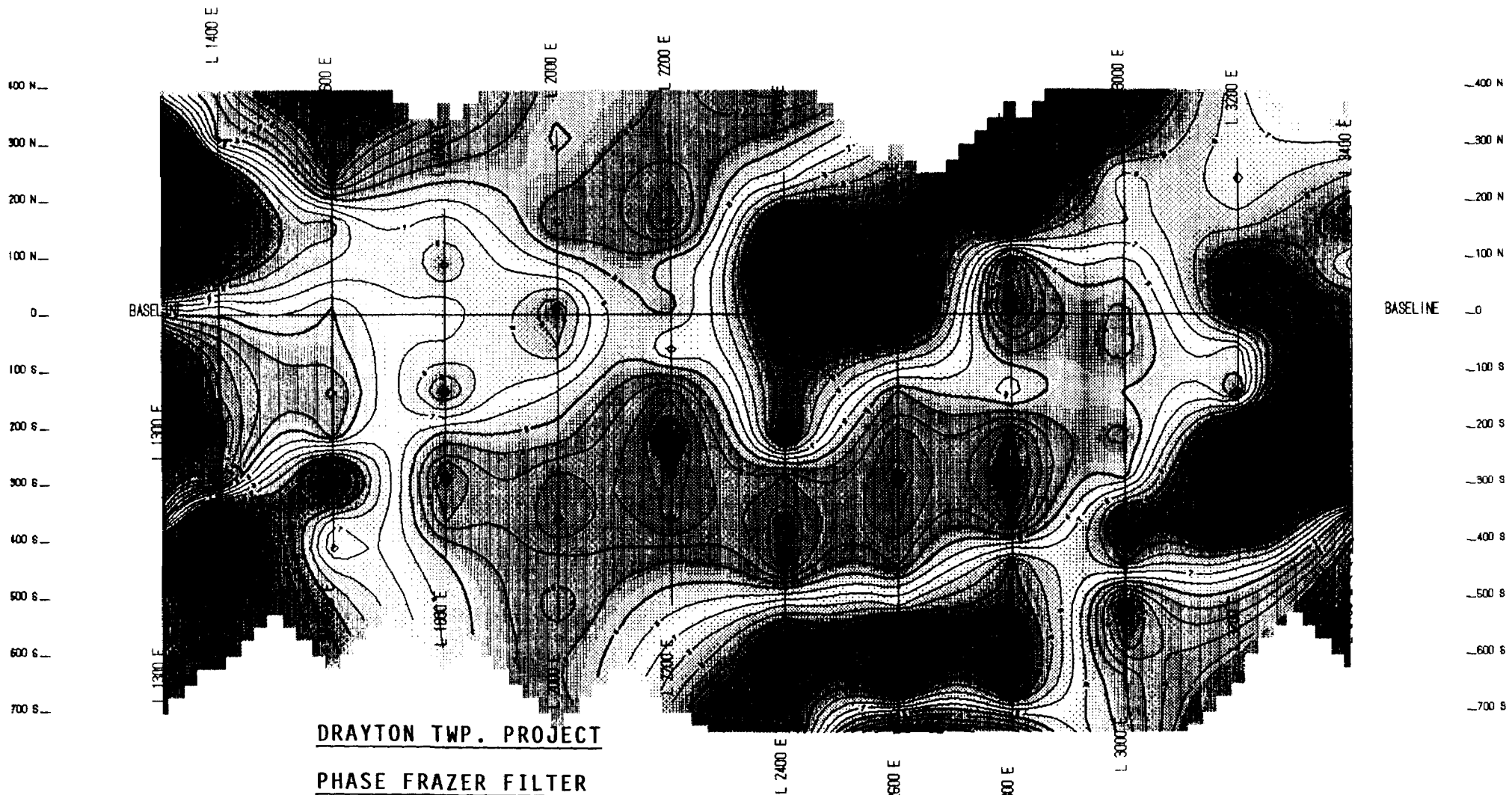
LOCATION MAP

Figure 1

1 inch equals approximately 32 miles







DRAYTON TWP. PROJECT

PHASE FRAZER FILTER

1:10 000

2. 14823

**APPENDIX D
DRILL LOGS AND SECTIONS**

**TECK EXPLORATION LTD.
DIAMOND DRILL LOG**

Hole MN-1
Sheet 1 of 3

Job <u>16070</u> N.T.S. <u>52 J/4</u>	Objective <u>To test western extent of</u>	Core Location <u>Sioux Lookout</u>	Tests	Dip	Azimuth
Property <u>Minnitaki</u>	<u>Main Zone</u>		At Collar	<u>-50°</u>	<u>160°</u>
Township <u>Drayton</u>			<u>30m</u>	<u>-48°</u>	
Location: Line <u>7+00mE</u>	Drilling Co. <u>Morissette</u>	Distance to Water <u>250 m</u>	<u>60m</u>	<u>-40°</u>	
Station <u>0+07mN</u>	Commenced <u>July 10, 1992</u>	Casing Lost <u>4 m</u>	<u>84m</u>	<u>-36°</u>	
Elevation <u>Surface</u>	Completed <u>July 11, 1992</u>	Core Size <u>80</u>			
Logged <u>Jim Janzen</u>	Length <u>84 m</u>				

Remarks Contact zone from 66.8m to 69.85m.

Depth (m)		Rock Type	Description	Sample No.	From	To	Lgth (m)	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppb
From	To											
0.00	4.00	OVERBURDEN										
4.00	51.30	MAFIC VOLCANIC	<p>Dark green, very fine-grained, massive flow, weakly foliated at 34° to 43° to core axis, 1% to 10% (locally) quartz-carbonate alteration on foliations, minor local iron-carbonate (leucoxene?) very fine crystals, pervasive weak chlorite alteration throughout. Minor scattered unmineralized quartz and quartz-carbonate veins up to 5 cm thick. Trace to 1% disseminated pyrite subhedral and euhedral. Unit weakly magnetic locally with trace to 1% very fine "magnetite?".</p> <p>9.67-9.70 - Quartz-carbonate vein, white-pink, 55° to core axis.</p> <p>9.90-9.95 - As above, 38° to core axis.</p> <p>17.00-38.00 - Quartz-carbonate on foliations weaker (1-3%).</p> <p>41.85-43.30 - Quartz-feldspar porphyry, light grey, very fine-grained matrix, 15% coarse-grained feldspar + quartz crystals, pervasive carbonate alteration, bleached. Upper contact weak, 42° to core axis, lower contact weak, 44° to core axis.</p> <p>43.30-51.30 - Unit is bleached with carbonate</p>									

Depth (m)		Rock Type	Description	Sample No.	From	To	Lgth (m)	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	
From	To												
51.30	66.80	MAFIC TUFF	and minor sericite alteration locally. 48.30-49.00 - Sericitized, light green sericite, trace pyrite.										
			Medium to dark green, very fine-grained, strongly foliated at 51° to 54° to core axis. Patchy strong carbonate alteration and bleaching. Local sections contain sericite wisps. Unit has a banded appearance locally (sediment?). Trace pyrite, 1% coarse brecciated cubic pyrite locally.										
			53.30-53.80 - Quartz-feldspar porphyry contacts very weak, crystal tuff?										
			59.00-60.20 - Banded at 53° to core axis, sediment?										
			62.00-62.70 - Sericitized chloritic section, unmineralized.										
			65.00-66.00 - Weakly sericitized mafic volcanic, unmineralized.	G5601	65.00	66.00	1.0	<5					
		66.00-66.80 - As above.	G5602	66.00	66.80	0.8	<5						
66.80	69.85	SILICIFIED CONTACT ZONE	Light grey green, very fine-grained. Upper contact @ 50° and lower contact @ 56° to core axis and weak, moderately sheared at 45° to 52° to core axis. Unit moderately to strongly silicified becoming sericitized down hole. Weak carbonate alteration throughout. Local section contains up to 10% quartz-carbonate stringers. 1% fine disseminated and coarse cataclastic cubic pyrite throughout. 2-3% pyrite locally.										
			66.80-67.50 - Strongly silicified, 10% quartz-carbonate stringers, 52° to core axis, 2% pyrite throughout.	G5603	66.80	67.50	0.7	<5					
			67.50-68.00 - Weakly silicified, moderately sericitized, trace pyrite.	G5604	67.50	68.00	0.5	<5					
			68.00-68.80 - Strongly silicified, minor sericite alteration, 1-2% pyrite throughout.	G5605	68.00	68.80	0.8	<5					
			68.80-69.85 - Moderately to strongly silicified. Sericite alteration increases down section,	G5606	68.80	69.85	1.05	<5					

Depth (m)		Rock Type	Description	Sample No.	From	To	Lgth (m)	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	
From	To												
69.85	78.70	SERICITE-ALTERED UNIT	5 quartz-iron-carbonate veins - 1 cm, 1 cm, 1.5 cm, 2 cm, and 4 cm thick, 40 to 63° to core axis. 1-2% pyrite throughout.										
			Light green, very fine-grained, upper contact gradational, lower contact strong at 58° to core axis. Moderately foliated at 52-57° to core axis, massive locally. Unit is strongly sericitized throughout, massive local quartz-carbonate veins and stringers, trace pyrite throughout.										
			69.85-70.50 - Sericite, one 10 cm quartz-carbonate vein, 58° to core axis, trace pyrite.	G5607	69.85	70.50	0.65	<5					
			70.50-71.50 - Sericite, trace to nil pyrite.	G5608	70.50	71.50	1.0	<5					
			71.50-72.50 - Massive sericite, one 8 cm quartz-feldspar vein, 40° to core axis, trace pyrite locally.	G5609	71.50	72.50	1.0	40					
		72.50 - 74.00 - Sericite, trace pyrite locally.	G5610	72.50	74.00	1.5	<5						
78.70	84.00	INTERBEDDED GREYWACKE AND ARGILLITE	Light and dark grey-black, very fine-grained, 70% 1-25 cm greywacke band at 57° to core axis, 30% dark grey-black, weakly graphitic argillite bands 0.5 cm to 10 cm thick. Trace pyrite locally.										
	84.00	END OF HOLE											
			Foliations: 10m = 34° 20 = 39° 30 = 39° 40 = 50° 50 = 50° 60 = 50° 70 = 53° 80 = 55°										

1+00mS

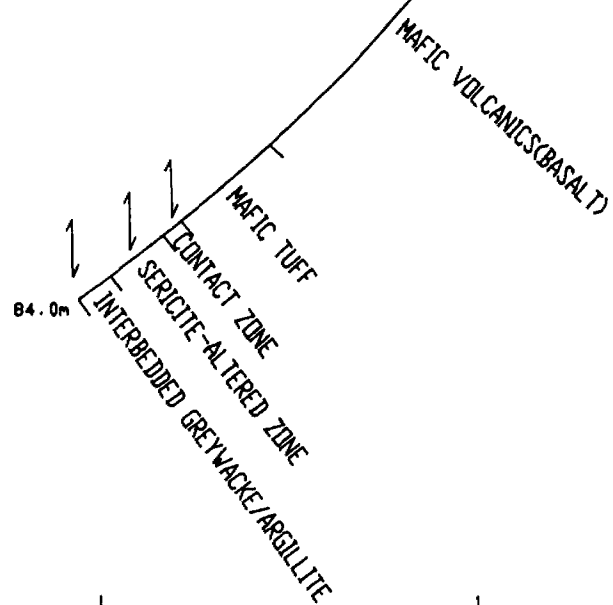
0+00

1+00mN

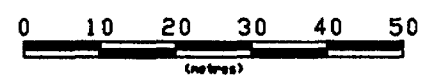
MN-1

Section 7+00E

MN-1
-51.0



Scale 1:1000



TECK EXPLORATION LTD

DDH. MN-1
MINNITAKI PROJECT
DRAYTON TP., ONTARIO

NTS: 52 J,K	PROJ: 16070	DATE: OCT. 92	Figure 9
-------------	-------------	---------------	----------

TECK EXPLORATION LTD. DIAMOND DRILL LOG

Hole MN-2
Sheet 1 of 6

Job <u>16070</u> N.T.S. <u>52 J/4</u> Property <u>Minnitaki</u> Township <u>Drayton</u> Location: Line <u>9+50mE</u> Station <u>0+30mN</u> Elevation <u>Surface</u> Logged <u>Jim Janzen</u>	Objective <u>Test below main trench</u> Drilling Co. <u>Morissette</u> Commenced <u>July 12, 1992</u> Completed <u>July 13, 1992</u> Length <u>89 m</u>	Core Location <u>Sioux Lookout</u> Distance to Water <u>125 m</u> Casing Lost <u>4.5 m</u> Core Size <u>BQ</u>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: left;">Tests</td> <td style="text-align: center;">Dip</td> <td style="text-align: center;">Azimuth</td> </tr> <tr> <td>At Collar</td> <td style="text-align: center;">-50°</td> <td style="text-align: center;">160°</td> </tr> <tr> <td>32m</td> <td style="text-align: center;">-49°</td> <td style="text-align: center;">--</td> </tr> <tr> <td>60m</td> <td style="text-align: center;">-47°</td> <td style="text-align: center;">--</td> </tr> <tr> <td>89m</td> <td style="text-align: center;">-40°</td> <td style="text-align: center;">--</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	Tests	Dip	Azimuth	At Collar	-50°	160°	32m	-49°	--	60m	-47°	--	89m	-40°	--						
Tests	Dip	Azimuth																						
At Collar	-50°	160°																						
32m	-49°	--																						
60m	-47°	--																						
89m	-40°	--																						
Remarks <u>Contact zone intersected from 35.25 to 48.00m.</u>																								

Depth (m)		Rock Type	Description	Sample No.	From	To	Lgth (m)	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppb
From	To											
0.00	4.50	OVERBURDEN										
4.50	35.25	MAFIC VOLCANIC	Dark green, very fine-grained, moderately to weakly foliated at 36-46° to core axis. Massive flow, 1-7% very fine to fine iron-carbonate crystals locally, weak carbonate alteration throughout along foliations. Very strong carbonate "flooding" along foliation locally, weakly chloritic throughout. Local quartz and quartz-iron-carbonate veins up to 40 cm thick (2%). Trace disseminated pyrite throughout, 1% disseminated pyrite locally. Unit is magnetic locally. 9.00-9.60 - Mafic volcanic. 9.60-10.50 - 40% quartz and quartz-iron-carbonate stringers, 1 to 5 cm thick, 40° to core axis. 0.5% disseminated pyrite, trace chalcopyrite. 10.50-11.00 - 15% carbonate stringers, 0.5 - 1.5 cm thick, 40-43° to core axis, trace pyrite. 11.00-14.00 - Mafic volcanic - 10% carbonate stringers, 40° to core axis, trace pyrite. 14.00-14.80 - Weakly bleached mafic volcanic. 14.80-15.30 - 35 cm quartz-iron-carbonate vein,	G5611	9.00	9.60	0.6	<5				
				G5612	9.60	10.50	0.9	130				
				G5613	10.50	11.00	0.5	10				
				G5614	14.00	14.80	0.8	5				
				G5615	14.80	15.30	0.5	250				

Depth (m)		Rock Type	Description	Sample No.	From	To	Lgth (m)	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
From	To											
			20° to core axis, 5% volcanic fragments, trace disseminated pyrite on contacts.									
			15.30-16.10 - Bleached mafic volcanic, trace pyrite.	G5616	15.30	16.10	0.8	10				
			16.10-17.30 - 83 cm quartz-iron-carbonate vein, 44° to core axis, vein contains 10% chloritized wall rock fragments, 0.5% disseminated pyrite.	G5617	16.10	17.30	1.2	30				
			17.30-17.60 - Mafic volcanic, 30% fine-grained white iron-carbonate crystals.	G5618	17.30	17.60	0.3	<5				
			21.30-21.60 - Mafic volcanic, 2% iron-carbonate crystals, trace pyrite.	G5619	21.30	21.60	0.3	<5				
			21.60-22.10 - 80% light grey, quartz-carbonate stringers (.5 to 2 cm thick) 45° to core axis, 2-3% disseminated pyrite.	G5620	21.60	22.10	0.5	30				
			22.10-22.40 - 5% quartz-carbonate stringers, 43-46° to core axis, <1 cm thick, trace pyrite.	G5621	22.10	22.40	0.3	<5				
			22.40-23.00 - As above.									
			24.60-24.90 - As above.									
			25.00-34.50 - Trace very fine-grained magnetite, section is weakly magnetic locally.									
			34.00-34.50 - Mafic volcanic, massive.									
			34.50-35.25 - Mafic volcanic, brecciated locally, patchy silicification (<5%), 1% pyrite.	G5622 G5623	34.00 34.50	34.50 35.25	0.5 0.75	<5 15				
35.25	48.00	SILICIFIED CONTACT ZONE	Light grey, cream light brown, very fine-grained to aphanitic. Upper contact @ 50° to core axis. Foliated at 45-50° to core axis. Brecciated locally, moderately micro-fractured. Approximately 3% quartz-carbonate-iron-carbonate veins/flooding at 30-70° to core axis, 0.5 cm to 15 cm thick. Strongly silicified with local mafic volcanic - fragments (5%). Pervasive carbonate-iron-carbonate alteration, minor sericite wisps (trace), 0.5% to 1% disseminated pyrite throughout. Section with 1-2% pyrite common, local sections with 2 to 10% dissemi-									

Depth (m)		Rock Type	Description	Sample No.	From	To	Lgth (m)	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
From	To											
			nated pyrite, trace molybdenite (unusual).									
			35.25-36.00 - Strongly silicified, 15% mafic volcanic interbeds, trace pyrite.	G5624	35.25	36.00	0.75	60				
			36.00-37.00 - Moderately silicified, brecciated, 10% quartz-carbonate stringers, 45° to core axis, 1% disseminated pyrite.	G5625	36.00	37.00	1.0	25				
			37.00-38.00 - Moderately silicified, brecciated. 15% quartz-carbonate stringers, 40-50° to core axis, 1-2% disseminated pyrite.	G5626	37.00	38.00	1.0	130				
			38.00-39.00 - Moderately silicified, 3, 8 cm, 6 cm, 12 cm quartz-iron-carbonate veins 30 to 43° to core axis, trace to 1% pyrite.	G5627	38.00	39.00	1.0	75				
			39.00-40.00 - Strongly silicified, trace pyrite.	G5628	39.00	40.00	1.0	130				
			40.00-41.00 - Strongly silicified, trace pyrite throughout (40.80-41.00 - 3% pyrite).	G5629	40.00	41.00	1.0	310				
			41.00-41.50 - Strongly silicified, 1-2% disseminated pyrite, trace molybdenite	G5630	41.00	41.50	0.5	410				
			41.50-42.50 - Strongly silicified, 2-3% disseminated pyrite.	G5631	41.50	42.50	1.0	900				
			42.50-43.50 - Strongly silicified, 10% quartz-carbonate veins, 1-4 cm thick, 30-57° to core axis, 3-5% disseminated pyrite throughout, 7-10% disseminated pyrite locally.	G5632	42.50	43.50	1.0	2030				
			43.50-44.20 - Strongly silicified, 5% quartz-carbonate stringers, 2-5% pyrite.	G5633	43.50	44.20	0.7	1240				
			44.20-44.50 - Strongly silicified, 1% pyrite.	G5634	44.20	44.50	0.3	225				
			44.50-45.50 - Strongly silicified, 5% quartz-carbonate stringers, weak blue tint - molybdenite?, 2% pyrite throughout.	G5635	44.50	45.50	1.0	680				
			45.50-46.20 - As above.	G5636	45.50	46.20	0.7	810				
			46.20-47.00 - Strongly silicified, 2% quartz-carbonate stringers brecciated, weak blue tint (molybdenite?), 1% pyrite.	G5637	46.20	47.00	0.8	490				
			47.00-48.00 - Strongly silicified, strong iron-carbonate alteration, brecciated, 2% pyrite throughout.	G5638	47.00	48.00	1.0	460				
48.00	62.50	SERICITE-ALTERED UNIT	Light green to grey-green, very fine-grained.									

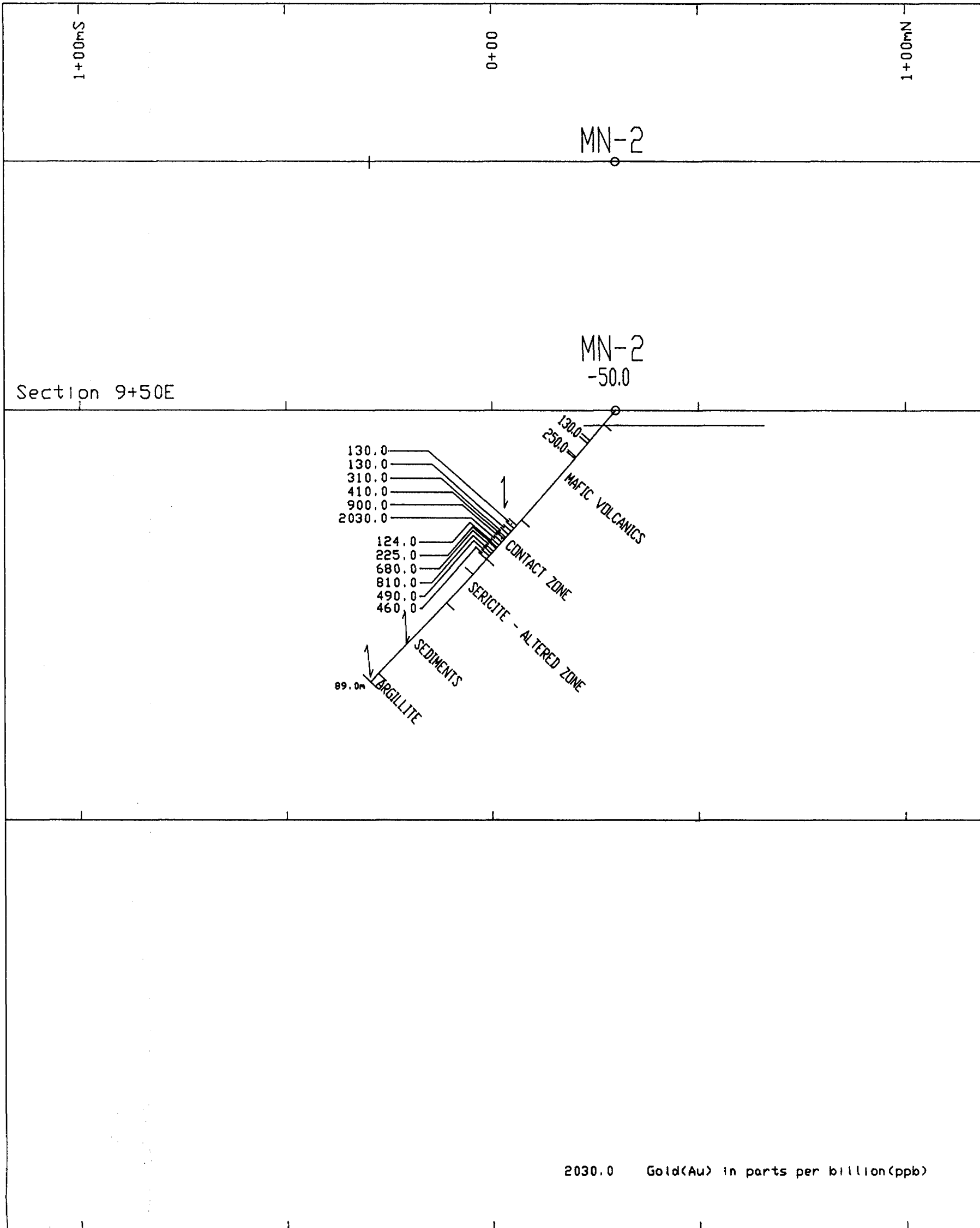
Depth (m)		Rock Type	Description	Sample No.	From	To	Lgth (m)	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
From	To											
			Upper contact @ 46° to core axis, moderately foliated 45-50° to core axis, massive in parts. Minor (<1%) quartz-carbonate stringers, weak carbonate alteration locally, trace fuschite. Locally coarse-grained feldspar crystals, trace pyrite throughout with local concentrations up to 2%.	G5639	48.00	49.00	1.0	10				
			48.49 - 10% sericite wisps in moderately silicified matrix, nil to trace pyrite.	G5640	49.00	50.00	1.0	5				
			49.50 - As above.	G5641	50.00	51.50	1.5	<5				
			50.00-51.50 - 30% sericite wisps in weakly silicified grey matrix, trace pyrite.	G5642	51.50	53.00	1.5	5				
			51.50-53.00 - Sericite, 5 cm thick greywacke bed, (52 m downwards unit is >70% sericite?).									
			54.40-59.00 - 10% coarse feldspar crystals.									
			59.00-65.50 - Unit becomes grey with fine-grained iron-carbonate crystals, approximately 5%.									
62.50	86.20	SEDIMENTS	Moderate grey, very fine-grained. Upper contact gradational. Moderately to strongly foliated at 50-51° to core axis. 1-10% fine-grained, white iron-carbonate crystals throughout yielding porphyritic texture, weakly sericitic throughout, local 10-40 cm thick, light green sericitic sections, minor quartz-carbonate veins, trace pyrite.									
			70.00-72.60 - Strongly sericitized, nil pyrite.									
			75.20-75.80 - Sericitic, weakly silicified, 1% pyrite.									
			80.00-84.00 - Sericite.									
86.20	89.00	ARGILLITE	Dark grey-black, gradational upper contact, very fine-grained, banded/foliated at 51° to core axis. Weak carbonate alteration, sericitic locally, 1% pyrite.									
			88.50-89.00 - Sericite, 1% pyrite.									

Depth (m)		Rock Type	Description	Sample No.	From	To	Lgth (m)	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
From	To											
	89.00	END OF HOLE										
			Foliations: 10m = 45° 20 = 36° 30 = 45° 40 = 48° 50 = 45° 60 = 49° 70 = 49° 80 = 51° 89 = 51° Geochem: Sample # From To 3589 4.50m 35.25m 3590 35.25 48.00 3591 48.00 62.50 3592 62.50 86.20 3593 86.20 89.00									

ASSAY SUMMARY

SAMPLE NO.	FROM (m)	TO (m)	LENGTH (m)	GEO-CHEM (ppb)	ASSAY g/t	CHECK 1	CHECK 2	CHECK 3	CHECK 4	AVER-AGE	AV X LEN
G5626	37.00	38.00	1.0	130							130
G5627	38.00	39.00	1.0	75							75
G5628	39.00	40.00	1.0	130							130
G5629	40.00	41.00	1.0	310							310
G5630	41.00	41.50	0.5	410							615
G5631	41.50	42.50	1.0	900							900
G5632	42.50	43.50	1.0	>1000	2.03						2030
G5633	43.50	44.20	0.7	>1000	1.24						868
G5634	44.20	44.50	0.3	225							67.5
G5635	44.50	45.50	1.0	680							680
G5636	45.50	46.20	0.7	810							567
G5637	46.20	47.00	0.8	490							392
G5638	47.00	48.00	1.0	460							460

FROM (m)	TO (m)	LENGTH (m)	TOTAL AV X LEN	AVERAGE (AG) GRADE (ppb)	HORIZON (HT) THICKNESS	PLOTTED HT X AG
37.00	48.00	11.00m	7224.5	657		
including 42.50	44.20	1.70m	2898	1705		



TECK EXPLORATION LTD			
DDH. MN-2			
MINNITAKI PROJECT			
DRAYTON TP., ONTARIO			
NTS: 52 J,K	PROJ: 16070	DATE: OCT. 92	Figure 10

TECK EXPLORATION LTD. DIAMOND DRILL LOG

Hole MN-3
Sheet 1 of 3

Job <u>16070</u> N.T.S. <u>52 J/4</u>	Objective <u>To test east extension</u>	Core Location <u>Sioux Lookout</u>	Tests
Property <u>Minnitaki</u>	<u>of contact zone</u>		At Collar
Township <u>Drayton</u>			<u>-50°</u> <u>160°</u>
Location: Line <u>13+00mE</u>	Drilling Co. <u>Morissette</u>	Distance to Water <u>300 m</u>	<u>30m</u> <u>-48°</u> <u>160°</u>
Station <u>0+85mN</u>	Commenced <u>July 13, 1992</u>	Casing Lost <u>3.5 m</u>	<u>60m</u> <u>-39°</u> <u>160°</u>
Elevation <u>Surface</u>	Completed <u>July 14, 1992</u>		
Logged <u>Jim Janzen</u>	Length <u>77 m</u>	Core Size <u>BQ</u>	

Remarks Weak Contact zone from 47.90m to 53.80m.

Depth (m)		Rock Type	Description	Sample No.	From	To	Lgth (m)	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppb
From	To											
0.00	3.00	CASING	Rock not recovered (Bedrock set up).									
3.00	47.90	MAFIC VOLCANIC	<p>Dark green, very fine-grained, massive flow, weakly to moderately foliated at 45-54° to core axis. Pervasive, weak to moderate carbonate alteration and foliations, 2% carbonate, quartz-carbonate stringers, localized (<1%) quartz-iron-carbonate veins, 2-5 cm thick, pervasive weak chlorite alteration, local section containing up to 15% fine-grained carbonate, iron-carbonate crystals - white. Trace disseminated pyrite locally, trace very fine-grained magnetite locally.</p> <p>6.50-7.80 - 10% quartz-carbonate stringers, 47° to core axis.</p> <p>8.30-9.20 - 15% fine-grained iron-carbonate crystals - white.</p> <p>25.40-25.90 - Light grey, strong carbonate bleaching.</p> <p>28.50-31.10 - 7-10% fine-grained cream-white iron-carbonate crystals.</p> <p>33.60-35.20 - As above.</p> <p>41.00-42.00 - Trace magnetite - weakly magnetic.</p> <p>46.00-47.00 - Mafic volcanic.</p> <p>47.00-47.90 - Mafic volcanic, 4 cm quartz vein,</p>									
				G5643	46.00	47.00	1.0	<5				
				G5644	47.00	47.90	0.9	<5				

Depth (m)		Rock Type	Description	Sample No.	From	To	Lgth (m)	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	
From	To												
47.90	53.80	CONTACT ZONE	<p>52° to core axis, containing 1% pyrite.</p> <p>Dark green with 30% light grey-cream bands, very fine-grained. Upper contact weak at 55° to core axis. Strongly foliated at 54-56° to core axis, 60-70% of unit is bleached (carbonate) mafic volcanic, 30-40% of unit consists of cream bands 1-10 cm thick which are weakly silicified, sericitized with iron-carbonate. Unit contains strong blue-grey silicification locally. Unit contains trace pyrite throughout, 1% pyrite locally.</p> <p>47.90-48.50 - 90% mafic volcanic, 10% cream alteration bands, trace pyrite.</p> <p>48.50-49.50 - 70% mafic volcanic, 30% cream alteration bands, trace pyrite.</p> <p>49.50-50.50 - 60% cream, iron-carbonate, sericite, silica-altered bands, trace pyrite.</p> <p>50.50-51.60 - 70% bleached mafic volcanic, 30% iron-carbonate, sericite, silica alteration lamina, trace pyrite locally.</p> <p>51.60-52.00 - 25 cm of strong blue-grey silicification (Contact Zone?) 50° to core axis, 1-2% very fine-grained disseminated pyrite.</p> <p>52.00-53.00 - Strongly altered volcanic, sericitized, iron-carbonate, weakly silicified, trace pyrite.</p> <p>53.00-53.80 - As above.</p>										
53.80	72.60	SERICITE-ALTERED ZONE	<p>Light green, very fine-grained, strongly sericitized throughout. Upper contact weak at 56° to core axis. Unit is moderately foliated at 53 to 56° to core axis. Local sections porphyritic with 2-7% coarse-grained feldspar crystals. Local sections with 5-15% fine-grained iron-carbonate subrounded phenocrysts (no reaction to acid). Mineralization is very weak with trace pyrite occurring locally.</p> <p>53.80-54.50 - Sericite with 3% coarse-grained</p>	G5645	47.90	48.50	0.6	10					
				G5646	48.50	49.50	1.0	20					
				G5647	49.50	50.50	1.0	<5					
				G5648	50.50	51.60	1.1	20					
				G5649	51.60	52.00	0.4	90					
				G5650	52.00	53.00	1.0	<5					
				G5651	53.00	53.80	0.8	<5					
				G5652	53.80	54.50	0.7	10					

Depth (m)		Rock Type	Description	Sample No.	From	To	Lgth (m)	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
From	To											
			feldspar (no clear intrusive contacts) unmineralized.									
			54.50-55.10 - Sericite with 10% quartz-iron-carbonate veins, 1-2 cm thick at 30-70° to core axis, trace pyrite throughout.	G5653	54.50	55.10	0.6	30				
			55.10-56.50 - Sericite, unmineralized.	G5654	55.10	56.50	1.4	<5				
			56.50-59.00 - 30% dark green (volcanic?) weakly altered sections.									
			59.50-60.00 - Trace fuschite.									
			63.50-64.00 - As above.									
			64.60-72.60 - 25% 1-10 cm bands of moderately sericitized darker green sections with 5-15% iron-carbonate crystals.									
72.60	77.00	SEDIMENTS	Moderate grey to dark grey. Upper contact sharp at 55° to core axis. Weakly foliated at 56° to core axis. 1-5% iron-carbonate crystals. Unit is predominantly greywacke with minor (10%) narrow (1-20 cm) interbands of grey-black argillite, trace coarse-grained cubic pyrite locally.									
			72.60-73.20 - Weakly bleached section, carbonate.									
			75.40-76.20 - 80% black, weakly graphitic argillite.									
	77.00	END OF HOLE										
			Foliations:									
			10m = 45°									
			20 = 42-46°									
			30 = 48°									
			40 = 51°									
			50 = 56°									
			60 = 52°									
			70 = 53°									
			77 = 56°									

1+00mS

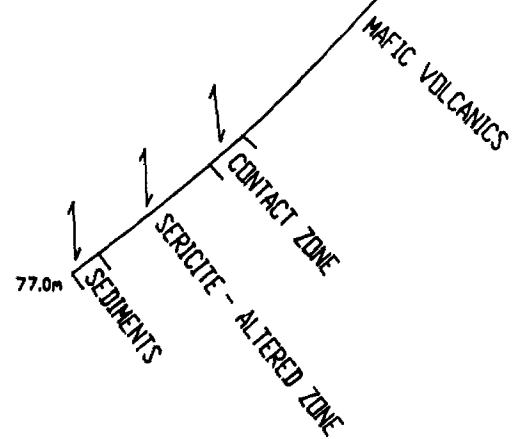
0+00

1+00mN

MN-3

MN-3
-50.0

Section 13+00E



Scale 1:1000



TECK EXPLORATION LTD

DDH. MN-3
MINNITAKI PROJECT
DRAYTON TP., ONTARIO

NTS: 52 J,K	PROJ: 16070	DATE: OCT. 92	Figure 11
-------------	-------------	---------------	-----------

TECK EXPLORATION LTD. DIAMOND DRILL LOG

Hole MN-4
Sheet 1 of 5

Job <u>16070</u> <u>N.T.S. 52 J/4</u> Property <u>Minnitaki</u> Township <u>Drayton</u> Location: Line <u>16+00mE</u> Station <u>0+73mN</u> Elevation <u>Surface</u> Logged <u>Jim Janzen</u>	Objective <u>To test eastern extent</u> <u>of contact zone</u> Drilling Co. <u>Morissette</u> Commenced <u>July 14, 1992</u> Completed <u>July 15, 1992</u> Length <u>95 m</u>	Core Location <u>Sioux Lookout</u> Distance to Water <u>125 m</u> Casing Lost <u>25 m</u> Core Size <u>BQ</u>	Tests At Collar <u>30m</u> <u>60m</u> <u>95m</u> Dip <u>-52°</u> <u>-52°</u> <u>-51°</u> <u>-46°</u> Azimuth <u>160°</u> <u>--</u> <u>--</u> <u>--</u>
---	---	--	--

Remarks Contact zone interested from 71.10m to 80.20m.

Depth (m)		Rock Type	Description	Sample No.	From	To	Lgth (m)	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppb
From	To											
0.00	25.00	OVERBURDEN										
25.00	71.10	MAFIC VOLCANIC	Dark green, very fine-grained, weakly to moderately foliated, at 40-45° to core axis. Weak pervasive chlorite and carbonate alteration throughout along foliations. <1% quartz-carbonate stringers, traces of magnetite and pyrite, locally. 47.50-51.00 - Strong carbonate and iron-carbonate bleaching. 3% quartz-carbonate stringers, trace pyrite. 66.50-67.50 - Massive mafic volcanic, 15% cream-white iron-carbonate crystals. 67.50-68.50 - As above. 68.50-69.40 - Mafic volcanic with 40% 1 to 15 cm thick cream blue-grey carbonate-silicified bands approximately 45° to core axis. Alteration bands contain trace to 1% pyrite. 69.40-70.40 - Mafic volcanic. 70.40-71.10 - Mafic volcanic; 70.53 to 70.67, cream blue silicified-carbonate band, 47° to core axis, 2% coarse-grained blue quartz-eyes, trace pyrite.	G5655	66.50	67.50	1.0	<5				
				G5656	67.50	68.50	1.0	<5				
				G5657	68.50	69.40	0.9	5				
				G5658	69.40	70.40	1.0	30				
				G5659	70.40	71.10	0.7	35				

Depth (m)		Rock Type	Description	Sample No.	From	To	Lgth (m)	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
From	To											
71.10	80.20	SILICIFIED CONTACT ZONE	Light grey-blue, very fine-grained to aphanitic. Upper contact at 46° to core axis. Moderately foliated/sheared at 45-46° to core axis. Moderately to strongly silicified throughout. Pervasive weak carbonate and iron-carbonate alteration, localized (<1%) clear-blue medium-grained to coarse-grained quartz eyes, localized (<3%) quartz and quartz-iron carbonate veins and stringers 30° to 70° to core axis, 0.5 to 4 cm thick, 0.5% fine disseminated and coarse cataclastic cubic pyrite throughout, 2-4% pyrite locally, trace chalcopyrite locally.									
			71.10-72.00 - Moderately silicified with 10% green mafic wisps - volcanic, trace disseminated pyrite.	G5660	71.10	72.00	0.9	20				
			72.00-72.50 - As above, 0.5% pyrite, 4 cm quartz-carbonate vein at 49° to core axis.	G5661	72.00	72.50	0.5	1520				
			72.50-73.50 - Strongly silicified, muscovite, trace to 0.5% pyrite.	G5662	72.50	73.50	1.0	260				
			73.50-74.50 - Strongly silicified, 2 cm quartz-carbonate vein at 30° to core axis, 1% pyrite.	G5663	73.50	74.50	1.0	570				
			74.50-75.50 - Strongly silicified, 3 cm quartz-carbonate vein at 70° to core axis. 0.5% pyrite throughout.	G5664	74.50	75.50	1.0	340				
			75.50-76.30 - As above, 4 cm quartz-carbonate vein at 38° to core axis.	G5665	75.50	76.30	0.8	310				
			76.30-77.10 - Strongly silicified, muscovite, 0.5% pyrite.	G5666	76.30	77.10	0.8	130				
			77.10-77.70 - Strongly silicified, 10% quartz-carbonate stringers, 0.5 cm to 1.5 cm thick, 35° to 65° to core axis, 3% pyrite, trace chalcopyrite.	G5667	77.10	77.70	0.6	2140				
			77.70-78.50 - Strongly silicified, 3-5% pyrite throughout.	G5668	77.70	78.50	0.8	260				
			78.50-78.90 - Strongly silicified, 2-1 cm quartz carbonate veins at 62° to core axis, 3-5% pyrite.	G5669	78.50	78.90	0.4	1520				
			78.90-79.80 - 10% quartz-carbonate veins, 8 cm	G5670	78.90	79.80	0.9	20				

Depth (m)		Rock Type	Description	Sample No.	From	To	Lgth (m)	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	
From	To												
80.20	95.00	SERICITE-ALTERED ZONE	thick at 45° to core axis, trace tourmaline, weakly sericitized locally, trace pyrite. 79.80-80.20 - Strongly silicified, 0.5% pyrite.	G5671	79.80	80.20	0.4	5					
			Light green, very fine-grained aphanitic. Sharp upper contact at 48° to core axis, strongly foliated - schistose at 48° to core axis. Strongly sericitized throughout, weak, pervasive carbonate alteration, trace fuschite, trace pyrite locally.										
			80.20-81.20 - Sericite, 10% weakly silicified bands at 46° to core axis, trace pyrite.	G5672	80.20	81.20	1.0	15					
			81.20-82.00 - Sericite schist, unmineralized.	G5673	81.20	82.00	0.8	10					
			82.00-83.50 - Sericite schist, 5% quartz-carbonate stringers at 32° to 50° to core axis, trace pyrite.	G5674	82.00	83.50	1.5	<5					
			83.50-84.00 - Sericite schist, 4 cm band of blue-grey silicification at 47° to core axis, trace pyrite.	G5675	83.50	84.00	0.5	<5					
		84.00-85.50 - Sericite schist, 5% medium-grained iron-carbonate crystals.	G5676	84.00	85.50	1.5	5						
	95.00	END OF HOLE											
			Foliations: 30m = 40° 40 = 41° 50 = 43° 60 = 46° 70 = 45° 80 = 46° 90 = 46°										

Depth (m)		Rock Type	Description	Sample No.	From	To	Lgth (m)	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
From	To											
			Geochem:									
			Sample # From To									
			3594 25.00 45.00									
			3595 45.00 71.10									
			3596 71.10 80.20									
			3597 80.20 95.00									

ASSAY SUMMARY

SAMPLE NO.	FROM (m)	TO (m)	LENGTH (m)	GEO-CHEM (ppb)	ASSAY g/t	CHECK 1	CHECK 2	CHECK 3	CHECK 4	AVER-AGE	AV X LEN
G5661	72.00	72.50	0.5	1520							760
G5662	72.50	73.50	1.0	260							260
G5663	73.50	74.50	1.0	570							570
G5664	74.50	75.50	1.0	340							340
G5665	75.50	76.30	0.8	310							248
G5666	76.30	77.10	0.8	130							104
G5667	77.10	77.70	0.6	>1000	2.14						1284
G5668	77.70	78.50	0.8	260							208
G5669	78.50	78.90	0.4	>1000	1.52						608

FROM (m)	TO (m)	LENGTH (m)	TOTAL AV X LEN	AVERAGE (AG) GRADE (ppb)	HORIZON (HT) THICKNESS	PLOTTED HT X AG
72.00	78.90	6.7	4382	654		
77.10	78.90	1.8	2100	1167		

1+00mS

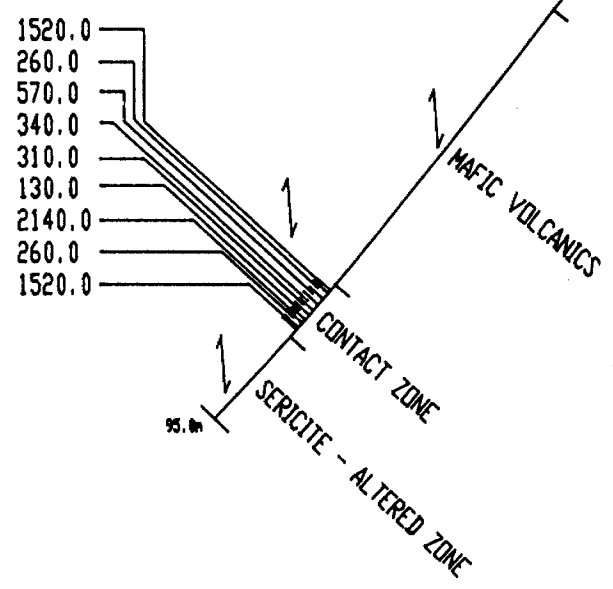
0+00

1+00mN

MN-4

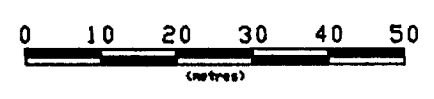
Section 16+00E

MN-4
-52.0



2140.0 Gold(Au) in parts per billion(ppb)

Scale 1:1000



TECK EXPLORATION LTD			
DDH. MN-4			
MINNITAKI PROJECT			
DRAYTON TP., ONTARIO			
NTS: 52 J,K	PROJ: 16070	DATE: OCT. 92	Figure 12

TECK EXPLORATION LTD. DIAMOND DRILL LOG

Hole MN-5
Sheet 1 of 6

Job <u>16070</u> N.T.S. <u>52 J/4</u> Property <u>Minnitaki</u> Township <u>Drayton</u> Location: Line <u>18+00mE</u> Station <u>0+02mS</u> Elevation <u>Surface</u> Logged <u>Jim Janzen</u>	Objective <u>To test eastern extent of contact zone, test an IP anomaly</u> Drilling Co. <u>Morissette</u> Commenced <u>July 16, 1992</u> Completed <u>July 18, 1992</u> Length <u>185 m</u>	Core Location <u>Sioux Lookout</u> Distance to Water <u>400 m</u> Casing Lost <u>17 m</u> Core Size <u>80</u>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: left;">Tests</td> <td style="text-align: center;">Dip</td> <td style="text-align: center;">Azimuth</td> </tr> <tr> <td>At Collar</td> <td style="text-align: center;">-56°</td> <td style="text-align: center;">160°</td> </tr> <tr> <td>30m</td> <td style="text-align: center;">-56°</td> <td style="text-align: center;">--</td> </tr> <tr> <td>60m</td> <td style="text-align: center;">-56°</td> <td style="text-align: center;">--</td> </tr> <tr> <td>90m</td> <td style="text-align: center;">-52°</td> <td style="text-align: center;">--</td> </tr> <tr> <td>120m</td> <td style="text-align: center;">-47°</td> <td style="text-align: center;">--</td> </tr> <tr> <td>150m</td> <td style="text-align: center;">-39°</td> <td style="text-align: center;">--</td> </tr> </table>	Tests	Dip	Azimuth	At Collar	-56°	160°	30m	-56°	--	60m	-56°	--	90m	-52°	--	120m	-47°	--	150m	-39°	--
Tests	Dip	Azimuth																						
At Collar	-56°	160°																						
30m	-56°	--																						
60m	-56°	--																						
90m	-52°	--																						
120m	-47°	--																						
150m	-39°	--																						

Continued on Page 4

Remarks Contact zone interested from 70.60m to 76.60m. I.P. anomaly source possibly graphitic argillite and weakly pyritic silicified sections from 125.90 to 157.70m.

Depth (m)		Rock Type	Description	Sample No.	From	To	Lgth (m)	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
From	To											
0.00	16.50	OVERBURDEN										
16.50	70.60	MAFIC VOLCANIC	Dark green, very fine-grained, weakly foliated at 35 to 45° to core axis. Massive flow, weak, pervasive chlorite alteration, minor localized carbonate alteration/bleaching, local epidote alteration. <1% quartz-carbonate and quartz-iron-carbonate stringers, trace disseminated and coarse-grained cubic pyrite locally, trace disseminated magnetite throughout. 22.40-23.00 - Strong epidote alteration. 38.20-39.90 - Moderate epidote alteration. 40.10-41.30 - Blocky. 64.50-70.60 - Strong carbonate alteration along foliations. 67.50-69.00 - Mafic volcanics, wispy carbonate along foliations. 69.00-70.20 - As above, 30 cm seam (no core). 70.20-70.60 - Mafic volcanic, strong carbonate bleaching, ½% pyrite.	G5677	67.50	69.00	1.5	<5				
				G5678	69.00	70.20	1.2	<5				
				G5679	70.20	70.60	0.4	<5				
70.60	76.60	CONTACT ZONE	Light grey, weak blue tint locally, very fine-grained to aphanitic. Weakly to moderately foliated at 39 to 43° to core axis. Sharp									

Depth (m)		Rock Type	Description	Sample No.	From	To	Lgth (m)	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
From	To											
			upper contact at 55° to core axis, moderately silicified, weak pervasive carbonate alteration. Minor <2% quartz-iron-carbonate stringers, trace to 0.5% fine disseminated and coarse cubic pyrite throughout, 1-3% pyrite locally.									
			70.60-71.00 - Moderate to weakly silicified, 1% coarse-grained cubic pyrite.	G5680	70.60	71.00	0.4	5				
			71.00-71.90 - Moderately silicified, trace pyrite.	G5681	71.00	71.90	0.9	15				
			71.90-72.60 - Moderately silicified, 1% pyrite.	G5682	71.90	72.60	0.7	110				
			72.60-73.60 - Moderately silicified, 4% quartz-iron-carbonate veins, 0.5-5 cm thick 30-68° to core axis, 1-3% pyrite.	G5683	72.60	73.60	1.0	310				
			73.60-74.60 - Moderately silicified, 0.5-1% pyrite, trace chalcopyrite locally.	G5684	73.60	74.60	1.0	100				
			74.60-75.50 - Moderately silicified, 10% 1-6 cm strong blue-grey silicified bands at 39-43° to core axis. 1% fine disseminated pyrite.	G5685	74.60	75.50	0.9	540				
			75.50-76.30 - Moderately silicified, 5% fine-grained iron-carbonate crystals, trace pyrite.	G5686	75.50	76.30	0.8	10				
			76.30-76.60 - Moderately silicified, 2% disseminated pyrite.	G5687	76.30	76.60	0.3	5				
76.60	107.60	SERICITE-ALTERED ZONE	Light green-grey, very fine-grained, strongly foliated-schistose at 40-44° to core axis. Upper contact at 40° to core axis. Sericitized throughout. Local feldspar/quartz porphyritic section. Local sections with 5-20% medium-grained iron-carbonate crystals, trace fuschite locally, minor local bands of grey-black argillite, trace pyrite locally.									
			76.60-77.30 - Transitional contact.									
			76.60-77.40 - Weak carbonate-altered, sericitized mafic volcanic, trace pyrite.	G5688	76.60	77.40	0.8	50				
			77.40-78.00 - Sericite, weakly silicified, un-mineralized.	G5689	77.40	78.00	0.6	<5				
			78.00-79.50 - Sericite, porphyritic - feldspar, trace pyrite locally.	G5690	78.00	79.50	1.5	<5				

Depth (m)		Rock Type	Description	Sample No.	From	To	Lgth (m)	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
From	To											
			79.50-81.00 - As above.	G5691	79.50	81.00	1.5	<5				
			84.00-84.50 - Sericite.	G5692	84.00	84.50	0.5	85				
			84.50-85.50 - Strongly silicified, 10% microfractures, trace pyrite.	G5693	84.50	85.50	1.0	<5				
			85.50-86.70 - Moderately silicified, 10% sericite, trace pyrite.	G5694	85.50	86.70	1.2	<5				
			86.70-87.10 - Sericite schist.	G5695	86.70	87.10	0.4	<5				
			87.10-87.40 - 50% grey black argillite bands.									
			88.60-88.70 - 10% medium-grained iron-carbonate.									
			91.40-93.80 - Quartz-sericite porphyry, weak contacts, upper at 38° to core axis, lower at 50° to core axis.									
			96.50-99.60 - As above, upper contact at 42° (sharp), lower contact at 45° (diffuse).									
			99.60-107.60 - 3-20% fine to medium-grained iron-carbonate crystals, 5% 1-5 cm weakly sericitized greywacke bands.									
			101.10-101.30 - Quartz-iron-carbonate vein at 32° to core axis, unmineralized.									
107.60	185.00	SEDIMENTS	Interbedded greywacke and argillite, medium grey-black, very fine-grained. Upper contact sharp at 40° to core axis. Moderately foliated and bedded at 44-52° to core axis. Trace to 20% medium-grained nodules, medium hard, ellipsoidal with long axis parallel to the foliation of unknown composition. Bands of argillite and greywacke evenly distributed. Bands are 1 cm to 1+ m thick, argillite bands are often weakly to strongly graphitic, local narrow sericitized and silicified sections, trace coarse-grained cubic pyrite locally.									
			107.60-125.90 - 70% greywacke, 30% weakly graphitic argillite.									
			125.90-140.70 - 80% argillite, 20% greywacke.									
			125.90-127.40 - Weakly graphitic argillite, trace pyrite.	G5696	125.90	127.40	1.5	<5				
			127.40-128.60 - Graphitic argillite, 3% pyrite.	G5697	127.40	128.60	1.2	5				

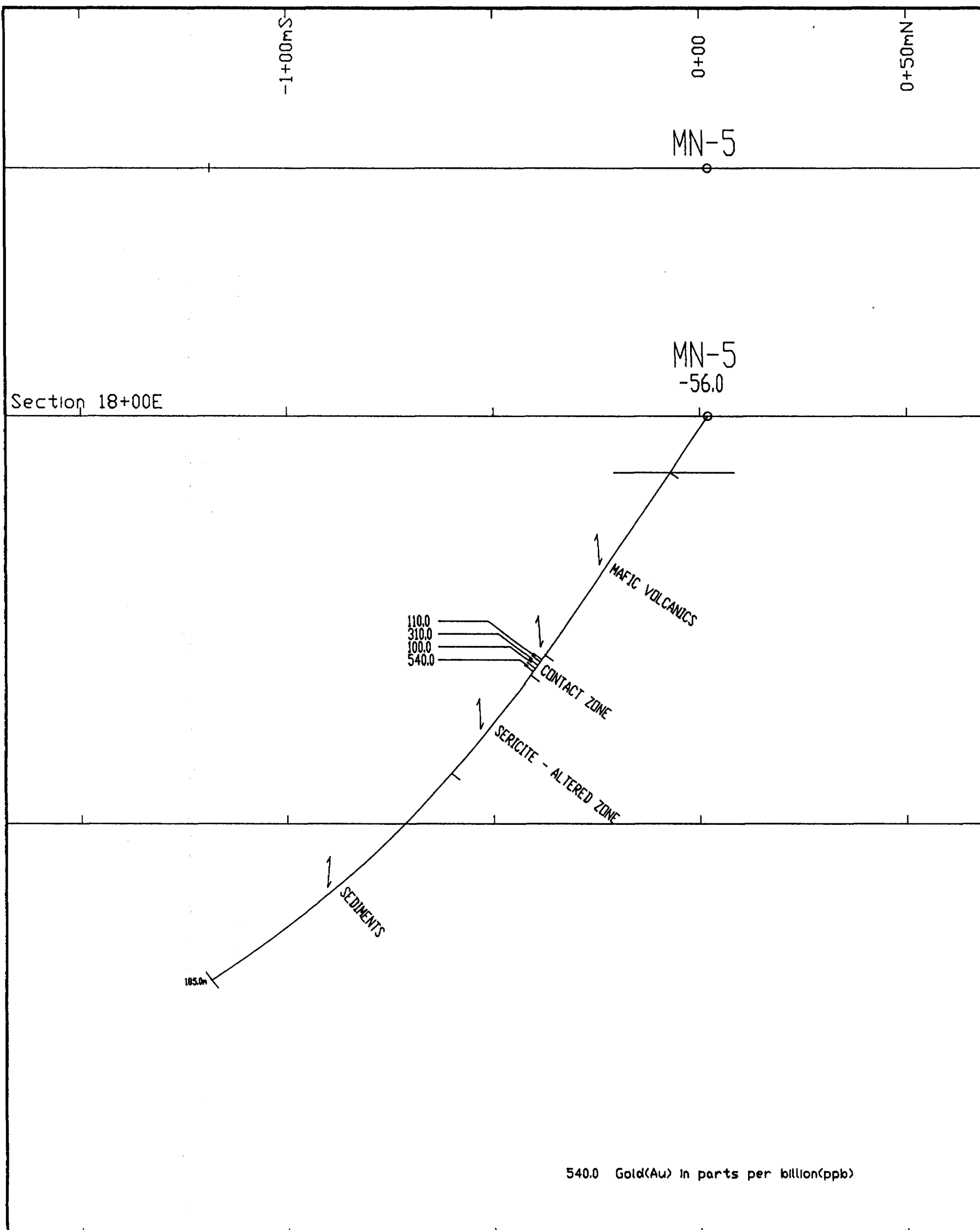
Depth (m)		Rock Type	Description	Sample No.	From	To	Lgth (m)	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
From	To											
			128.60-129.60 - Argillite weakly graphitic, 15% nodules, trace pyrite.	G5698	128.60	129.60	1.0	<5				
			140.70-150.60 - 60% greywacke, 40% argillite.									
			149.00-150.00 - Greywacke, minor argillite, trace pyrite.	G5699	149.00	150.00	1.0	<5				
			150.00-150.60 - Weakly sericitized and silicified sediment, trace pyrite.	G5700	150.00	150.60	0.6	<5				
			150.60-174.70 - 50% greywacke and 50% weakly graphitic argillite.	G5701	150.60	151.00	0.4	<5				
			150.60-151.00 - Strongly silicified and sericitized section, trace pyrite.	G5702	151.00	151.60	0.6	5				
			151.00-151.60 - Sericitic, 20% quartz-iron carbonate stringers, 1-2% pyrite.	G5703	151.60	152.00	0.4	5				
			151.60-152.00 - Greywacke.									
			154.60-155.10 - Weakly silicified sediment, trace pyrite.	G5704	154.60	155.10	0.5	5				
			155.10-155.90 - Moderately silicified sediment, trace pyrite.	G5705	155.10	155.90	0.8	5				
			155.90-156.60 - 25% quartz-iron carbonate veins, 1-7 cm thick, 45-62° to core axis, 2% pyrite throughout.	G5706	155.90	156.60	0.7	<5				
			156.60-157.00 - Graphitic argillite.	G5707	156.60	157.00	0.4	<5				
			150.60-185.00 - 80% greywacke, minor narrow (1-5 cm) 20% argillite bands (weakly graphitic).									
185.00		END OF HOLE										
			Test (continued)									
			185m -34° --									
			Foliations:									
			20m = massive									
			30 = 35°									
			40 = 38°									
			50 = 45° (very weak)									

Depth (m)		Rock Type	Description	Sample No.	From	To	Lgth (m)	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
From	To											
			60 - 44° (very weak)									
			70 = 39°									
			80 = 44°									
			90 = 40°									
			100 = 44°									
			110 = 47°									
			120 = 45°									
			130 = 45°									
			140 = 45°									
			150 = 44°									
			160 = 56°									
			170 = 60°									
			180 = 61°									

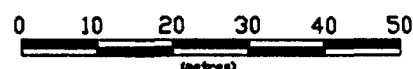
ASSAY SUMMARY

SAMPLE NO.	FROM (m)	TO (m)	LENGTH (m)	GEO-CHEM (ppb)	ASSAY g/t	CHECK 1	CHECK 2	CHECK 3	CHECK 4	AVER-AGE	AV X LEN
G5682	71.90	72.60	0.7	110						110	77
G5683	72.60	73.60	1.0	310						310	310
G5684	73.60	74.60	1.0	100						100	100
G5685	74.60	75.50	0.9	540						540	486

FROM (m)	TO (m)	LENGTH (m)	TOTAL AV X LEN	AVERAGE (AG) GRADE (ppb)	HORIZON (HT) THICKNESS	PLOTTED HT X AG
71.90	75.50	3.6	973	270		



Scale 1:1000



TECK EXPLORATION LTD			
DDH. MN-5			
MINNITAKI PROJECT			
DRAYTON TP., ONTARIO			
NTS:	52 JK	PROJ:	16070
DATE:	OCT.92	Figure 13	

TECK EXPLORATION LTD. DIAMOND DRILL LOG

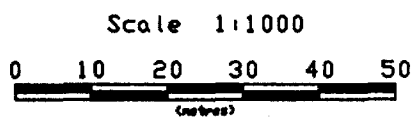
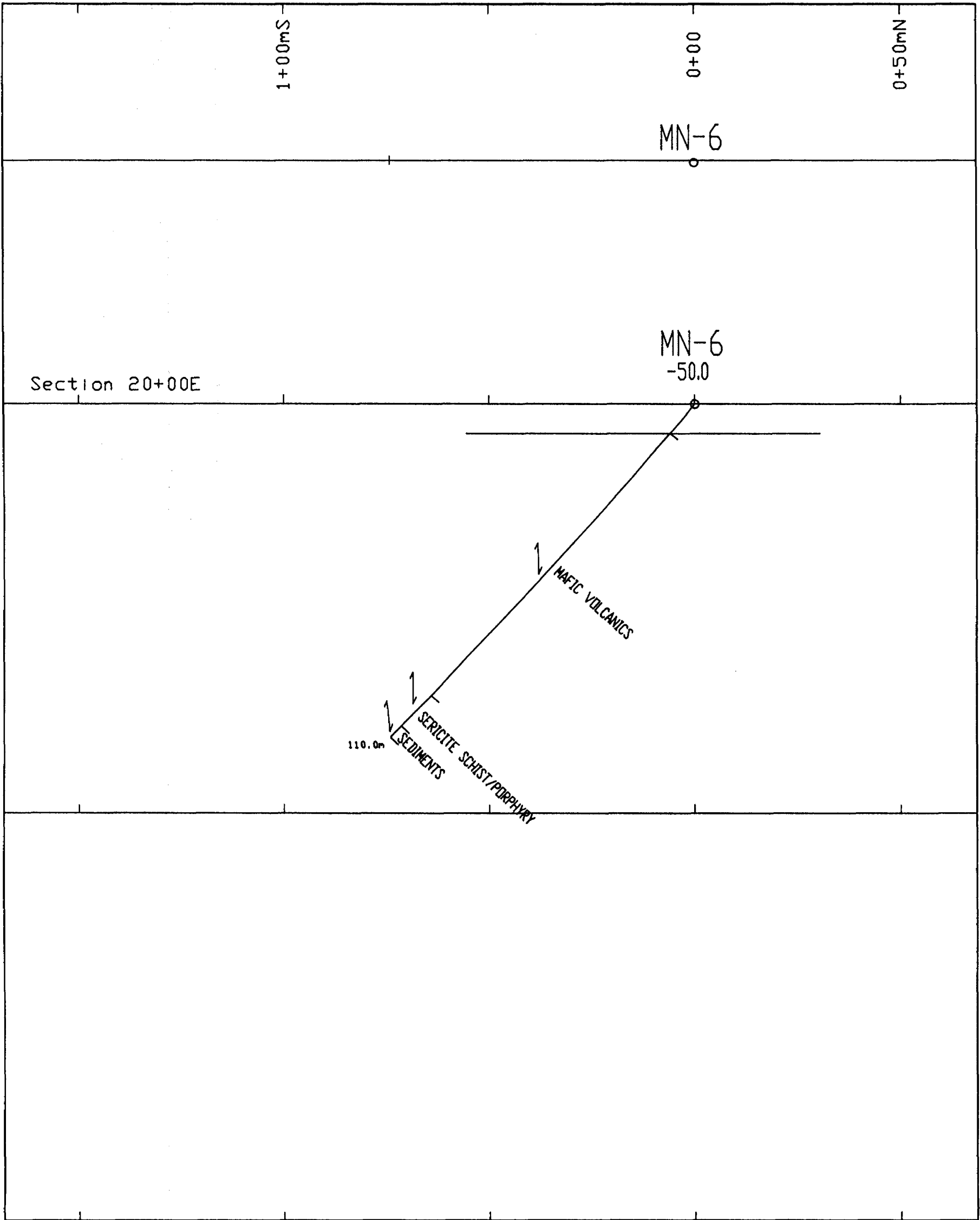
Hole MN-6
Sheet 1 of 3

Job <u>16070</u> N.T.S. <u>52 J/4</u> Property <u>Minnitaki</u> Township <u>Drayton</u> Location: Line <u>20+00mE</u> Station <u>0+00</u> Elevation <u>Surface</u> Logged <u>Jim Janzen</u>	Objective <u>To test the eastern extent of the contact zone</u> Drilling Co. <u>Morissette</u> Commenced <u>July 18, 1992</u> Completed <u>July 19, 1992</u> Length <u>110 m</u>	Core Location <u>Sioux Lookout</u> Distance to Water <u>650 m</u> Casing Lost <u>10 m</u> Core Size <u>BQ</u>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: left;">Tests</td> <td style="text-align: center;">Dip</td> <td style="text-align: center;">Azimuth</td> </tr> <tr> <td>At Collar</td> <td style="text-align: center;">-50°</td> <td style="text-align: center;">160°</td> </tr> <tr> <td>30m</td> <td style="text-align: center;">-49°</td> <td style="text-align: center;">--</td> </tr> <tr> <td>60m</td> <td style="text-align: center;">-47°</td> <td style="text-align: center;">--</td> </tr> <tr> <td>95m</td> <td style="text-align: center;">-46°</td> <td style="text-align: center;">--</td> </tr> </table>	Tests	Dip	Azimuth	At Collar	-50°	160°	30m	-49°	--	60m	-47°	--	95m	-46°	--
Tests	Dip	Azimuth																
At Collar	-50°	160°																
30m	-49°	--																
60m	-47°	--																
95m	-46°	--																
Remarks <u>95.50 - 98.00 m moderate blue-grey silicification with 1% - 2% pyrite.</u>																		

Depth (m)		Rock Type	Description	Sample No.	From	To	Lgth (m)	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppb
From	To											
0.00	9.40	OVERBURDEN										
9.40	92.80	MAFIC VOLCANIC	Dark green, very fine-grained massive flow, weakly foliated at 35-45° to core axis. Pervasive weak chloritic alteration, (note: grade of metamorphism is approaching amphibolite facies). Minor carbonate alteration throughout, <1% quartz, quartz-carbonate and quartz-iron carbonate stringers and veins, trace disseminated pyrite throughout, trace very fine-grained magnetite locally. 72.80-79.30 - Mafic volcanic, 5% quartz-iron-carbonate stringers, 33-45° to core axis, 2% pyrite throughout. 80.00-92.80 - 1-10% very fine-grained iron carbonate crystals. 87.00-87.50 - Bleached mafic volcanic. 87.50-88.10 - Sericite schist 47° to core axis, sericitized dyke?, trace pyrite. 88.10-89.50 - Mafic volcanic. 89.50-90.50 - As above, 1% disseminated pyrite. 90.50-92.00 - Bleached mafic volcanic, 1% disseminated cubic pyrite. 92.00-92.80 - As above.	G5708	72.80	74.30	1.5	25				
				G5709	87.00	87.50	0.5	10				
				G5710	87.50	88.10	0.6	5				
				G5711	88.10	89.50	1.4	15				
				G5712	89.50	90.50	1.0	10				
				G5713	90.50	92.00	1.5	<5				
				G5714	92.00	92.80	0.8	<5				

Depth (m)		Rock Type	Description	Sample No.	From	To	Lgth (m)	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	
From	To												
92.80	106.20	SERICITE SCHIST AND PORPHYRY	Light green and grey, very fine-grained to aphanitic. Upper contact at 44° to core axis, strongly foliated - schistose at 42-50° to core axis. Weakly to strongly sericitized throughout, trace fuschite. Local quartz-feldspar-sericite porphyritic sections, weakly to moderately silicified sections locally, weak pervasive carbonate alteration, trace disseminated pyrite throughout, 2% pyrite locally.										
			92.80-93.80 - Quartz-feldspar-sericite porphyry, trace pyrite.	G5715	92.80	93.80	1.0	20					
			93.80-95.00 - As above.	G5716	93.80	95.00	1.2	<5					
			95.00-95.50 - Strong sericite alteration, 2% disseminated pyrite.	G5717	95.00	95.50	0.5	40					
			95.50-96.30 - Moderately silicified, blue-grey, 2% disseminated pyrite.	G5718	95.50	96.30	0.8	40					
			96.30-97.00 - As above.	G5719	96.30	97.00	0.7	5					
			97.00-98.00 - As above.	G5720	97.00	98.00	1.0	25					
			98.00-99.50 - Sericite schist, trace pyrite.	G5721	98.00	99.50	1.5	5					
			99.50-101.00 - As above.	G5722	99.50	101.00	1.5	<5					
			100.50-106.00 - 40% grey section, weakly silicified, weakly altered greywacke.										
		105.10-105.60 - Quartz-feldspar-sericite porphyry, trace pyrite.	G5723	105.10	105.60	0.5	<5						
		105.60-106.20 - Weakly to moderately silicified section, brecciated, trace pyrite.	G5724	105.60	106.20	0.6	<5						
106.20	110.00	SEDIMENTS	Light to medium grey, very fine-grained. Upper contact gradational, strongly foliated at 44-50° to core axis. Trace fuschite, weak pervasive sericite alteration, weak pervasive carbonate alteration, minor local strongly sericitized sections. Trace pyrite locally.										
			106.20-107.00 - Weakly altered greywacke.	G5725	106.20	107.00	0.8	<5					
			106.90-108.00 - Sericite schist.										
	110.00	END OF HOLE											

Depth (m)		Rock Type	Description	Sample No.	From	To	Lgth (m)	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
From	To											
			Foliations: 10m = 44° 20 = 35° 30 = 40° 40 = 43° 50 = 36° 60 = 45° 70 = 45° 80 = 42° 90 = 42° 100 = 44° 110 = 50° Geochem: Sample # From To 3598 10.00m 30.00m 3599 30.00 50.00 3600 50.00 70.00 9688 70.00 92.80 9689 92.80 110.00									



TECK EXPLORATION LTD			
DDH. MN-6			
MINNITAKI PROJECT			
DRAYTON TP., ONTARIO			
NTS: 52 J,K	PROJ: 16070	DATE: OCT. 92	Figure 14

TECK EXPLORATION LTD. DIAMOND DRILL LOG

Hole MN-7
Sheet 1 of 2

Job <u>16070</u> N.T.S. <u>52 J/4</u>	Objective <u>To test an IP anomaly</u>	Core Location <u>Sioux Lookout</u>	Tests
Property <u>Minnitaki</u>			At Collar
Township <u>Drayton</u>			30m
Location: Line <u>24+00mE</u>	Drilling Co. <u>Morissette</u>	Distance to Water <u>100 m</u>	60m
Station <u>5+35mS</u>	Commenced <u>July 21, 1992</u>	Casing Lost <u>8 m</u>	95m
Elevation <u>Surface</u>	Completed <u>July 22, 1992</u>	Core Size <u>8Q</u>	
Logged <u>Jim Janzen</u>	Length <u>97 m</u>		
			Dip
			160°
			-50°
			-48°
			-46°
			-42°
			--
			--
			--
			--

Remarks 47.00-48.80 - Sericitic section with 2-3% pyrite. Graphitic argillite interbeds common throughout hole.

Depth (m)		Rock Type	Description	Sample No.	From	To	Lgth (m)	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppb
From	To											
0.00	7.10	OVERBURDEN										
7.10	97.00	SEDIMENTS	<p>Interbedded greywacke and argillite. Greywacke is medium grey, very fine-grained with pervasive moderate carbonate alteration and trace pyrite locally. 90% of unit argillite; dark grey-black, very fine-grained, graphitic, trace pyrite locally.</p> <p>Sediments are weakly foliated at 45-55° to core axis, 10% of 10 cm to 1 m+ bands (interbeds) of graphitic argillite, trace pyrite locally.</p> <p>23.00-24.50 - 70% graphitic argillite bands.</p> <p>32.00-34.00 - Argillite, weakly graphitic.</p> <p>41.30-45.80 - 60% graphitic argillite bands.</p> <p>45.50-47.00 - Weakly bleached (carbonatized) greywacke.</p> <p>47.00-48.80 - Sericitic section, light green, very fine-grained, massive, upper contact sharp at 47° to core axis, lower contact at 47°. 5% quartz-carbonate stringers, 1-3 cm thick, 2-3% pyrite throughout.</p> <p>47.00-48.00 - As above.</p> <p>48.00-48.80 - As above.</p> <p>48.80-50.00 - Greywacke.</p> <p>48.80-97.00 - Greywacke with approximately 10%</p>									
				G5726	45.50	47.00	1.5	<5				
				G5727	47.00	48.00	1.0	<5				
				G5728	48.00	48.80	0.8	<5				
				G5729	48.80	50.00	1.2	10				

Depth (m)		Rock Type	Description	Sample No.	From	To	Lgth (m)	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
From	To											
	97.00	END OF HOLE	interbands/beds of graphitic argillite. Foliations: 10m = 45° 20 = 55° 30 = 48° 40 = 52° 50 = 52° 60 = 49° 70 = 53° 80 = 48° 90 = 51° 97 = 51°									

1+00mS

0+00

1+00mN

MN-7

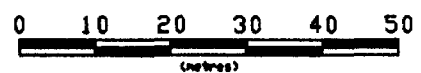
Section 24+00E

MN-7
-50.0

97.0m

SEDIMENTS - Graphitic

Scale 1:1000



TECK EXPLORATION LTD

DDH. MN-7
MINNITAKI PROJECT
DRAYTON TP., ONTARIO

NTS: 52 J,K	PROJ: 16070	DATE: OCT. 92	Figure 15
-------------	-------------	---------------	-----------

TECK EXPLORATION LTD. DIAMOND DRILL LOG

Hole MN-8
Sheet 1 of 3

Job <u>16070</u> N.T.S. <u>52 J/4</u> Property <u>Minnitaki</u> Township <u>Drayton</u> Location: Line <u>30+00mE</u> Station <u>0+97mS</u> Elevation <u>Surface</u> Logged <u>Jim Janzen</u>	Objective <u>To test an I.P anomaly - possible Contact Zone</u> Drilling Co. <u>Morissette</u> Commenced <u>July 23, 1992</u> Completed <u>July 24, 1992</u> Length <u>107 m</u>	Core Location <u>Sioux Lookout</u> Distance to Water <u>150 m</u> Casing Lost <u>4 m</u> Core Size <u>BQ</u>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">Tests</td> <td style="text-align: center;">Dip</td> <td style="text-align: center;">Azimuth</td> </tr> <tr> <td style="text-align: center;">At Collar</td> <td style="text-align: center;"><u>-55°</u></td> <td style="text-align: center;"><u>160°</u></td> </tr> <tr> <td style="text-align: center;"><u>30m</u></td> <td style="text-align: center;"><u>-54°</u></td> <td style="text-align: center;"><u>--</u></td> </tr> <tr> <td style="text-align: center;"><u>60m</u></td> <td style="text-align: center;"><u>-53°</u></td> <td style="text-align: center;"><u> </u></td> </tr> <tr> <td style="text-align: center;"><u>107m</u></td> <td style="text-align: center;"><u>?</u></td> <td style="text-align: center;"><u> </u></td> </tr> </table>	Tests	Dip	Azimuth	At Collar	<u>-55°</u>	<u>160°</u>	<u>30m</u>	<u>-54°</u>	<u>--</u>	<u>60m</u>	<u>-53°</u>	<u> </u>	<u>107m</u>	<u>?</u>	<u> </u>
Tests	Dip	Azimuth																
At Collar	<u>-55°</u>	<u>160°</u>																
<u>30m</u>	<u>-54°</u>	<u>--</u>																
<u>60m</u>	<u>-53°</u>	<u> </u>																
<u>107m</u>	<u>?</u>	<u> </u>																

Remarks I.P. anomaly explained by graphitic argillite from 77.30 to 81.40 m.

Depth (m)		Rock Type	Description	Sample No.	From	To	Lgth (m)	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppb
From	To											
0.00	1.50	OVERBURDEN										
1.50	71.00	MAFIC VOLCANIC	Dark green, very fine-grained, moderately to strongly foliated/sheared at 36-39° to core axis. 5-25% buff, fine-grained iron carbonate crystals. Strong iron carbonate and carbonate alteration, bleaching locally. Local sections moderately siliceous with 1-2% pyrite, pervasive chlorite alteration throughout, minor quartz porphyry, trace fine-grained disseminated and coarse-grained cubic pyrite throughout with local concentrations of 2% pyrite, trace to 2% red-brown sphalerite and trace to 0.5% magnetite locally.									
			1.50-2.30 - Quartz porphyry, strong lower contact at 38° to core axis.									
			15.00-16.20 - Mafic volcanic, 10% fine-grained iron carbonate, 1% coarse-grained cubic pyrite.	G5730	15.00	16.20	1.2	5				
			16.20-17.30 - 50% coarse-grained iron carbonate crystals - porphyritic, sheared, sharp upper and lower contacts at 36° to core axis, 1-2% red-brown sphalerite.	G5731	16.20	17.30	1.1	<5				
			17.30-18.80 - Strong iron carbonate and carbonate alteration of mafic volcanic, trace	G5732	17.30	18.80	1.5	<5				

Depth (m)		Rock Type	Description	Sample No.	From	To	Lgth (m)	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
From	To											
			pyrite, trace red-brown sphalerite.									
			17.30-37.90 - Strong iron carbonate and carbonate bleaching.									
			20.50-21.70 - Bleached mafic volcanic with 1% felsic lapilli-sized fragments, 1% coarse-grained cubic pyrite.	G5733	20.50	21.70	1.2	<5				
			21.70-22.00 - Moderately siliceous, 10% quartz-carbonate stringers, 2% coarse-grained cubic pyrite.	G5734	21.70	22.00	0.3	<5				
			22.00-22.95 - As above. 3% coarse-grained cubic pyrite.	G5735	22.00	22.95	0.95	<5				
			22.95-24.00 - Bleached mafic volcanic, trace coarse-grained cubic pyrite.	G5736	22.95	24.00	1.05	<5				
			37.90-40.80 - Massive mafic volcanic.									
			40.80-64.00 - Moderate iron carbonate and carbonate bleaching.									
			64.00-71.00 - Strong iron carbonate and carbonate bleaching.									
71.00	77.30	ALTERATION ZONE (SEDIMENTS)	Light grey, very fine-grained, transitional upper contact strongly foliated at 36-39° to core axis. 70% beige bands 1-30cm thick, strongly altered with carbonate, iron-carbonate and weakly siliceous, 30% dark grey-black argillite bands, trace to 1% pyrite locally (cubic and disseminated).									
			71.00-72.50 - Altered sediments, unmineralized.	G5737	71.00	72.50	1.5	<5				
			72.50-74.00 - Altered sediments, trace pyrite.	G5738	72.50	74.00	1.5	<5				
			74.00-75.00 - Altered greywacke, 1% pyrite.	G5739	74.00	75.00	1.0	<5				
			75.00-75.70 - 30 cm iron carbonate - sericitized section, 40° to core axis, 1% pyrite - cubic.	G5740	75.00	75.70	0.7	<5				
			75.70-77.30 - Moderately siliceous, 1% disseminated and cubic pyrite.	G5741	75.70	77.30	1.6	<5				
77.30	81.40	GRAPHITIC ARGILLITE	Dark grey-black, very fine-grained. Sharp upper contact at 13° to core axis. Strongly foliated/sheared at 37-43° to core axis. 7% quartz-carbonate stringers, 3% coarse-grained									

Depth (m)		Rock Type	Description	Sample No.	From	To	Lgth (m)	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
From	To											
81.40	107.00	SEDIMENTS	cubic pyrite throughout, trace sphalerite.									
			77.30-78.50 - Weakly graphitic greywacke, 3% pyrite.	G5742	77.30	78.50	1.2	<5				
			78.50-80.00 - Graphitic argillite, 3% pyrite, trace sphalerite.	G5743	78.50	80.00	1.5	<5				
	80.00-81.40 - As above.		G5744	80.00	81.40	1.4	<5					
			Light grey-green greywacke, very fine-grained, moderately foliated at 38-41° to core axis, 10% 1-10 cm graphitic argillite bands. 1-8% medium-grained iron carbonate crystals, trace coarse-grained cubic pyrite locally.									
			81.40-83.00 - Greywacke.	G5745	81.40	83.00	1.6	<5				
			91.10-91.90 - Graphitic argillite.									
	107.00	END OF HOLE										
			Foliations:									
			10m = 36°									
			20 = 36°									
			30 = 36°									
			40 = 37°									
			50 = 40°									
			60 = 37°									
			70 = 37°									
			80 = 39°									
			90 = 39°									
			100 = 39°									
			107 = 40°									
			Geochem:									
			Sample # From To									
			9690 5.00m 25.00m									
			9691 25.00 45.00									
			9692 45.00 71.00									
			9693 71.00 81.40									
			9694 81.40 107.00									

2+00mS

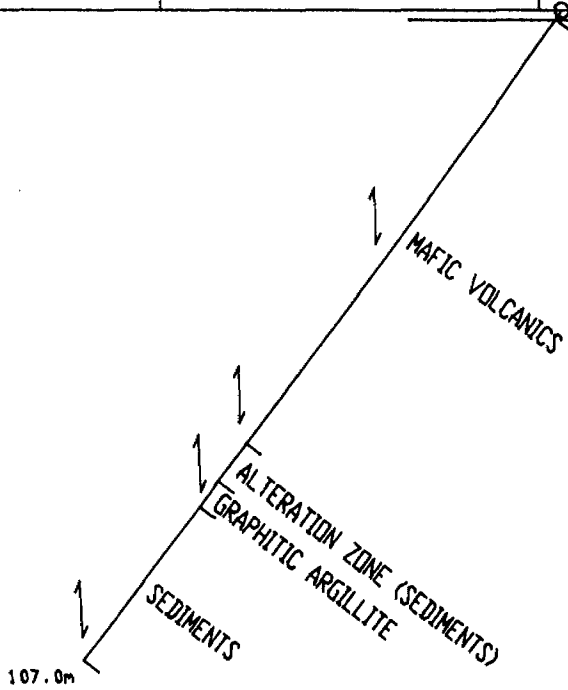
1+00mS

0+00

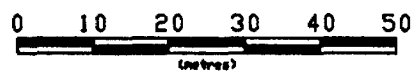
MN-8

Section 30+00E

MN-8
-55.0



Scale 1:1000



TECK EXPLORATION LTD

DDH. MN-8
MINNITAKI PROJECT
DRAYTON TP., ONTARIO

NTS: 52 J,K	PROJ: 16070	DATE: OCT. 92	Figure 16
-------------	-------------	---------------	-----------

TECK EXPLORATION LTD. DIAMOND DRILL LOG

Hole MN-9
Sheet 1 of 3

Job <u>16070</u> N.T.S. <u>52 J/4</u> Property <u>Minnitaki</u> Township <u>Drayton</u> Location: Line <u>17+00mE</u> Station <u>0+85mW</u> Elevation <u>Surface</u> Logged <u>Jim Janzen</u>	Objective <u>To test the Contact Zone</u> <u>at depth</u> Drilling Co. <u>Morissette</u> Commenced <u>July 25, 1992</u> Completed <u>July 27, 1992</u> Length <u>185 m</u>	Core Location <u>Sioux Lookout</u> Distance to Water <u>275 m</u> Casing Lost <u>12 m</u> Core Size <u>BQ</u>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: left;">Tests</td> <td style="text-align: center;">Dip</td> <td style="text-align: center;">Azimuth</td> </tr> <tr> <td>At Collar</td> <td style="text-align: center;"><u>-60°</u></td> <td style="text-align: center;"><u>160°</u></td> </tr> <tr> <td><u>30m</u></td> <td style="text-align: center;"><u>-58°</u></td> <td style="text-align: center;"><u>--</u></td> </tr> <tr> <td><u>60m</u></td> <td style="text-align: center;"><u>-55°</u></td> <td style="text-align: center;"><u>--</u></td> </tr> <tr> <td><u>92m</u></td> <td style="text-align: center;"><u>-55°</u></td> <td style="text-align: center;"><u>--</u></td> </tr> <tr> <td><u>122m</u></td> <td style="text-align: center;"><u>-55°</u></td> <td style="text-align: center;"><u>--</u></td> </tr> <tr> <td><u>150m</u></td> <td style="text-align: center;"><u>-53°</u></td> <td style="text-align: center;"><u>--</u></td> </tr> </table> <p style="text-align: right;">Continued on Page 3</p>	Tests	Dip	Azimuth	At Collar	<u>-60°</u>	<u>160°</u>	<u>30m</u>	<u>-58°</u>	<u>--</u>	<u>60m</u>	<u>-55°</u>	<u>--</u>	<u>92m</u>	<u>-55°</u>	<u>--</u>	<u>122m</u>	<u>-55°</u>	<u>--</u>	<u>150m</u>	<u>-53°</u>	<u>--</u>
Tests	Dip	Azimuth																						
At Collar	<u>-60°</u>	<u>160°</u>																						
<u>30m</u>	<u>-58°</u>	<u>--</u>																						
<u>60m</u>	<u>-55°</u>	<u>--</u>																						
<u>92m</u>	<u>-55°</u>	<u>--</u>																						
<u>122m</u>	<u>-55°</u>	<u>--</u>																						
<u>150m</u>	<u>-53°</u>	<u>--</u>																						
Remarks <u>Moderate silicification. Trace to 2% pyrite.</u>																								

Depth (m)		Rock Type	Description	Sample No.	From	To	Lgth (m)	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppb
From	To											
0.00	11.50	OVERBURDEN										
11.50	134.30	MAFIC VOLCANICS	Dark green, very fine-grained, moderately to weakly foliated at 32-47° to core axis, massive flow. Local sections with 1-20% medium-grained buff iron-carbonate crystals, pervasive weak chlorite alteration, local carbonate, iron-carbonate bleached sections, <1% scattered quartz, and quartz-iron-carbonate stringers, trace to 1% pyrite locally. 97m to end of unit 1% fine-grained disseminated magnetite. 11.50-18.30 - Blocky ground. 28.20-28.90 - Iron-carbonate bleached, 5% quartz-iron carbonate stringers, trace pyrite. 35.00-35.20 - Strong iron-carbonate and epidote alteration. 42.50-43.60 - Felsic dyke at 26° to core axis, iron carbonate bleached, light grey-green. 69.35-69.50 - Sericitic dyke, 5% chlorite phenocrysts, 55° to core axis. 84.10-88.70 - Strong iron-carbonate alteration, weakly to moderately silicified, 5% quartz-iron-carbonate stringers, trace pyrite throughout, 1% pyrite locally.	G5746	84.10	85.60	1.5	600				
				G5747	85.60	87.10	1.5	140				
				G5748	87.10	88.70	1.6	35				

Depth (m)		Rock Type	Description	Sample No.	From	To	Lgth (m)	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
From	To											
134.30	179.70	INTERMEDIATE TUFF	84.10-85.60 - Strongly altered with iron-carbonate, weakly to moderately silicified, 1% pyrite. 85.60-87.10 - As above, trace pyrite. 87.70-88.70 - As above, trace pyrite. 88.70-90.80 - Weakly bleached mafic volcanic. 93.70-93.80 - Felsic dyke, 55° to core axis Light grey, very fine-grained, 10-15% medium-grained quartz-porphyritic, weak upper contact at 41° to core axis. Strongly foliated-sheared at 35-42° to core axis. Volcanic/sediment? Local strongly iron-carbonate alteration, sericite altered and silica sections, trace fuschite, trace pyrite throughout, 2% pyrite locally. 141.50-142.50 - Intermediate tuff. 142.50-143.30 - Altered section, iron-carbonate, sericite, weakly silicified, trace coarse-grained cubic pyrite. 143.30-143.70 - Intermediate tuff. 162.00-164.00 - 5% coarse-grained quartz crystals (subrounded and fragments angular). 163.00-170.60 - Moderately silicified (Contact zone). 163.00-163.60 - Weakly sericitized intermediate tuff. 163.60-164.20 - Strongly silicified, weakly brecciated, 3% fine-grained disseminated pyrite, 36° to core axis. 164.20-164.90 - As above. 164.90-166.40 - Weakly silicified intermediate tuff, trace pyrite. 166.40-167.90 - As above. 167.90-169.40 - As above. 169.40-170.60 - 30% quartz-iron-carbonate stringers, trace pyrite. 170.60-171.00 - Intermediate tuff.									
179.70	185.00	SERICITE SCHIST	Light green, very fine-grained, strong upper									

Depth (m)		Rock Type	Description	Sample No.	From	To	Lgth (m)	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
From	To											
	185.00	END OF HOLE	<p>contact at 37° to core axis, strongly foliated-schistose at 40-45° to core axis, sericitized throughout, trace fuschite, trace pyrite. 182.50-182.80 - Quartz porphyry, 26° to core axis.</p> <p>Tests (continued) 180m -60° 160°</p> <p>Foliations:</p> <p>20m = 32° 30 = 35° 40 = 35° 50 = 37° 60 = 45° 70 = 41° 80 = 36° 90 = 40° 100 = 36° 110 = 36° 120 = 37° 130 = 45° 140 = 44° 150 = 40° 160 = 35° 170 = 36° 180 = 45°</p>									

1+00mS

0+00

1+00mN

MN-9

Section 17+00E

MN-9
-60.0

600.0
140.0

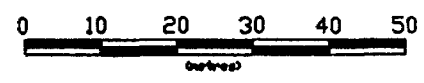
MAFIC VOLCANICS

INTERMEDIATE TUFF

185.0m
SERICITE SCHIST

600.0 Gold(Au) in parts per billion(ppb)

Scale 1:1000

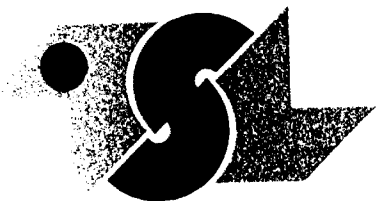


TECK EXPLORATION LTD

DDH. MN-9
MINNITAKI PROJECT
DRAYTON TP., ONTARIO

NTS: 52 JK PROJ: 16070 DATE: OCT.92 Figure 17

APPENDIX E
ASSAY CERTIFICATES



TSL LABORATORIES

2 - 302 - 48th STREET, EAST
SASKATOON, SASKATCHEWAN
S7K 6A4

☎ (306) 931-1033 FAX: (306) 242-4717

CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM Teck Explorations Ltd.
R.R. #5 19 Legault Street
North Bay, Ontario
P1B 8Z4

REPORT No.
S4308

SAMPLE(S) OF Rock

INVOICE #: 19499
P.O.: PN:16070/TB1907

J. Janzen
Project: 16070

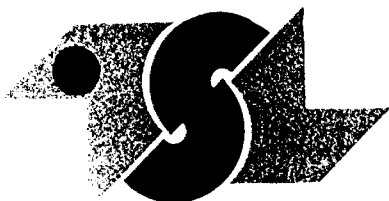
	Au ppb	Au g/t	Ag ppm
3501	10		.8
3502	70		.4
3503	15		.6
3504	<5		.6
3505	<5		.6
3506	10		.6
3507	<5		.4
3508	20		1.0
3509	30		.8
3510	20		.8
3511	20		.6
3512	<5		.4
3513	<5		.4
3514	<5		.8
3515	<5		.8
3516	<5		1.0
3517	420		1.0
3518	270		1.0
3519	130		1.2
3520	>1000	2.59/2.34	1.6

COPIES TO: K. Thorsen
INVOICE TO: Teck Expl.- North Bay

Jun 18/92

SIGNED





TSL LABORATORIES

2 - 302 - 48th STREET, EAST
SASKATOON, SASKATCHEWAN
S7K 6A4

☎ (306) 931-1033 FAX: (306) 242-4717

CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM Teck Explorations Ltd.
R.R. #5 19 Legault Street
North Bay, Ontario
P1B 8Z4

REPORT No.
S4308

SAMPLE(S) OF Rock

INVOICE #: 19499
P.O.: PN:16070/TB1907

J. Janzen
Project: 16070

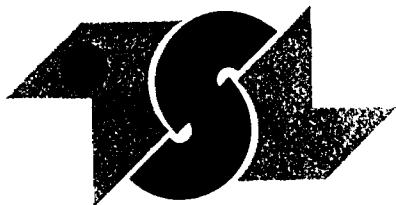
	Au ppb	Ag ppm
3521	90	.8
3522	10	.8
3523	10	.8
3524	85	.8
3525	25	.8
3526	10	1.0
3527	20	.8
3528	<5	.8
3529	<5	.8
3530	<5	.8
3531	410	1.4
3532	590	2.0
3533	100	.8
3534	<5	<.2
3535	25	.6
3536	10	.6
3537	<5	<.2
3538	15	.6
3539	100	.6
3540	30	.4

COPIES TO: K. Thorsen
INVOICE TO: Teck Expl.- North Bay

Jun 18/92

SIGNED Bernie Dunn





TSL LABORATORIES

2 - 302 - 48th STREET, EAST
SASKATOON, SASKATCHEWAN
S7K 6A4

☎ (306) 931-1033 FAX: (306) 242-4717

CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM Teck Explorations Ltd.
R.R. #5 19 Legault Street
North Bay, Ontario
P1B 8Z4

REPORT No.
S4308

SAMPLE(S) OF Rock

INVOICE #: 19499
P.O.: PN:16070/TB1907

J. Janzen
Project: 16070

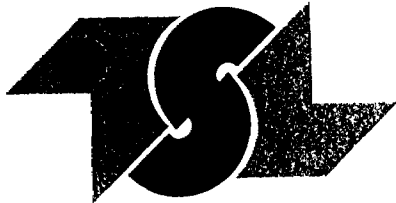
	Au ppb	Ag ppm
3541	<5	.8
3542	<5	.4
3543	<5	.4
3544	<5	.4
3545	<5	.4
3546	<5	.4
3547	<5	.2
3548	<5	.6
3549	<5	.6
3550	<5	.4
3551	<5	.4
3552	<5	.2
3553	20	.4

COPIES TO: K. Thorsen
INVOICE TO: Teck Expl.- North Bay

Jun 18/92

SIGNED Bernie Dum





TSL LABORATORIES

2 - 302 - 48th STREET, EAST
SASKATOON, SASKATCHEWAN
S7K 6A4

☎ (306) 931-1033 FAX: (306) 242-4717

CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM Teck Explorations Ltd.
R.R. #5 19 Legault Street
North Bay, Ontario
P1B 8Z4

REPORT No.
S4345

SAMPLE(S) OF Rock

INVOICE #: 19536
P.O.: TB1933

J. Janzen
Project: 16070

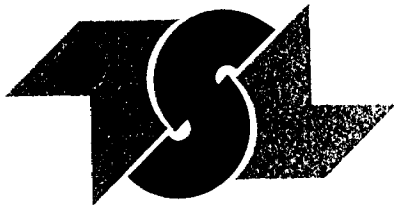
	Au ppb	Ag ppm
3554	<5	<.2
3555	<5	<.2
3556	5	<.2
3557	<5	<.2
3558	<5	<.2
3559	<5	<.2
3560	<5	<.2
3561	<5	<.2
3562	<5	<.2
3563	<5	<.2
3564	<5	.4
3565	30	.2
3566	<5	.2
3567	<5	<.2
3568	<5	.4
3569	<5	<.2
3570	10	<.2
3571	<5	<.2
3572	60	.4
3573	230	.2

COPIES TO: K. Thorsen, B. Miller
INVOICE TO: Teck Expl.- North Bay

Jun 26/92

SIGNED Bernie Dunn





TSL LABORATORIES

2 - 302 - 48th STREET, EAST
SASKATOON, SASKATCHEWAN
S7K 6A4

☎ (306) 931-1033 FAX: (306) 242-4717

CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM Teck Explorations Ltd.
R.R. #5 19 Legault Street
North Bay, Ontario
P1B 8Z4

REPORT No.
S4345

SAMPLE(S) OF Rock

INVOICE #: 19536
P.O.: TB1933

J. Janzen
Project: 16070

	Au ppb	Ag ppm
3574	65	<.2
3575	80	.2
3576	10	<.2
3577	75	.4
3578	45	<.2
3579	<5	<.2
3580	15	<.2
3581	10	.2
3582	90	.4
3583	130	<.2
3584	15	<.2
3585	50	<.2
3586	35	<.2
3587	240	.2

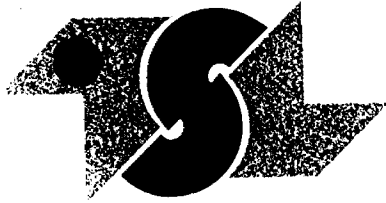
COPIES TO: K. Thorsen, B. Miller
INVOICE TO: Teck Expl.- North Bay

Jun 26/92

SIGNED



For enquiries on this report, please contact Customer Service Department.
Samples, Pulps and Rejects discarded two months from the date of this report.



TSL LABORATORIES

2 - 302 - 48th STREET, EAST
SASKATOON, SASKATCHEWAN
S7K 6A4

☎ (306) 931-1033 FAX: (306) 242-4717

CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM Teck Explorations Ltd.
R.R. #5 19 Legault Street
North Bay, Ontario
P1B 8Z4

REPORT No.
S4447

SAMPLE(S) OF Rock

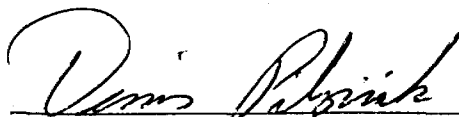
INVOICE #: 19654
P.O.: PN:16070/TB1976

J. Janzen
Project: Minnitaki

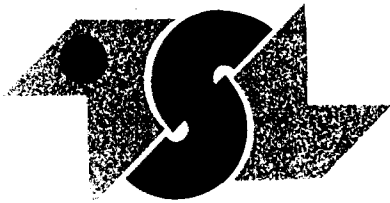
	Au ppb
5601	<5
5602	<5
5603	<5
5604	<5
5605	5
5606	<5
5607	<5
5608	<5
5609	40
5610	<5
5611	<5
5612	130
5613	10
5614	5
5615	250
5616	10
5617	30
5618	<5
5619	<5
5620	30

COPIES TO: K. Thorsen, J. Janzen
INVOICE TO: Teck Expl.- North Bay

Jul 17/92

SIGNED 





TSL LABORATORIES

2 - 302 - 48th STREET, EAST
SASKATOON, SASKATCHEWAN
S7K 6A4

☎ (306) 931-1033 FAX: (306) 242-4717

CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM Teck Explorations Ltd.
R.R. #5 19 Legault Street
North Bay, Ontario
P1B 8Z4

REPORT No.
S4447

SAMPLE(S) OF Rock

INVOICE #: 19654
P.O.: PN:16070/TB1976

J. Janzen
Project: Minnitaki

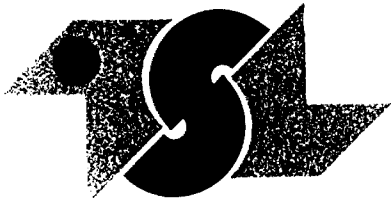
	Au ppb	Au g/t
5621	<5	
5622	<5	
5623	15	
5624	60	
5625	25	
5626	130	
5627	75	
5628	130	
5629	310	
5630	410	
5631	900	
5632	>1000	2.03
5633	>1000	1.24
5634	225	
5635	680	
5636	810	
5637	490	
5638	460	
5639	10	
5640	5	

COPIES TO: K. Thorsen, J. Janzen
INVOICE TO: Teck Expl.- North Bay

Jul 17/92

SIGNED





TSL LABORATORIES

2 - 302 - 48th STREET, EAST
SASKATOON, SASKATCHEWAN
S7K 6A4

☎ (306) 931-1033 FAX: (306) 242-4717

CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM Teck Explorations Ltd.
R.R. #5 19 Legault Street
North Bay, Ontario
P1B 8Z4

REPORT No.
S4447

SAMPLE(S) OF Rock

INVOICE #: 19654
P.O.: PN:16070/TB1976

J. Janzen
Project: Minnitaki

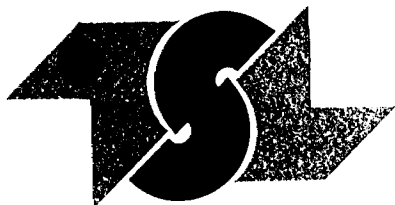
	Au ppb
5641	<5
5642	5

COPIES TO: K. Thorsen, J. Janzen
INVOICE TO: Teck Expl.- North Bay

Jul 17/92

SIGNED





TSL LABORATORIES

2 - 302 - 48th STREET, EAST
SASKATOON, SASKATCHEWAN
S7K 6A4

☎ (306) 931-1033 FAX: (306) 242-4717

CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM Teck Explorations Ltd.
R.R. #5 19 Legault Street
North Bay, Ontario
P1B 8Z4

REPORT No.
S4476

SAMPLE(S) OF Rock

INVOICE #: 19673
P.O.: PN:16070/TB1982

J. Janzen
Project: 16070/Minnitaki

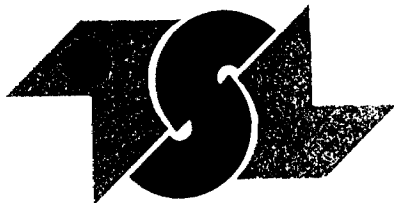
	Au ppb	Au g/t
5643	<5	
5644	<5	
5645	10	
5646	20	
5647	<5	
5648	20	
5649	90	
5650	<5	
5651	<5	
5652	10	
5653	30	
5654	<5	
5655	<5	
5656	<5	
5657	5	
5658	30	
5659	35	
5660	20	
5661	>1000	1.52
5662	260	

COPIES TO: K. Thorsen
INVOICE TO: Teck Expl.- North Bay

Jul 23/92

SIGNED





TSL LABORATORIES

2 - 302 - 48th STREET, EAST
SASKATOON, SASKATCHEWAN
S7K 6A4

☎ (306) 931-1033 FAX: (306) 242-4717

CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM Teck Explorations Ltd.
R.R. #5 19 Legault Street
North Bay, Ontario
P1B 8Z4

REPORT No.
S4476

SAMPLE(S) OF Rock

INVOICE #: 19673
P.O.: PN:16070/TB1982

J. Janzen
Project: 16070/Minnitaki

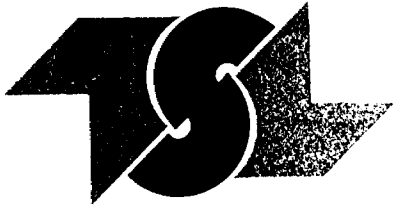
	Au ppb	Au g/t
5663	570	
5664	340	
5665	310	
5666	130	
5667	>1000	2.14
5668	260	
5669	>1000	1.52
5670	20	
5671	5	
5672	15	
5673	10	
5674	<5	
5675	<5	
5676	5	

COPIES TO: K. Thorsen
INVOICE TO: Teck Expl.- North Bay

Jul 23/92

SIGNED *Dennis Pilgiate*





TSL LABORATORIES

2 - 302 - 48th STREET, EAST
SASKATOON, SASKATCHEWAN
S7K 6A4

☎ (306) 931-1033 FAX: (306) 242-4717

CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM Teck Explorations Ltd.
R.R. #5 19 Legault Street
North Bay, Ontario
P1B 8Z4

REPORT No.
S4487

SAMPLE(S) OF Rock

INVOICE #: 19689
P.O.: 16070/TB1989

Jim Janzen
Project: Minnitaki

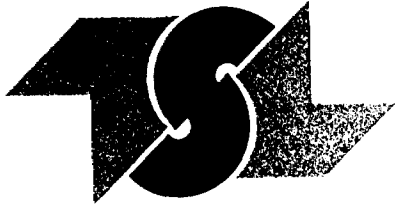
	Au ppb
5677	<5
5678	<5
5679	<5
5680	5
5681	15
5682	110
5683	310
5684	100
5685	540
5686	10
5687	5
5688	50
5689	<5
5690	<5
5691	<5
5692	85
5693	<5
5694	<5
5695	<5
5696	<5

COPIES TO: K. Thorsen, J. Janzen
INVOICE TO: Teck Expl.- North Bay

Jul 24/92

SIGNED *Dennis Pilgisch*





TSL LABORATORIES

2 - 302 - 48th STREET, EAST
SASKATOON, SASKATCHEWAN
S7K 6A4

☎ (306) 931-1033 FAX: (306) 242-4717

CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM Teck Explorations Ltd.
R.R. #5 19 Legault Street
North Bay, Ontario
P1B 8Z4

REPORT No.
S4487

SAMPLE(S) OF Rock

INVOICE #: 19689
P.O.: 16070/TB1989

Jim Janzen
Project: Minnitaki

	Au ppb
5697	5
5698	<5
5699	<5
5700	<5
5701	<5
5702	5
5703	5
5704	5
5705	5
5706	<5
5707	<5

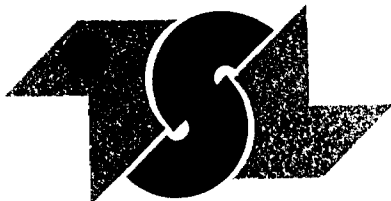
COPIES TO: K. Thorsen, J. Janzen
INVOICE TO: Teck Expl.- North Bay

Jul 24/92

SIGNED

Dennis Piljinski





TSL LABORATORIES

2 - 302 - 48th STREET, EAST
SASKATOON, SASKATCHEWAN
S7K 6A4

☎ (306) 931-1033 FAX: (306) 242-4717

CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM Teck Explorations Ltd.
R.R. #5 19 Legault Street
North Bay, Ontario
P1B 8Z4

REPORT No.
S4538

SAMPLE(S) OF Rock

INVOICE #: 19759
P.O.: PN:16070/TB2007

J. Janzen
Project: Minnitaki 16070

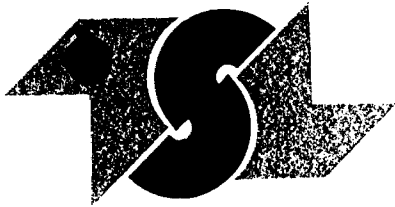
	Au ppb
5708	25
5709	10
5710	5
5711	15
5712	10
5713	<5
5714	<5
5715	20
5716	<5
5717	40
5718	40
5719	5
5720	25
5721	5
5722	<5
5723	<5
5724	<5
5725	<5
5726	<5
5727	<5

COPIES TO: K. Thorsen
INVOICE TO: Teck Expl.- North Bay

Aug 04/92

SIGNED





TSL LABORATORIES

2 - 302 - 48th STREET, EAST
SASKATOON, SASKATCHEWAN
S7K 6A4

☎ (306) 931-1033 FAX: (306) 242-4717

CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM Teck Explorations Ltd.
R.R. #5 19 Legault Street
North Bay, Ontario
P1B 8Z4

REPORT No.
S4538

SAMPLE(S) OF Rock

INVOICE #: 19759
P.O.: PN:16070/TB2007

J. Janzen
Project: Minnitaki 16070

Au
ppb

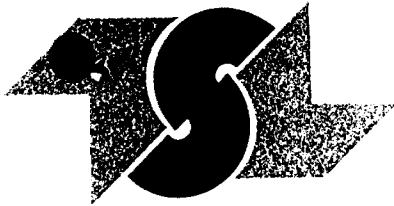
5728	<5
5729	10
5730	5
5731	<5
5732	<5
5733	<5
5734	<5
5735	<5
5736	<5
5737	<5
5738	<5
5739	<5
5740	<5
5741	<5
5742	<5
5743	<5
5744	<5
5745	<5

COPIES TO: K. Thorsen
INVOICE TO: Teck Expl.- North Bay

Aug 04/92

SIGNED





TSL LABORATORIES

2 - 302 - 48th STREET, EAST
SASKATOON, SASKATCHEWAN
S7K 6A4

☎ (306) 931-1033 FAX: (306) 242-4717

CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM Teck Explorations Ltd.
R.R. #5 19 Legault Street
North Bay, Ontario
P1B 8Z4

REPORT No.
S4537

SAMPLE(S) OF Rock

INVOICE #: 19758
P.O.: PN:16070/TB2006

J. Janzen
Project: Minnitaki 16070

	Au ppb
5746	600
5747	140
5748	35
5749	15
5750	10
5751	15
5752	15
5753	25
5754	5
5755	<5
5756	<5
5757	<5
5758	<5
5759	5

COPIES TO: K. Thorsen
INVOICE TO: Teck Expl.- North Bay

Aug 04/92

SIGNED _____



Bondar-Clegg & Company Ltd.
 5420 Canotek Road
 Ottawa, Ontario
 K1J 9G2
 Tel: (613) 749-2220
 Fax: (613) 749-7170



Geochemical
 Lab Report

REPORT: 092-41799.0 (COMPLETE)

REFERENCE INFO:

CLIENT: TECK EXPLORATIONS LIMITED
 PROJECT: 15070

SUBMITTED BY: J. JANZEN
 DATE PRINTED: 13-AUG-92

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	BaO Barium Oxide	19	0.001 PCT	BORATE FUSION	INDUC. COUP. PLASMA
2	Cr2O3 Chromium Oxide	19	0.01 PCT	BORATE FUSION	INDUC. COUP. PLASMA
3	Au Gold	19	5 PPB	FIRE ASSAY	FIRE ASSAY @ 10 G
4	SiO2 Silica Dioxide	19	0.01 PCT	BORATE FUSION	INDUC. COUP. PLASMA
5	TiO2 Titanium Dioxide	19	0.01 PCT	BORATE FUSION	INDUC. COUP. PLASMA
6	Al2O3 Alumina	19	0.01 PCT	BORATE FUSION	INDUC. COUP. PLASMA
7	Fe2O3 Total Iron	19	0.01 PCT	BORATE FUSION	INDUC. COUP. PLASMA
8	MnO Manganese Oxide	19	0.01 PCT	BORATE FUSION	INDUC. COUP. PLASMA
9	MgO Magnesium Oxide	19	0.01 PCT	BORATE FUSION	INDUC. COUP. PLASMA
10	CaO Calcium (CaO)	19	0.01 PCT	BORATE FUSION	INDUC. COUP. PLASMA
11	Na2O Sodium Oxide	19	0.01 PCT	BORATE FUSION	INDUC. COUP. PLASMA
12	K2O Potassium	19	0.05 PCT	BORATE FUSION	INDUC. COUP. PLASMA
13	P2O5 Phosphorous (P2O5)	19	0.03 PCT	BORATE FUSION	INDUC. COUP. PLASMA
14	LOI Loss on Ignition	19	0.05 PCT		GRAVIMETRIC
15	Total Whole Rock Total	19	0.01 PCT		
16	Zr Zirconium	19	1 PPM		XRAY FLUORESCENCE

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
ROCK	19	-200	19	CRUSH, PULVERIZE	19

REPORT COPIES TO: MR. KEN THORSEN
 *P. JIM JANZEN

INVOICE TO: MR. KEN THORSEN



REPORT: 092-41799.D (COMPLETE)

DATE PRINTED: 13-AUG-92
 PROJECT: 16070

PAGE 1A

SAMPLE NUMBER	ELEMENT UNITS	BaO PCT	Cr2O3 PCT	Al PPB	SiO2 PCT	TiO2 PCT	Al2O3 PCT	Fe2O3 PCT	MnO PCT	MgO PCT	CaO PCT	Na2O PCT
3589		0.017	0.01	<5	48.56	1.86	12.59	15.99	0.19	4.36	6.45	2.81
3590		0.007	0.02	151	40.58	1.86	13.07	15.32	0.17	4.09	7.04	4.65
3591		0.089	<0.01	<5	54.37	0.41	17.42	3.74	0.05	3.09	5.30	3.65
3592		0.059	0.04	29	59.58	0.48	13.19	5.25	0.07	3.71	3.83	2.28
3593		0.084	0.02	8	55.34	0.62	15.97	7.03	0.07	3.03	1.41	2.92
3594		0.002	0.02	<5	47.79	1.89	12.01	15.28	0.22	4.57	9.27	2.11
3595		0.001	0.01	11	41.32	1.76	13.36	17.31	0.23	5.33	8.04	2.22
3596		0.011	0.02	643	39.92	1.72	12.11	15.50	0.21	4.54	7.65	3.85
3597		0.063	0.01	17	52.85	0.49	16.50	4.53	0.06	3.45	5.96	4.25
3598		0.004	0.02	<5	44.49	1.92	14.43	16.72	0.22	5.28	7.36	2.91
3599		0.002	0.01	<5	48.09	1.85	11.99	14.89	0.21	4.19	8.24	2.79
3600		0.068	0.01	<5	43.94	1.83	12.76	15.72	0.20	4.87	7.01	1.70
3601		0.002	0.01	<5	45.15	1.91	12.69	15.94	0.21	4.76	7.10	3.49
3602		0.056	<0.01	9	60.55	0.40	17.80	2.52	0.03	1.35	3.30	5.88
3603		0.005	0.03	<5	50.88	0.79	12.67	11.89	0.14	8.71	6.05	1.37
3604		0.009	0.03	10	48.12	1.38	13.32	11.93	0.17	5.74	7.12	2.68
3605		0.007	0.02	<5	45.39	0.69	13.18	11.49	0.24	6.41	8.28	2.00
3606		0.033	0.03	<5	45.12	0.56	13.02	8.37	0.19	5.97	9.51	0.96
3607		0.066	0.02	<5	66.92	0.43	14.34	4.39	0.06	2.26	1.79	3.17

REPORT: 092-41799.0 (COMPLETE)

DATE PRINTED: 13-AUG-92
 PROJECT: 16070

PAGE 2A

STANDARD NAME	ELEMENT UNITS	BaO PCT	Cr2O3 PCT	Au PPS	SiO2 PCT	TiO2 PCT	Al2O3 PCT	Fe2O3 PCT	MnO PCT	MgO PCT	CaO PCT	Na2O PCT
BCC HIGH XRF STD		-	-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-	-
ANALYTICAL BLANK		<0.001	<0.01	<5	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Number of Analyses		1	1	1	1	1	1	1	1	1	1	1
Mean Value		0.0005	0.005	2.5	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-	-
GEO TRACE STD (1989)		-	-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-	-
BCC Rock Std 1989		0.180	0.02	-	60.35	0.92	12.23	7.07	0.10	3.58	5.90	1.35
Number of Analyses		1	1	-	1	1	1	1	1	1	1	1
Mean Value		0.2801	0.020	-	60.350	0.920	12.230	7.070	0.100	3.581	5.900	1.360
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	60.40	0.90	12.13	6.90	0.09	3.50	5.90	1.30

Bondar-Clegg & Company Ltd.
 5420 Canotek Road
 Ottawa, Ontario
 K1J 9G5
 Tel: (613) 749-2220
 Fax: (613) 749-7170



Geochemical
 Lab Report

REPORT: 092-41799.0 (COMPLETE)

DATE PRINTED: 13-AUG-92
 PROJECT: 16070

PAGE 28

STANDARD NAME	ELEMENT UNITS	K2O PCT	P2O5 PCT	LOI PCT	Total PCT	Zr PPM
BCC HIGH XRF STD		-	-	-	-	298
Number of Analyses		-	-	-	-	1
Mean Value		-	-	-	-	298.0
Standard Deviation		-	-	-	-	-
Accepted Value		-	-	-	-	280
ANALYTICAL BLANK		<0.05	<0.03	-	-	-
Number of Analyses		1	1	-	-	-
Mean Value		0.025	0.015	-	-	-
Standard Deviation		-	-	-	-	-
Accepted Value		-	-	-	-	-
BED TRACE STD (1983)		-	-	-	-	80
Number of Analyses		-	-	-	-	1
Mean Value		-	-	-	-	80.0
Standard Deviation		-	-	-	-	-
Accepted Value		-	-	-	-	110
BCC Rock Std 1989		2.07	0.19	-	94.07	-
Number of Analyses		1	1	-	1	-
Mean Value		2.072	0.191	-	94.073	-
Standard Deviation		-	-	-	-	-
Accepted Value		2.10	0.19	5.00	-	-

Bondar-Clegg & Company Ltd.
 5420 Canotek Road
 Ottawa, Ontario
 K1J 9G3
 Tel: (613) 749-2220
 Fax: (613) 749-7170



Geochemical
 Lab Report

REPORT: 092-41799.0 (COMPLETE)

DATE PRINTED: 13-AUG-92

PROJECT: 16070

PAGE 3A

SAMPLE NUMBER	ELEMENT UNITS	BaO PCT	Cr2O3 PCT	Au PPB	SiO2 PCT	TiO2 PCT	Al2O3 PCT	Fe2O3 PCT	MnO PCT	MgO PCT	CaO PCT	Na2O PCT
3589 Duplicate		0.017	0.01	<5	48.56	1.86	12.59	15.99	0.19	4.36	6.45	2.81
3594 Prep Duplicate		0.002	0.02	<5	47.79	1.89	12.01	15.28	0.22	4.57	9.27	2.11
		0.002	0.01	9	47.25	1.97	11.91	14.73	0.23	4.70	9.19	2.22
3598 Duplicate		0.004	0.02	<5	44.49	1.92	14.43	16.72	0.22	5.28	7.36	2.91
		0.002	0.02	<5	44.46	2.02	14.30	16.54	0.23	5.59	7.31	2.95

Bondar-Clegg & Company Ltd.
5420 Canotek Road
Ottawa, Ontario
K1J 9G3
Tel: (613) 749-2220
Fax: (613) 749-7170



Geochemical Lab Report

REPORT: 092-4-799.0 (COMPLETE)

DATE PRINTED: 13-AUG-92
PROJECT: 16070

PAGE 38

SAMPLE NUMBER	ELEMENT UNITS	K2O PCT	P2O5 PCT	LOI PCT	Total PCT	Zr PPM
3589 Duplicate		0.33	0.14	5.53 5.92	98.83	134
3594 Prep Duplicate		<0.05 <0.05	0.07 0.10	7.65	100.90	123 120
3598 Duplicate		0.08 <0.05	0.17 0.11	5.32 4.50	98.92	124 129

APPENDIX F
INSTRUMENT SPECIFICATIONS

EM16

VLF Electromagnetic Unit

Pioneered and patented exclusively by Geonics Limited, the VLF method of electromagnetic surveying has been proven to be a major advance in exploration geophysical instrumentation.

Since the beginning of 1965 a large number of mining companies have found the EM16 system to meet the need for a simple, light and effective exploration tool for mining geophysics.

The VLF method uses the military and time standard VLF transmissions as primary field. Only a receiver is then used to measure the secondary fields radiating from the local conductive targets. This allows a very light, one-man instrument to do the job. Because of the almost uniform primary field, good response from deeper targets is obtained. The EM16 system provides the in-phase and quadrature components of the secondary field with the polarities indicated. Interpretation technique has been highly developed particularly to differentiate deeper targets from the wealth of surface indications.

PRINCIPLE OF OPERATION

The VLF transmitters have vertical antennas. The magnetic signal component is then horizontal and concentric around the transmitter cation.



Specifications

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

SCINTREX MP-2 Portable Proton Precession Magnetometer

Function

The MP-2 is a portable one gamma proton precession magnetometer for field survey or base station use. The optimized design of sensor and circuitry using the latest COS/MOS components has resulted in a very light weight, low power consumption, rugged and reliable magnetometer.

Light emitting diodes coupled with an ingenious optically polarized reflector combine solid state reliability with easy reading even in bright sunlight.

Coupled with a module into which the MP-2 is easily inserted, the magnetometer can be used as a base station unit for analogue or digital recording. Full details of the MBS-2 Magnetic Base Station are available on another Scintrex specification sheet.

The noise-cancelling dual-coil sensor and electronics have been so designed as to effectively eliminate reading problems due to virtually all magnetic gradients which may be encountered in field survey conditions.

Features

1 gamma sensitivity and accuracy over range of 20,000 to 100,000 gammas.

Operates in very high gradients, to 5000 gammas per meter.

Ultra small size and weight.

Up to 25,000 readings from only 8 D cells.

Battery pack isolated from electronics for corrosion protection.

Battery pack easily extended for winter use.

Light emitting diode digital display, with complete test feature.

Unique no-glare polarized reflector permits easy reading in bright sunlight.

Indicator light warning of excessive gradient, ambient noise or electronic failure.

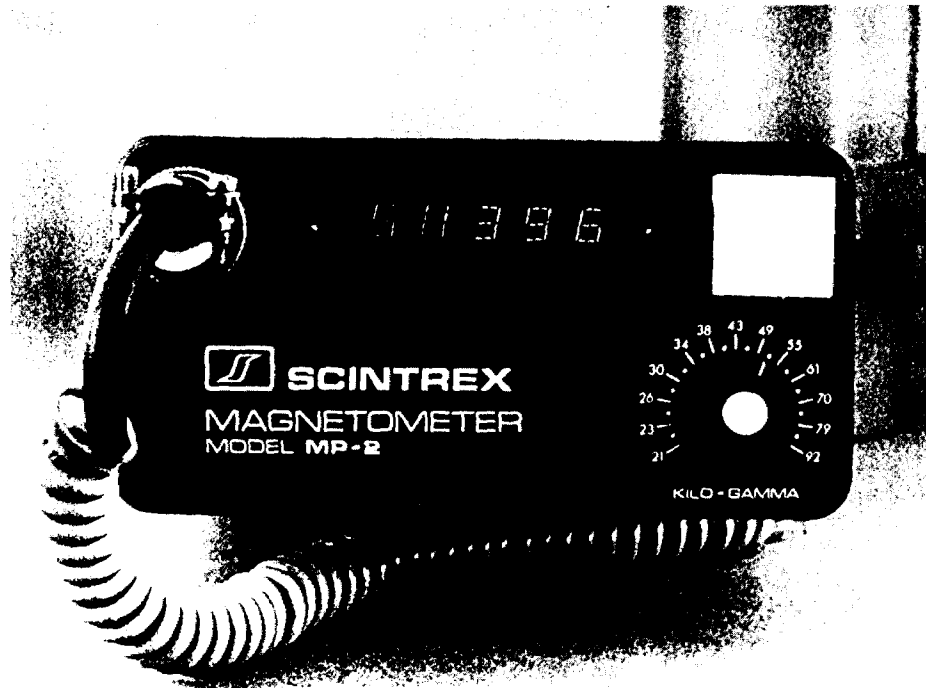
Digital readout of battery voltage.

Rugged all metal housing for rough field use at all temperatures.

Automatic recycling or external trigger features permit ready conversion to base station use.

Short reading time.

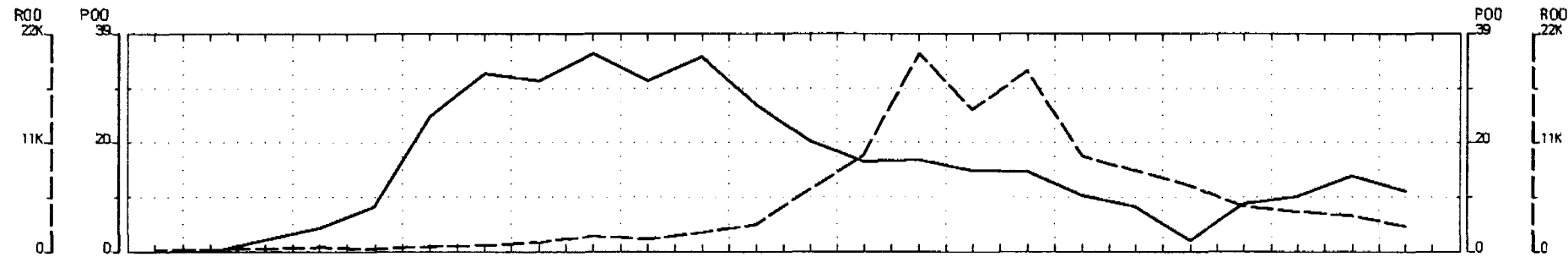
Broad operating temperature range.



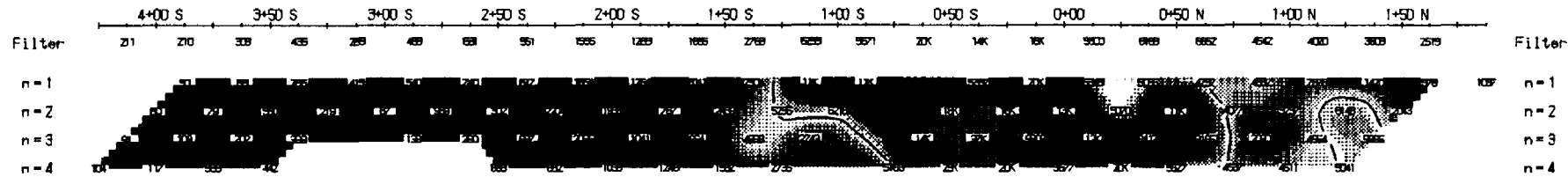
MP-2 Console

MP-2 in Operation with Staff Sensor



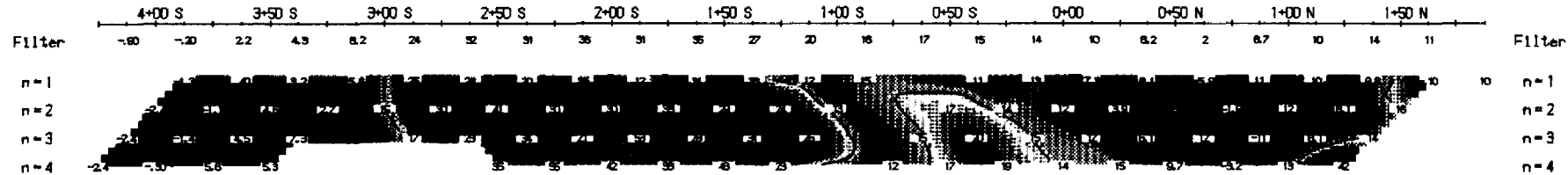


RESISTIVITY
OHM-METERS



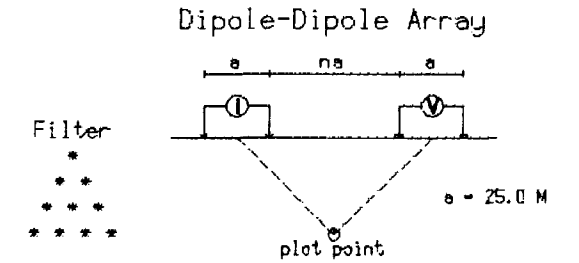
RESISTIVITY
OHM-METERS

PHASE
MRAD



PHASE
MRAD

Line 3400 E



Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10, ...

INTERPRETATION

- Strong increase in polarization accompanied by marked decrease in resistivity.
- Well defined increase in polarization without marked resistivity decrease.
- Poorly defined polarization increase with no resistivity signature.
- ▼ Low resistivity feature.

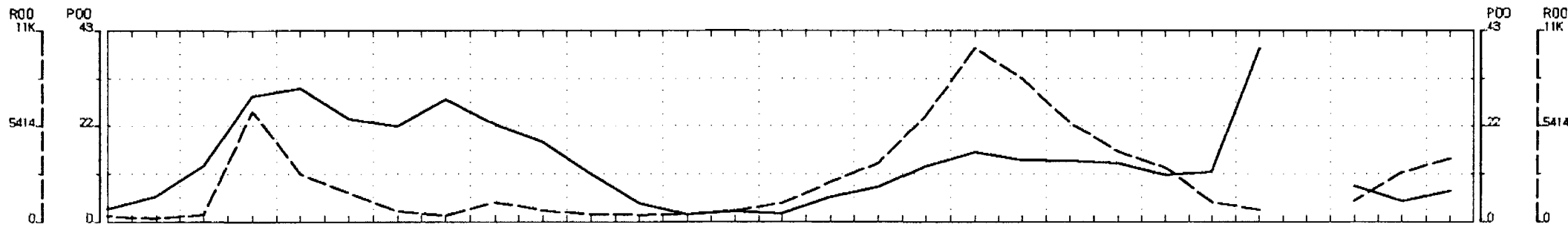
Scale 1:2500
25 0 25 50 75 100 125
(metres)

TECK EXPLORATION LIMITED

INDUCED POLARIZATION SURVEY
MINNITAKI PROPERTY
DRAYTON TWP., SIOUX LOOKOUT, ONTARIO.

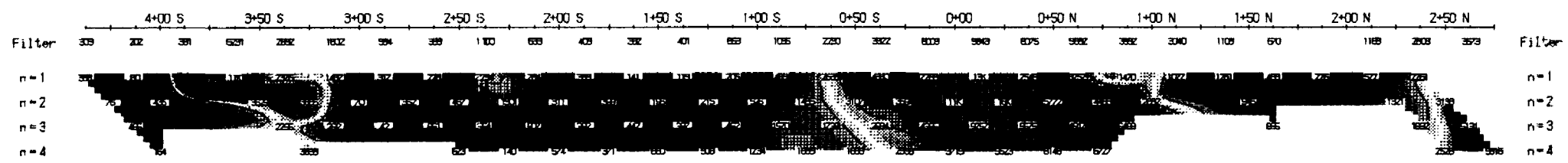
Date: 92/02/25
Interpretation: REMY BELANGER

REMY BELANGER (GEOPHYSICAL CONTRACTOR).



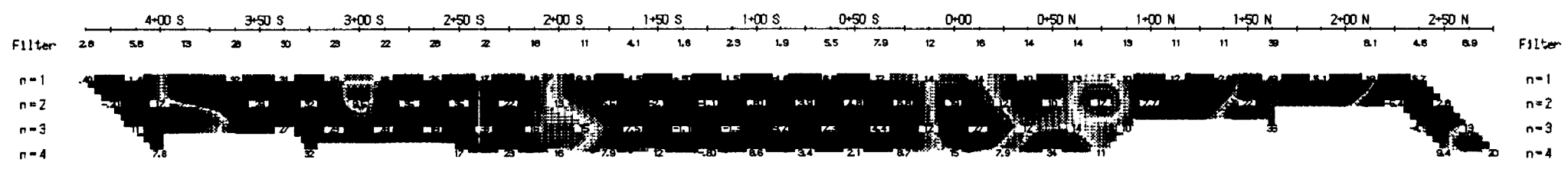
RESISTIVITY
OHM-METERS

RESISTIVITY
OHM-METERS

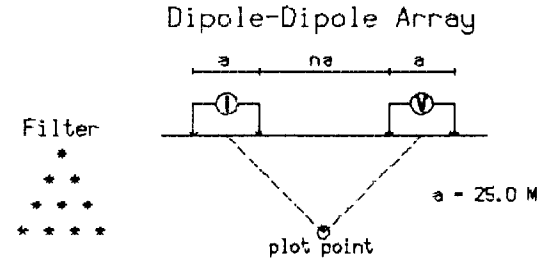


PHASE
MRAD

PHASE
MRAD



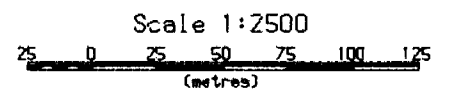
Line 3200 E



Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10, ...

INTERPRETATION

- Strong increase in polarization accompanied by marked decrease in resistivity.
- ▨ Well defined increase in polarization without marked resistivity decrease.
- Poorly defined polarization increase with no resistivity signature.
- ▼ Low resistivity feature.

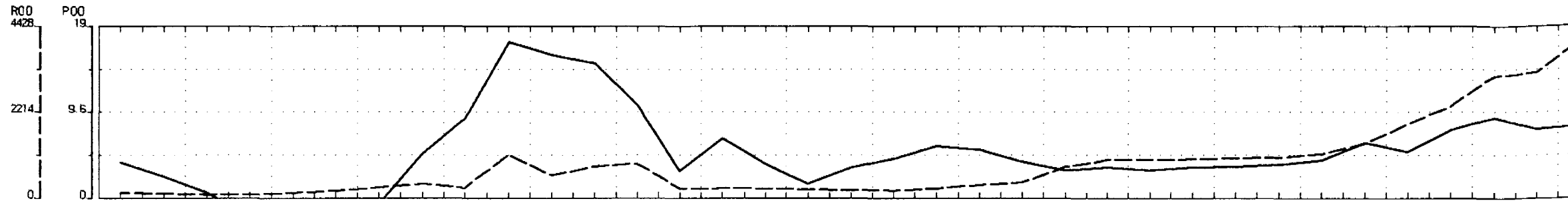


TECK EXPLORATION LIMITED

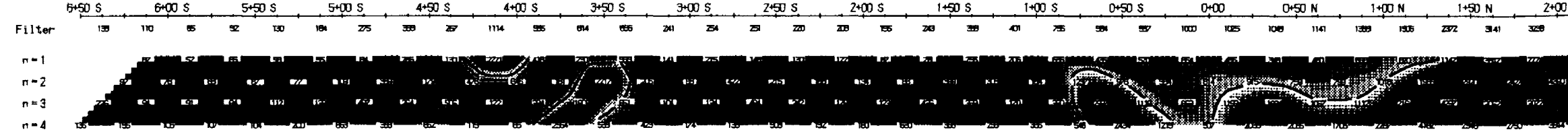
INDUCED POLARIZATION SURVEY
MINNITAKI PROPERTY
DRAYTON TWP., SIOUX LOOKOUT, ONTARIO.

Date: 92/02/25
Interpretation: REMY BELANGER

REMY BELANGER (GEOPHYSICAL CONTRACTOR).

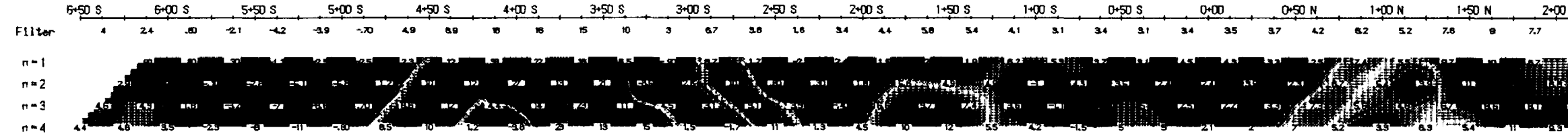


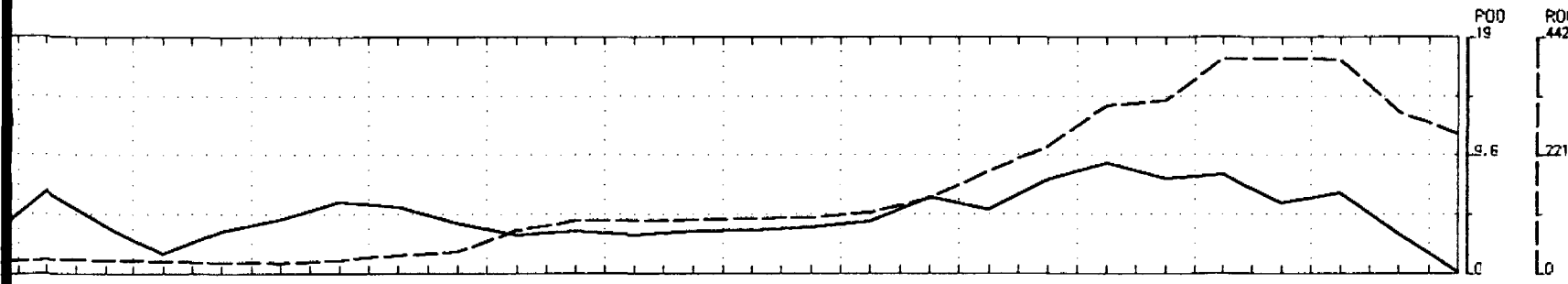
RESISTIVITY
OHM-METERS



?

PHASE
MRAD





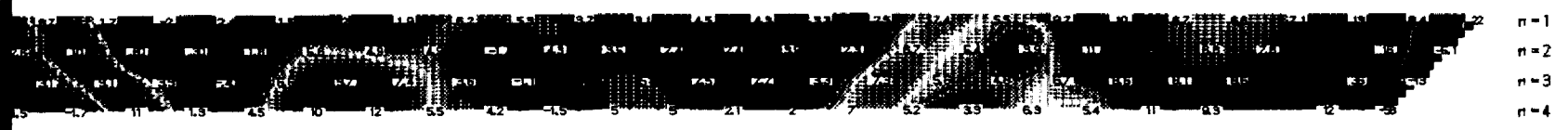
00 S 2+50 S 2+00 S 1+50 S 1+00 S 0+50 S 0+00 0+50 N 1+00 N 1+50 N 2+00 N 2+50 N 3+00 N



RESISTIVITY
OHM-METERS

Filter
n=1
n=2
n=3
n=4

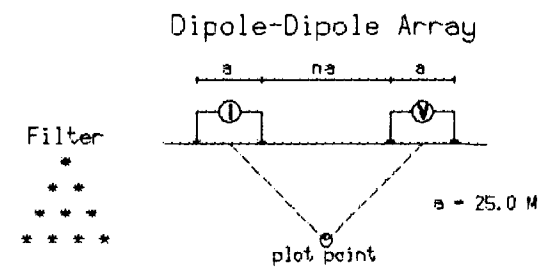
00 S 2+50 S 2+00 S 1+50 S 1+00 S 0+50 S 0+00 0+50 N 1+00 N 1+50 N 2+00 N 2+50 N 3+00 N



PHASE
MRAD

Filter
n=1
n=2
n=3
n=4

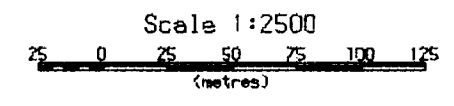
Line 3000 E



Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10, ...

INTERPRETATION

- Strong increase in polarization accompanied by marked decrease in resistivity.
- ▣ Well defined increase in polarization without marked resistivity decrease.
- Poorly defined polarization increase with no resistivity signature.
- ▼ Low resistivity feature.

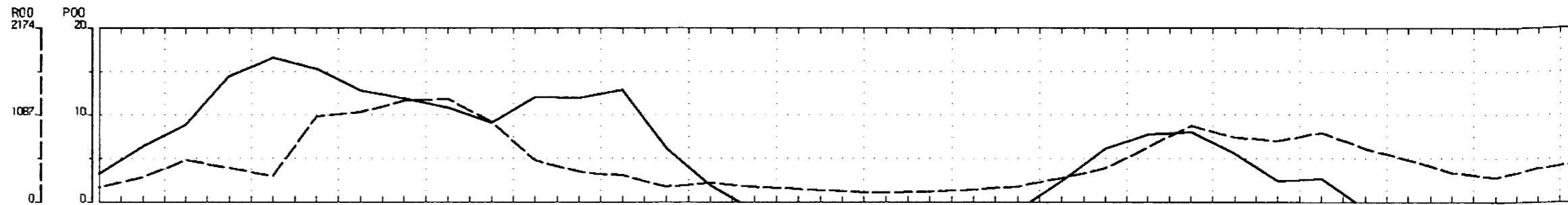


TECK EXPLORATION LIMITED

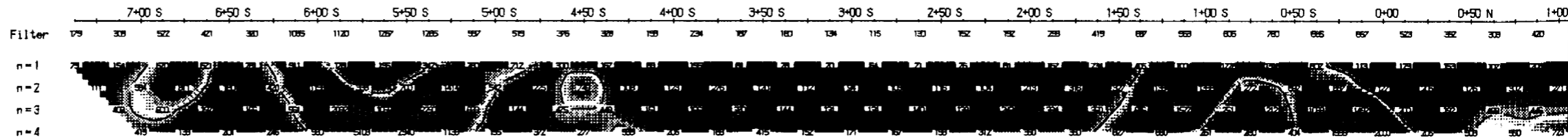
**INDUCED POLARIZATION SURVEY
MINNITAKI PROPERTY
DRAYTON TWP., SIOUX LOOKOUT, ONTARIO.**

Date: 92/02/24
Interpretation: REMY BELANGER

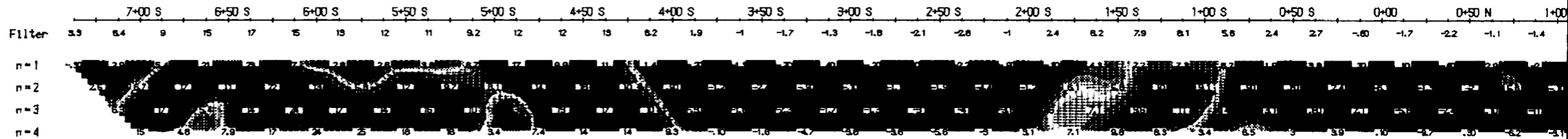
REMY BELANGER (GEOPHYSICAL CONTRACTOR).

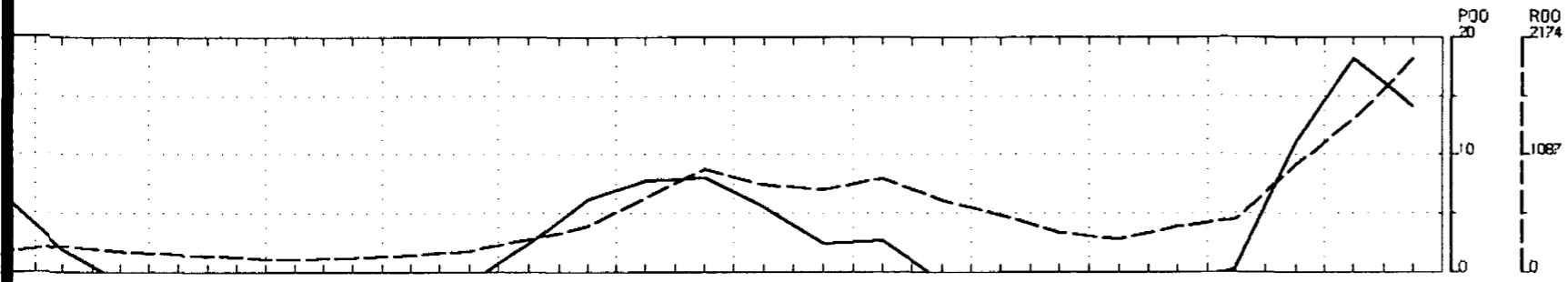


RESISTIVITY
OHM-METERS



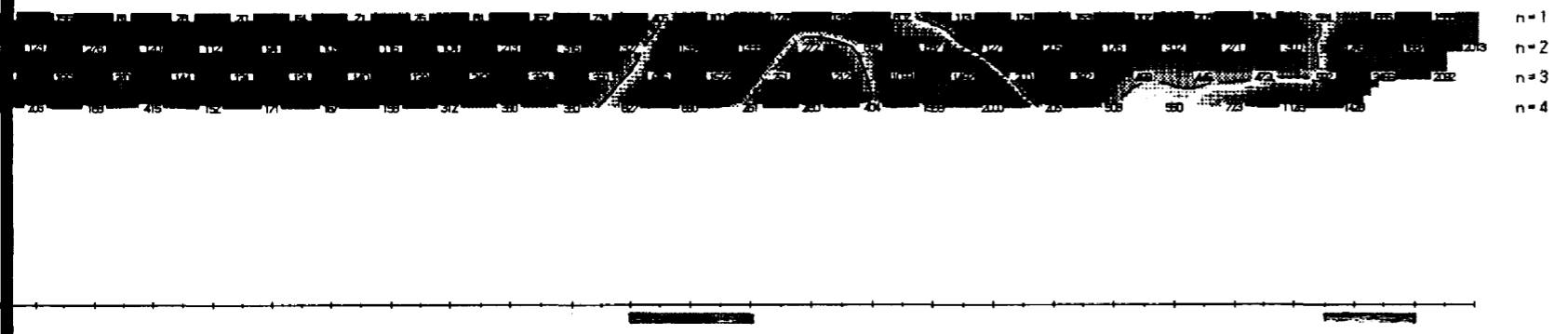
PHASE
MRAD





4:00 S 3:50 S 3:00 S 2:50 S 2:00 S 1:50 S 1:00 S 0:50 S 0:00 0:50 N 1:00 N 1:50 N 2:00 N
 Filter

RESISTIVITY
 OHM-METERS

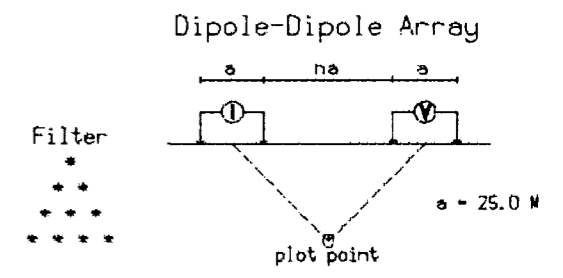


4:00 S 3:50 S 3:00 S 2:50 S 2:00 S 1:50 S 1:00 S 0:50 S 0:00 0:50 N 1:00 N 1:50 N 2:00 N
 Filter

PHASE
 MRAD



Line 2800 E



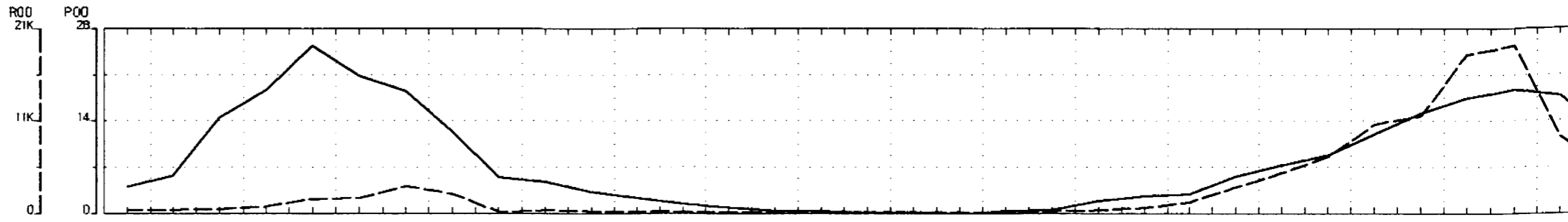
Logarithmic
 Contours 1, 1.5, 2, 3, 5, 7.5, 10, ...

INTERPRETATION

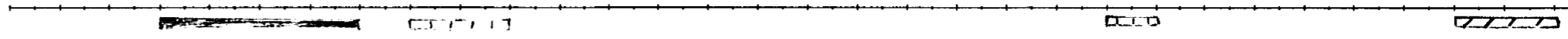
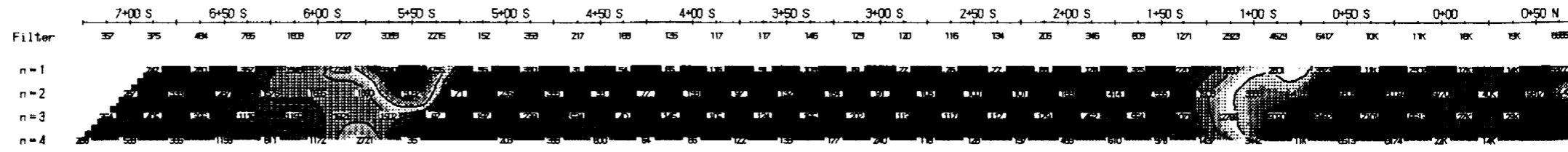
- Strong increase in polarization accompanied by marked decrease in resistivity.
- ▣ Well defined increase in polarization without marked resistivity decrease.
- Poorly defined polarization increase with no resistivity signature.
- ▼ Low resistivity feature.

Scale 1:2500
 25 0 25 50 75 100 125
 (metres)

TECK EXPLORATION LIMITED
 INDUCED POLARIZATION SURVEY
 MINNITAKI PROPERTY
 DRAYTON TWP., SIOUX LOOKOUT, ONTARIO.
 Date: 92/02/24
 Interpretation: REMY BELANGER
REMY BELANGER (GEOPHYSICAL CONTRACTOR).

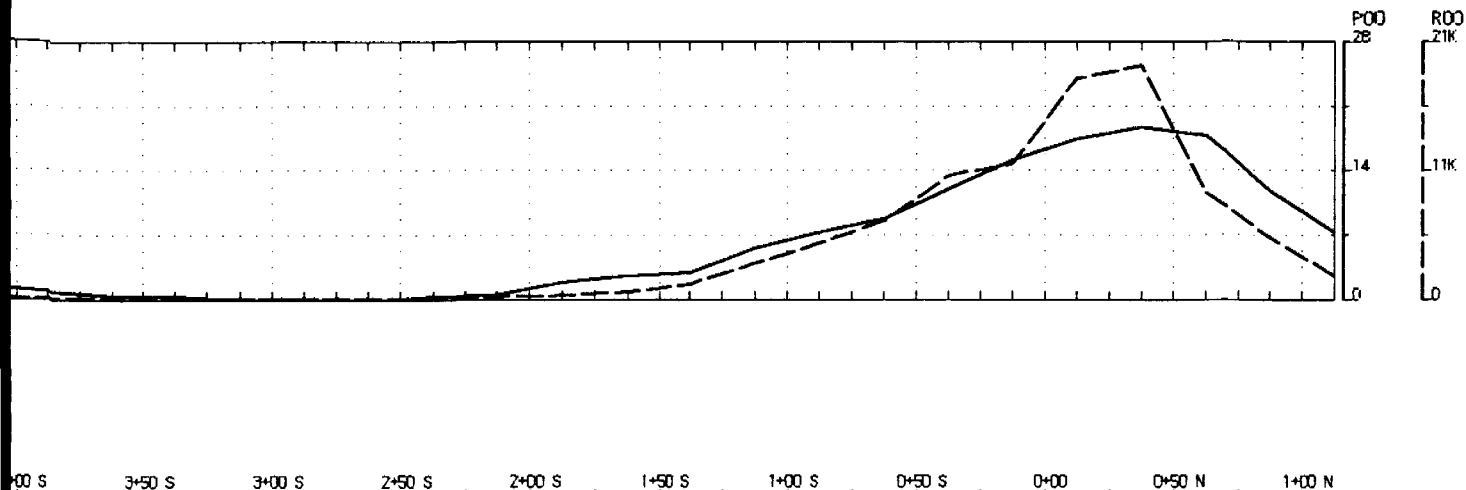


RESISTIVITY
OHM-METERS

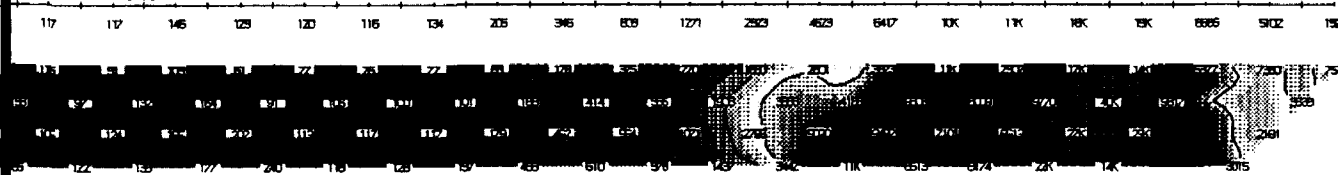


PHASE
MRAD





0+00 S 3+50 S 3+00 S 2+50 S 2+00 S 1+50 S 1+00 S 0+50 S 0+00 0+50 N 1+00 N



Filter
n=1
n=2
n=3
n=4

RESISTIVITY
OHM-METERS

0+00 S 3+50 S 3+00 S 2+50 S 2+00 S 1+50 S 1+00 S 0+50 S 0+00 0+50 N 1+00 N

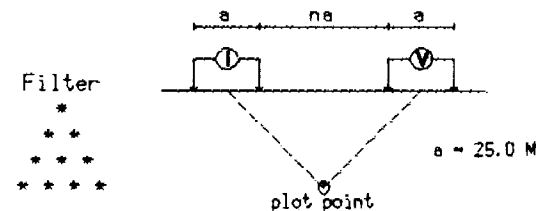


Filter
n=1
n=2
n=3
n=4

PHASE
MRAD

Line 2600 E

Dipole-Dipole Array



Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10, ...

INTERPRETATION

- Strong increase in polarization accompanied by marked decrease in resistivity.
- ▣ Well defined increase in polarization without marked resistivity decrease.
- Poorly defined polarization increase with no resistivity signature.
- ▼ Low resistivity feature.

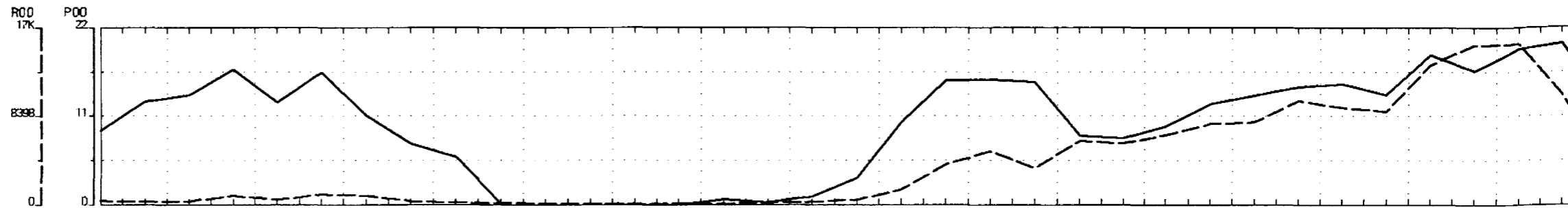
Scale 1:2500
25 0 25 50 75 100 125
(metres)

TECK EXPLORATION LIMITED

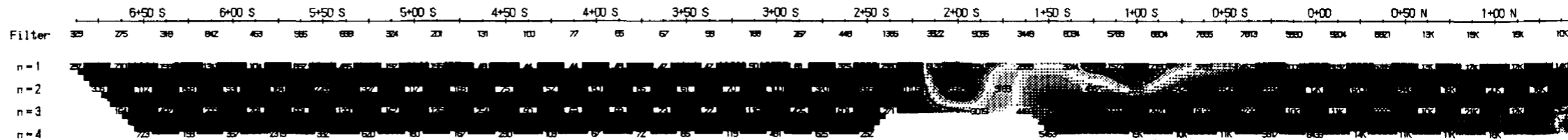
**INDUCED POLARIZATION SURVEY
MINNITAKI PROPERTY
DRAYTON TWP., SIOUX LOOKOUT, ONTARIO.**

Date: 92/02/23
Interpretation: REMY BELANGER

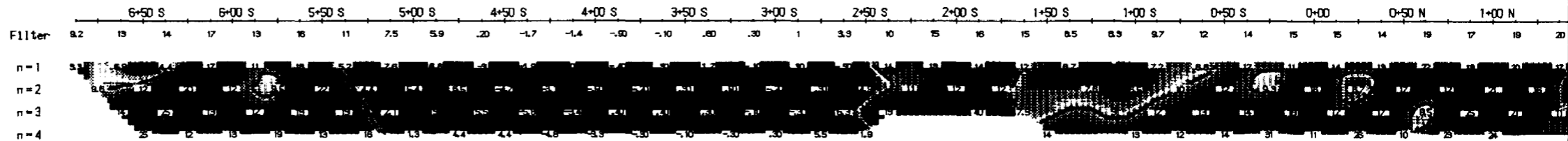
REMY BELANGER (GEOPHYSICAL CONTRACTOR).

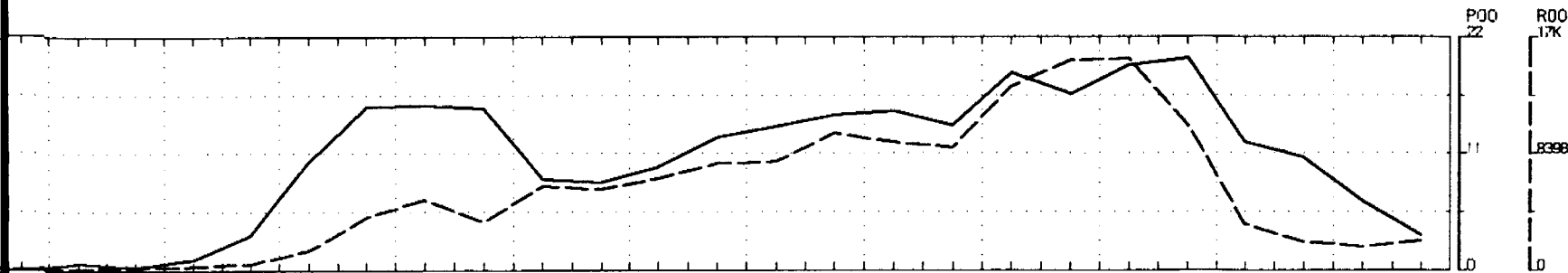


RESISTIVITY
OHM-METERS



PHASE
MRAD





3+50 S 3+00 S 2+50 S 2+00 S 1+50 S 1+00 S 0+50 S 0+00 0+50 N 1+00 N 1+50 N 2+00 N 2+50 N



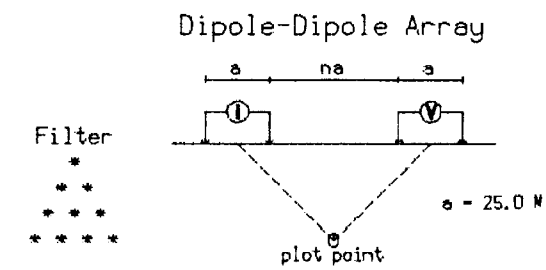
RESISTIVITY
OHM-METERS

3+50 S 3+00 S 2+50 S 2+00 S 1+50 S 1+00 S 0+50 S 0+00 0+50 N 1+00 N 1+50 N 2+00 N 2+50 N



PHASE
MRAD

Line 2400 E



Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10, ...

INTERPRETATION

- Strong increase in polarization accompanied by marked decrease in resistivity.
- Well defined increase in polarization without marked resistivity decrease.
- Poorly defined polarization increase with no resistivity signature.
- ▼ Low resistivity feature.

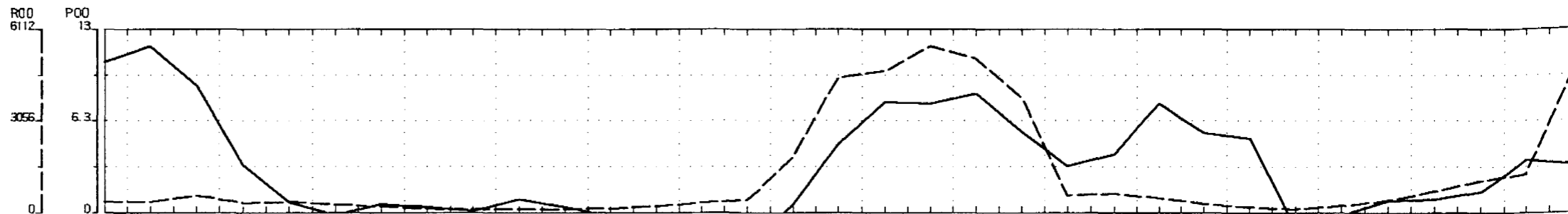
Scale 1:2500
25 0 25 50 75 100 125
(metres)

TECK EXPLORATION LIMITED

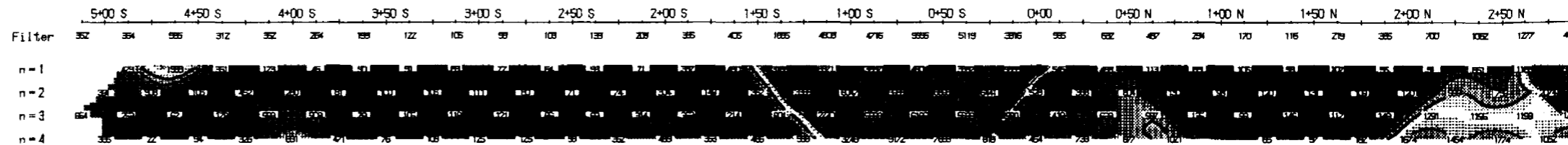
INDUCED POLARIZATION SURVEY
MINNITAKI PROPERTY
DRAYTON TWP., SIOUX LOOKOUT, ONTARIO.

Date: 92/02/23
Interpretation: REMY BELANGER

REMY BELANGER (GEOPHYSICAL CONTRACTOR).

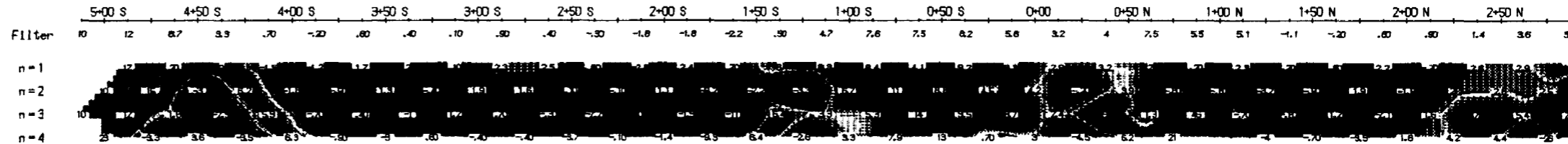


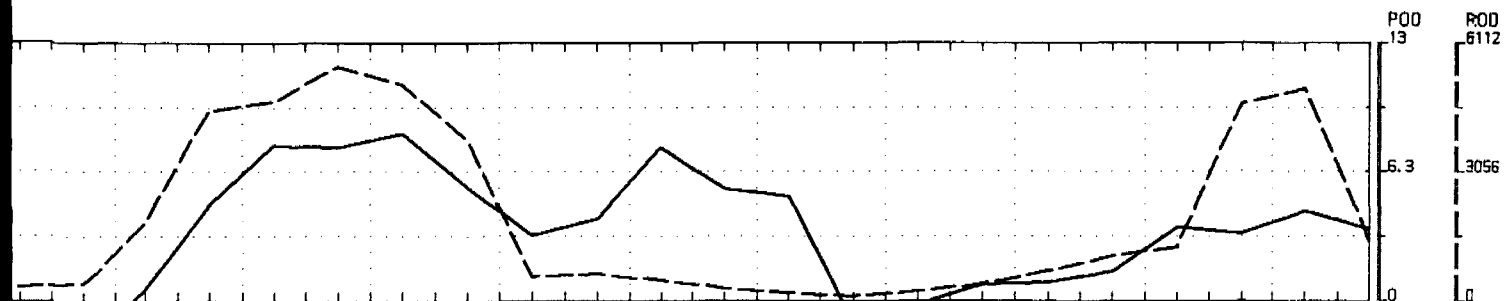
RESISTIVITY
OHM-METERS



?

PHASE
MRAD





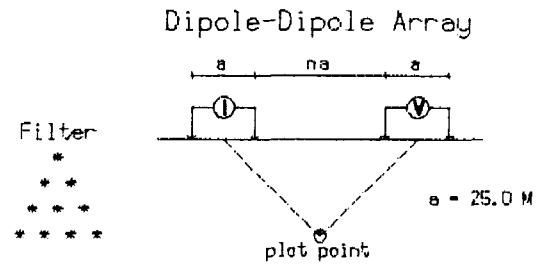
RESISTIVITY
OHM-METERS



PHASE
MRAD



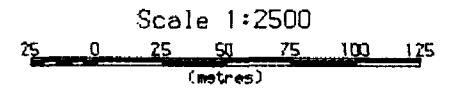
Line 2200 E



Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10, ...

INTERPRETATION

- Strong increase in polarization accompanied by marked decrease in resistivity.
- ▣ Well defined increase in polarization without marked resistivity decrease.
- Poorly defined polarization increase with no resistivity signature.
- ▼ Low resistivity feature.

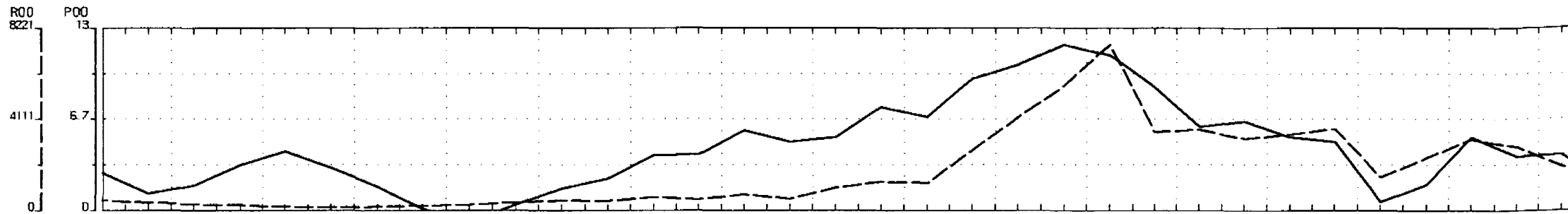


TECK EXPLORATION LIMITED

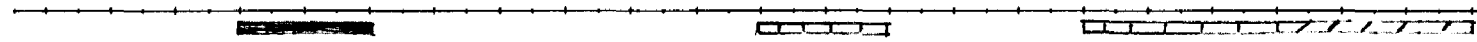
INDUCED POLARIZATION SURVEY
MINNITAKI PROPERTY
DRAYTON TWP., SIOUX LOOKOUT, ONTARIO.

Date: 92/02/23
Interpretation: REMY BELANGER

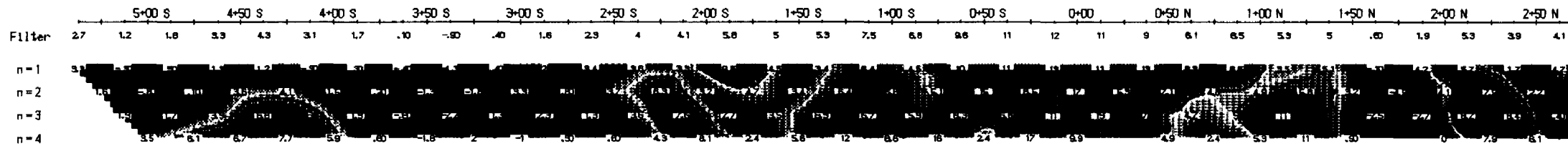
REMY BELANGER (GEOPHYSICAL CONTRACTOR).

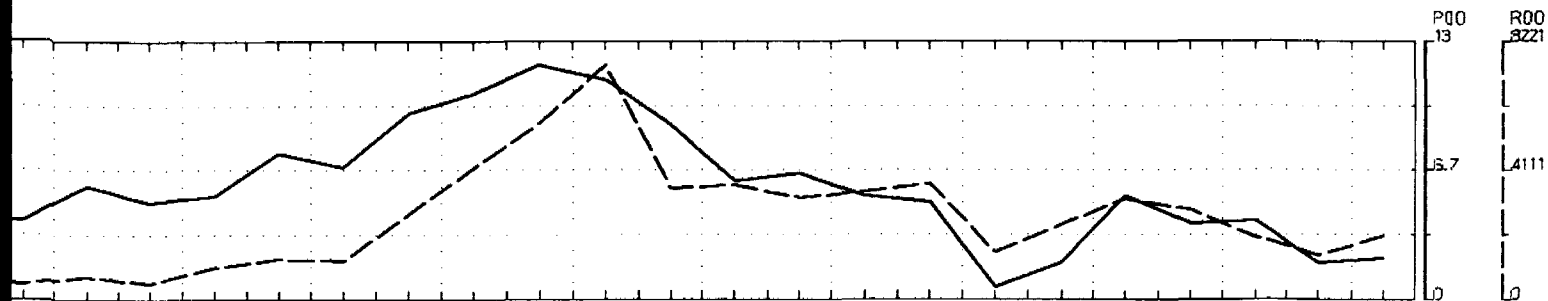


RESISTIVITY
OHM-METERS



PHASE
MRAD



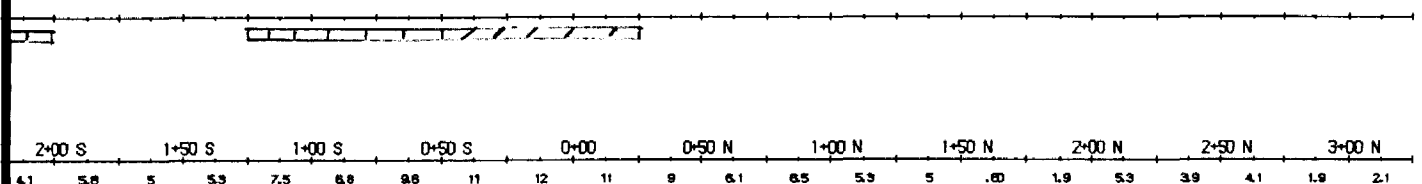


2:00 S 1:50 S 1:00 S 0:50 S 0:00 0:50 N 1:00 N 1:50 N 2:00 N 2:50 N 3:00 N



Filter
n=1
n=2
n=3
n=4

RESISTIVITY
OHM-METERS



2:00 S 1:50 S 1:00 S 0:50 S 0:00 0:50 N 1:00 N 1:50 N 2:00 N 2:50 N 3:00 N

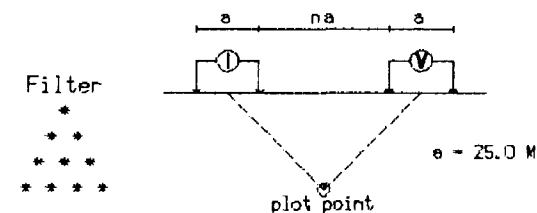


Filter
n=1
n=2
n=3
n=4

PHASE
MRAD

Line 2000 E

Dipole-Dipole Array

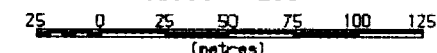


Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10, ...

INTERPRETATION

- Strong increase in polarization accompanied by marked decrease in resistivity.
- ▣ Well defined increase in polarization without marked resistivity decrease.
- Poorly defined polarization increase with no resistivity signature.
- ▼ Low resistivity feature.

Scale 1:2500

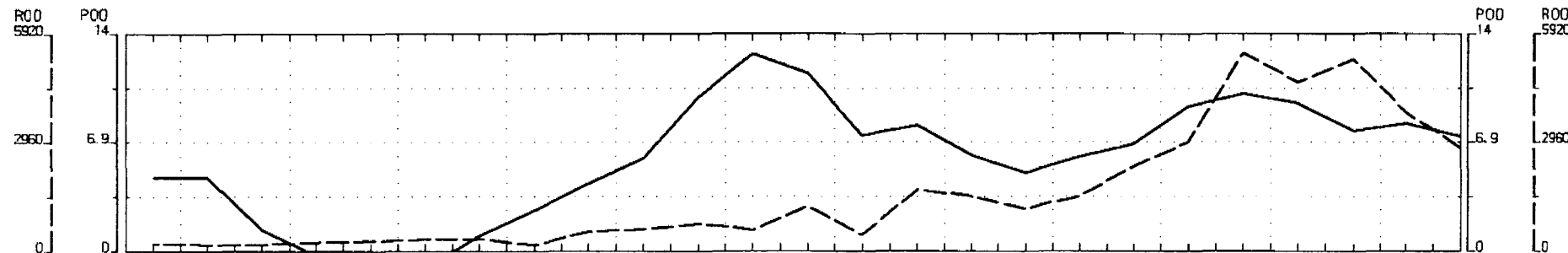


TECK EXPLORATION LIMITED

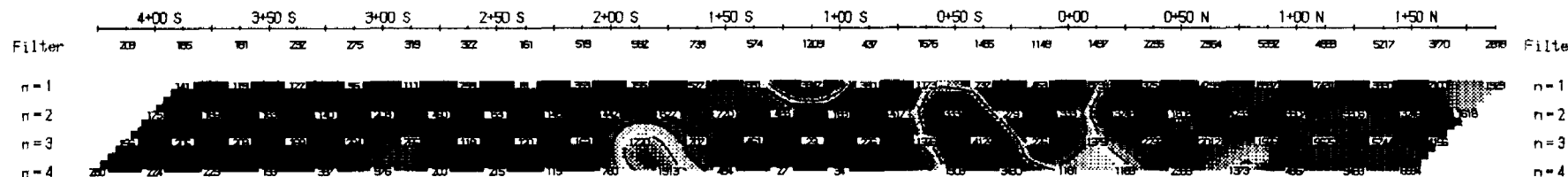
**INDUCED POLARIZATION SURVEY
MINNITAKI PROPERTY
DRAYTON TWP., SIOUX LOOKOUT, ONTARIO.**

Date: 92/02/22
Interpretation: REMY BELANGER

REMY BELANGER (GEOPHYSICAL CONTRACTOR).

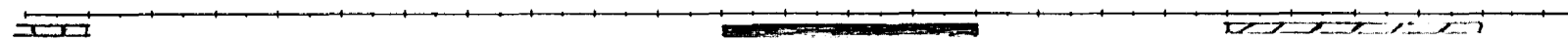


RESISTIVITY
OHM-METERS

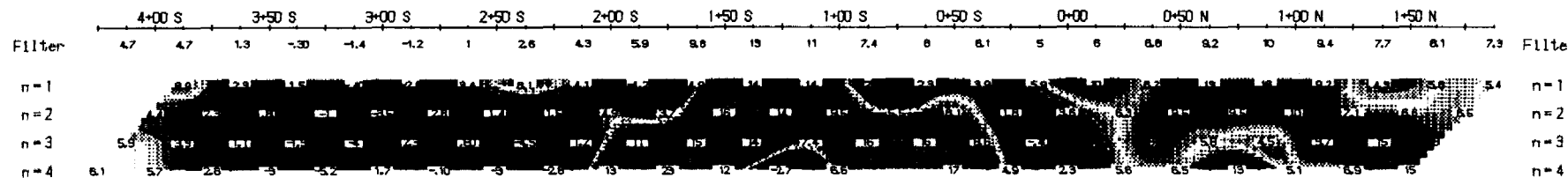


RESISTIVITY
OHM-METERS

?

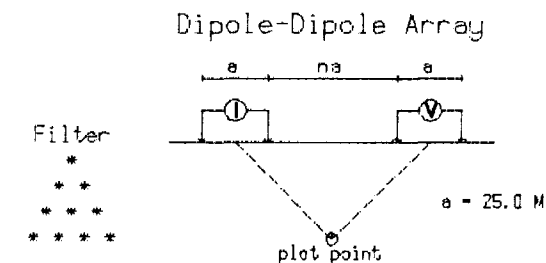


PHASE
MRAD



PHASE
MRAD

Line 1800 E



Logarithmic
Contours 1, 1.5, 2, 3, 5, 7.5, 10, ...

INTERPRETATION

- Strong increase in polarization accompanied by marked decrease in resistivity.
- ▣ Well defined increase in polarization without marked resistivity decrease.
- Poorly defined polarization increase with no resistivity signature.
- ▼ Low resistivity feature.

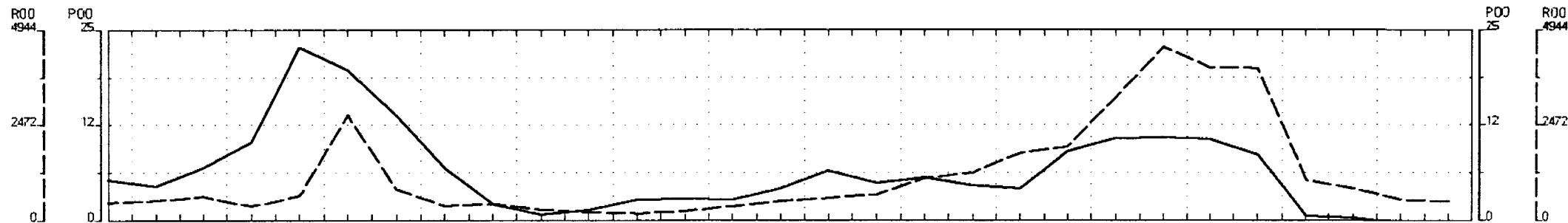
Scale 1:2500
25 0 25 50 75 100 125
(metres)

TECK EXPLORATION LIMITED

INDUCED POLARIZATION SURVEY
MINNITAKI PROPERTY
DRAYTON TWP., SIOUX LOOKOUT, ONTARIO.

Date: 92/02/22
Interpretation: REMY BELANGER

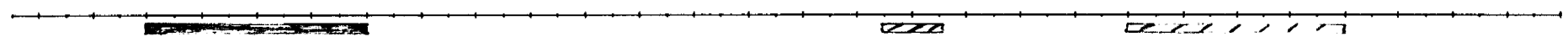
REMY BELANGER (GEOPHYSICAL CONTRACTOR).



RESISTIVITY
OHM-METERS

RESISTIVITY
OHM-METERS

Filter 4+00 S 3+50 S 3+00 S 2+50 S 2+00 S 1+50 S 1+00 S 0+50 S 0+00 0+50 N 1+00 N 1+50 N 2+00 N 2+50 N 3+00 N Filter



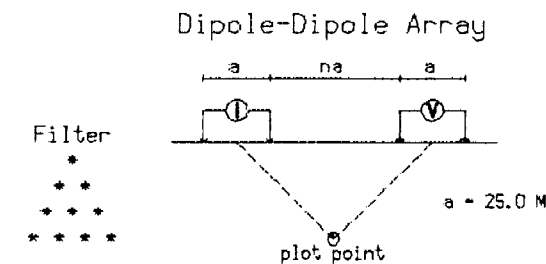
PHASE
MRAD

PHASE
MRAD

Filter 4+00 S 3+50 S 3+00 S 2+50 S 2+00 S 1+50 S 1+00 S 0+50 S 0+00 0+50 N 1+00 N 1+50 N 2+00 N 2+50 N 3+00 N Filter



Line 1600 E



Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10, ...

INTERPRETATION

- Strong increase in polarization accompanied by marked decrease in resistivity.
- ▣ Well defined increase in polarization without marked resistivity decrease.
- Poorly defined polarization increase with no resistivity signature.
- ▼ Low resistivity feature.

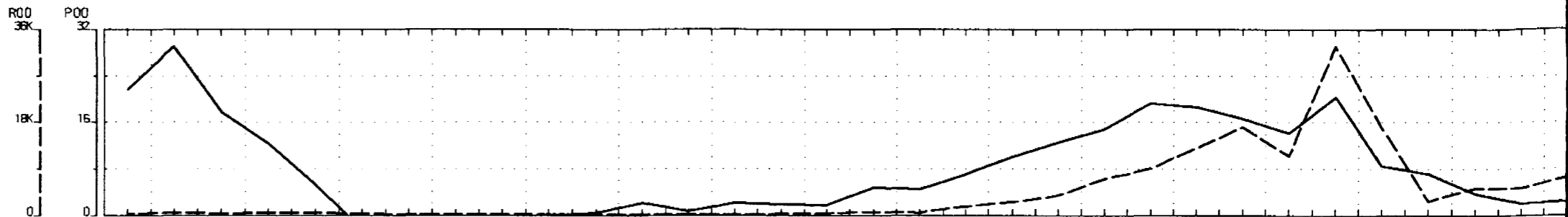
Scale 1:2500
25 0 25 50 75 100 125
(metres)

TECK EXPLORATION LIMITED

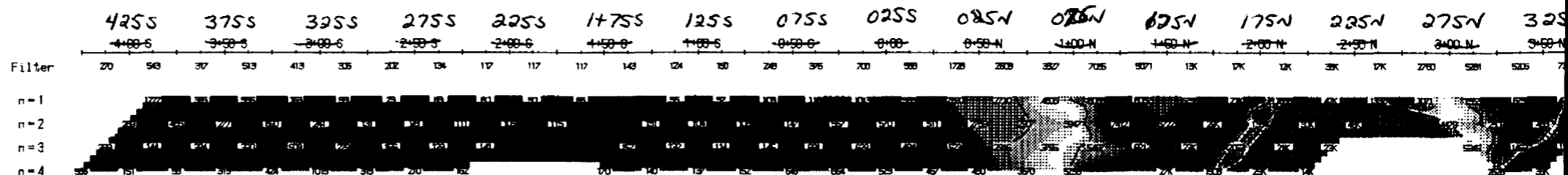
INDUCED POLARIZATION SURVEY
MINNITAKI PROPERTY
DRAYTON TWP., SIOUX LOOKOUT, ONTARIO.

Date: 92/02/21
Interpretation: REMY BELANGER

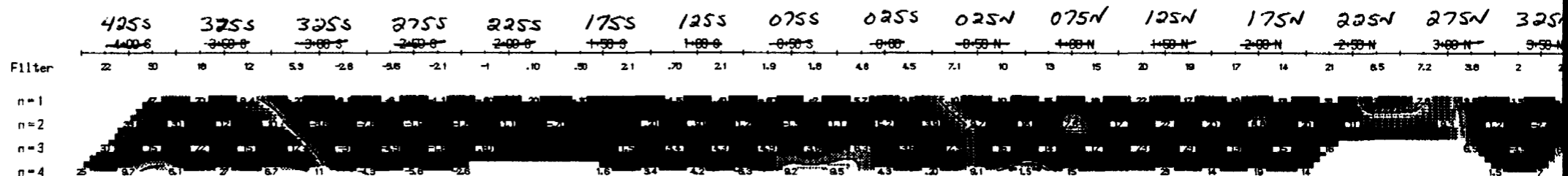
REMY BELANGER (GEOPHYSICAL CONTRACTOR).

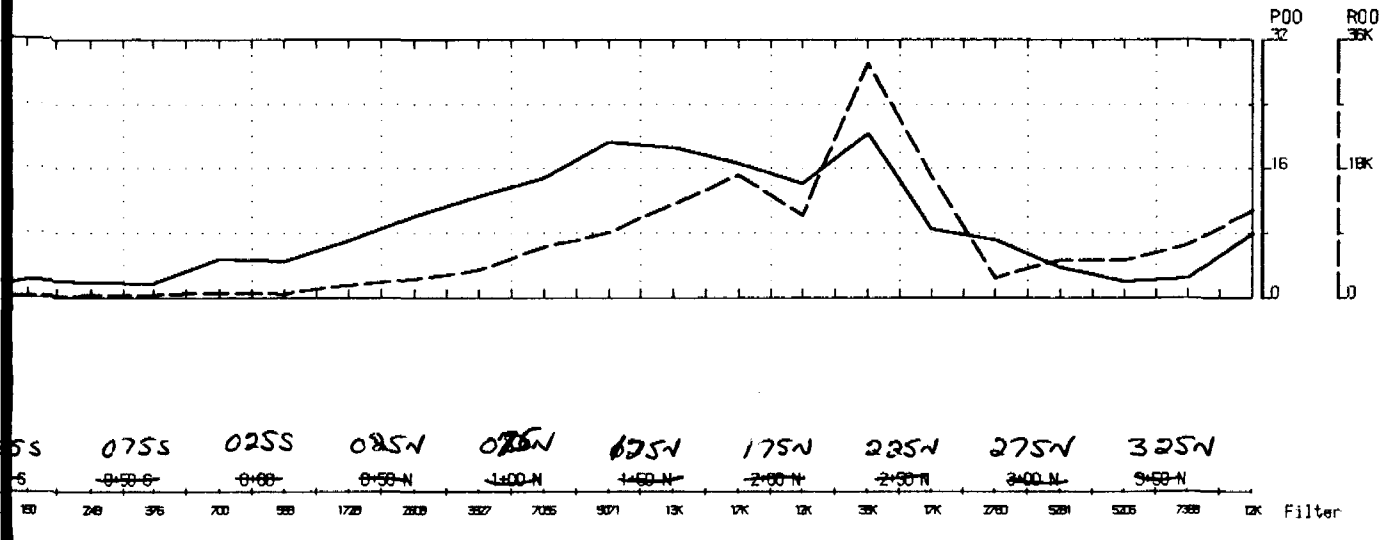


RESISTIVITY
OHM-METERS

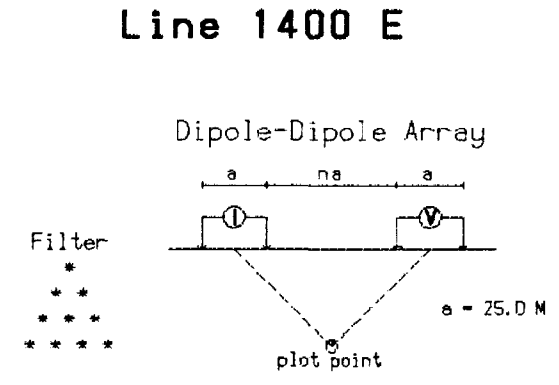


PHASE
MRAD





RESISTIVITY
OHM-METERS



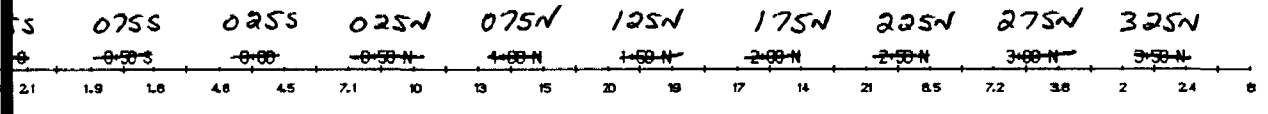
Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10, ...



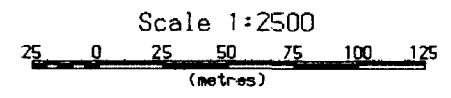
n=1
n=2
n=3
n=4

INTERPRETATION

- Strong increase in polarization accompanied by marked decrease in resistivity.
- ▣ Well defined increase in polarization without marked resistivity decrease.
- Poorly defined polarization increase with no resistivity signature.
- ▼ Low resistivity feature.



PHASE
MRAD

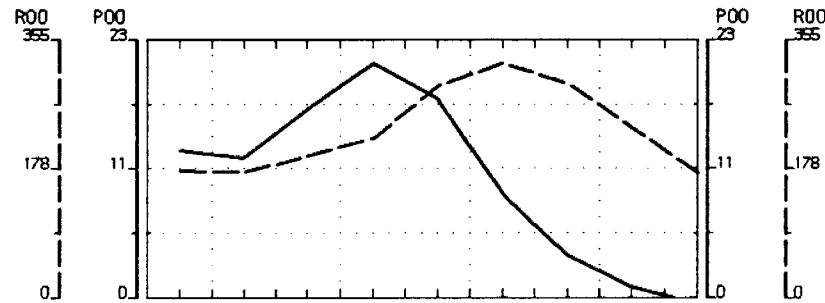


TECK EXPLORATION LIMITED

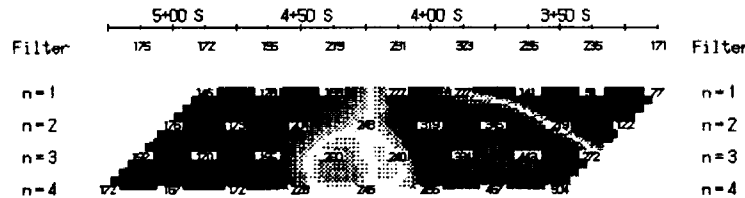
INDUCED POLARIZATION SURVEY
MINNITAKI PROPERTY
DRAYTON TWP., SIOUX LOOKOUT, ONTARIO.

Date: 92/02/21
Interpretation: REMY BELANGER

REMY BELANGER (GEOPHYSICAL CONTRACTOR).

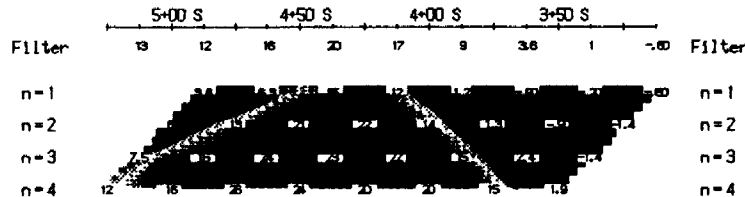


RESISTIVITY
OHM-METERS



RESISTIVITY
OHM-METERS

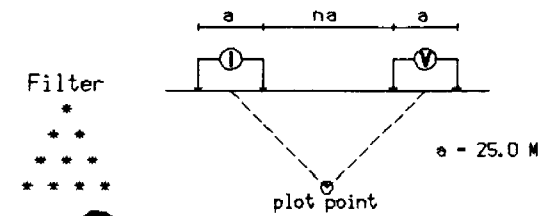
PHASE
MRAD



PHASE
MRAD

Line 1300 E

Dipole-Dipole Array



2.14823

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10....

INTERPRETATION

- Strong increase in polarization accompanied by marked decrease in resistivity.
- ▣ Well defined increase in polarization without marked resistivity decrease.
- Poorly defined polarization increase with no resistivity signature.
- ▼ Low resistivity feature.

Scale 1:2500



TECK EXPLORATION LIMITED

**INDUCED POLARIZATION SURVEY
MINNITAKI PROPERTY
DRAYTON TWP., SIOUX LOOKOUT, ONTARIO.**

Date: 92/02/25
Interpretation: REMY BELANGER

REMY BELANGER (GEOPHYSICAL CONTRACTOR).

Personal information collected on this form is obtained under the authority of the Ministry of Northern Development, Mining Lands, Ministry of Northern Development, Sudbury, Ontario, P3E 6A5, telephone (705) 670-7264.



900

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

Recorded Holder(s) Teck Exploration Ltd.		Client No. 200415
Address R.R. #5, 19 Legault Street, North Bay, Ontario P1B 8Z4		Telephone No. 705-474-5500
Mining Division Patricia	Township/Area Drayton	M or G Plan No. G-3379
Dates Work Performed From: January 1992		To: February 1992

Work Performed (Check One Work Group Only)

Work Group	Type
Geotechnical Survey	Magnetometer-Electromagnetometer and Induced Polarization Survey
Physical Work, including Drilling	RECEIVED DEC 01 1992 MINING LANDS BRANCH
Rehabilitation	
Other Authorized Work	
Assays	
Assignment from Reserve	

Total Assessment Work Claimed on the Attached Statement of Costs \$ 19,018.00

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

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

Name	Address
Vytl Exploration Services	1529 Rankin Street, Thunder Bay, Ontario P7E 5Z2
Gerard Lambert Geosciences	2158 des Coteaux, CP 2355, Rouyn-Noranda, Quebec J9X 5A9
Remi Belanger Engineering	Box 40, 329 W blvd., Evain, Quebec J0Z 1Y0

(attach a schedule if necessary)

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

I certify that at the time the work was performed, the claims covered in this work report were recorded in the current holder's name or held under a beneficial interest by the current recorded holder.	Date Nov 2, 92	Recorded Holder or Agent (Signature)
--	--------------------------	--

Certification of Work Report

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

Name and Address of Person Certifying J. Janzen, R.R. #5, 19 Legault Street, North Bay, Ontario P1B 8Z4		
Telephone No. 705-474-5500	Date Nov 2, 92	Certified By (Signature)

For Office Use Only

Total Value Cr. Recorded \$ 19,018	Date Recorded 16 NOV 92	Mining Recorder 	Received Stamp
	Deemed Approval Date 16 FEB 93	Date Approved 16 FEB 93	
Date Notice for Amendments Sent			

Geophysics - Minnitaki

Work Report Number for Applying Reserve	Claim Number (see Note 2)	Number of Claim Units
	PA 1119709 ✓✓	1
	PA 1119710 ✓✓	1
	PA 1119711 ✓✓	1
	PA 1119712 ✓✓	1
	PA 1119713 ✓	1
	PA 1119714 ✓✓	1
	PA 1119715 ✓✓	1
	PA 1119716 ✓	1
	PA 1119717 ✓	1
	PA 1119718 ✓	1
	PA 1119719 ✓	1
	PA 1119720 ✓	1
	PA 1119721 ✓	1
	PA 1119722 ✓	1
	PA 1119723 ✓	1
	PA 1133758	2
	PA 1133759	6

Total Number of Claims

Value of Assessment Work Done on this Claim	Value Applied to this Claim
761.00	0.00
1,029.00	0.00
954.00	0.00
876.00	0.00
377.00	0.00
377.00	0.00
226.00	0.00
302.00	0.00
226.00	0.00
226.00	0.00
226.00	0.00
302.00	0.00
226.00	0.00
226.00	0.00
302.00	0.00

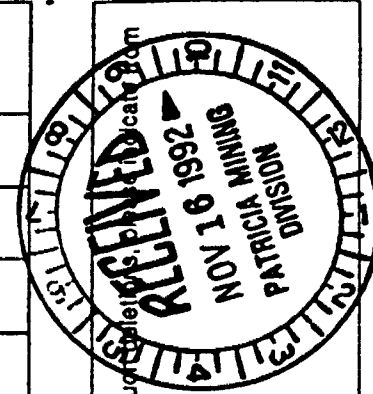
Total Value Work Done

Total Value Work Applied

Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date
0.00	761.00
0.00	1,029.00
0.00	954.00
0.00	876.00
0.00	377.00
0.00	377.00
0.00	226.00
0.00	302.00
0.00	226.00
0.00	226.00
0.00	226.00
0.00	302.00
0.00	226.00
0.00	226.00
0.00	302.00

Total Assigned From

Total Reserve



Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such cutbacks, please specify the priority of the claims you wish to prioritize the deletion of credits. Please mark (✓) one of the following:

- 1. Credits are to be cut back starting with the claim listed last, working backwards.
- 2. Credits are to be cut back equally over all claims contained in this report of work.
- 3. Credits are to be cut back as prioritized on the attached appendix.

In the event that you have not specified your choice of priority, option one will be implemented.

Note 1: Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respect to the mining claims.

Note 2: If work has been performed on patented or leased land, please complete the following:

I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed.

Signature

Date: Oct 30, 92

W9230-00049



Ministry of
Northern Development
and Mines
Ministère du
Développement du Nord
et des mines

Statement of Costs
for Assessment Credit

État des coûts aux fins
du crédit d'évaluation

Mining Act/Loi sur les mines

Transaction No./N° de transaction
W9230 - 00049

Geophysics - Minnitaki

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

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

1. Direct Costs/Coûts directs

Type	Description	Amount Montant	Totals Total global
Wages Salaires	Labour Main-d'oeuvre		
	Field Supervision Supervision sur le terrain		
Contractor's and Consultant's Fees Droits de l'entrepreneur et de l'expert- conseil	Type Mag-VLF	7,543.00	
	I.P. Survey	11,475.00	
			19,018.00
Supplies Used Fournitures utilisées	Type		
Equipment Rental Location de matériel	Type		
Total Direct Costs Total des coûts directs			19,018.00

2. Indirect Costs/Coûts indirects

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

Type	Description	Amount Montant	Totals Total global
Transportation Transport	Type		
Food and Lodging Nourriture et hébergement			
Mobilization and Demobilization Mobilisation et démobilisation			
Total Indirect Costs Total partie des coûts indirects			
Amount Allowable (not greater than 20% of Direct Costs) Montant admissible (n'excédant pas 20 % des coûts directs)			
Total Value of Assessment Credit (Total of Direct and Allowable Indirect costs)			19,018.00
Valeur totale du crédit d'évaluation (Total des coûts directs et indirects admissibles)			19,018.00

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

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

Filing Discounts

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

Total Value of Assessment Credit	x 0.50	Assessment Claimed
----------------------------------	--------	--------------------

Remises pour dépôt

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

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

Certification Verifying Statement of Costs

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

that as Project Geologist I am authorized
(Recorded Holder, Agent, Position in Company)

to make this certification

Attestation de l'état des coûts

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

Et qu'à titre de _____ Je suis autorisé
(titulaire enregistré, représentant, poste occupé dans la compagnie)

à faire cette attestation.

Signature _____ Date
Oct 30, 92



Assays - Minnitaki
**Report of Work Conducted
 After Recording Claim**
 Mining Act

Transaction Number
W9230-00050

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used for correspondence. Questions about this collection should be directed to the Provincial Manager, Mining Lands, Ministry of Northern Development and Mines, Fourth Floor, 159 Cedar Street, Sudbury, Ontario, P3E 6A5, telephone (705) 670-7264.

2. 14820

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

Recorded Holder(s) Teck Exploration Ltd.		Client No. 200415
Address R.R. #5, 19 Legault Street, North Bay, Ontario P1B 8Z4		Telephone No. 705-474-5500
Mining Division Patricia	Township/Area Drayton	M or G Plan No. G-3379
Dates Work Performed From: June 1992		To: July 1992

Work Performed (Check One Work Group Only)

Work Group	Type
<input type="checkbox"/> Geotechnical Survey	
<input type="checkbox"/> Physical Work, Including Drilling	
<input type="checkbox"/> Rehabilitation	
<input type="checkbox"/> Other Authorized Work	
<input checked="" type="checkbox"/> Assays	Au + Ag, Major Oxides
<input type="checkbox"/> Assignment from Reserve	

RECEIVED
 DEC 01 1992
 MINING LANDS BRANCH

Total Assessment Work Claimed on the Attached Statement of Costs \$ 2,709.00

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

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

Name	Address
TSL Laboratories	2-302 48th Street, Saskatoon, Saskatchewan S7K 6A4
Bondar-Clegg	5420 Canotek Road, Ottawa, Ontario K1J 9G2

(attach a schedule if necessary)

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

I certify that at the time the work was performed, the claims covered in this work report were recorded in the current holder's name or held under a beneficial interest by the current recorded holder.	Date Nov 2, 92	Recorded Holder or Agent (Signature)
--	--------------------------	--

Certification of Work Report

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

Name and Address of Person Certifying
J. Janzen, R.R. #5, 19 Legault Street, North Bay, Ontario P1B 8Z4

Telephone No. 705-474-5500	Date Nov 2, 92	Certified By (Signature)
--------------------------------------	--------------------------	------------------------------

For Office Use Only

\$ 2,709	Total Value Cr. Recorded	Date Recorded 16 NOV 92	Mining Recorder 	Received Stamp
	Deemed Approval Date 16 FEB 93	Date Approved FEB. 16/93		
	Date Notice for Amendments Sent			



Statement of Costs
for Assessment Credit

État des coûts aux fins
du crédit d'évaluation

Mining Act/Loi sur les mines

Transaction No./N° de transaction

W9230 - 00050

Assays - Minnitaki

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

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

1. Direct Costs/Coûts directs

Type	Description	Amount Montant	Totals Total global
Wages Salaires	Labour Main-d'oeuvre		
	Field Supervision Supervision sur le terrain		
Contractor's and Consultant's Fees Droits de l'entrepreneur et de l'expert- conseil	Type Au + Ag Assays	2,303.00	
	Whole Rock	406.00	
			2,709.00
Supplies Used Fournitures utilisées	Type		
Equipment Rental Location de matériel	Type		
Total Direct Costs Total des coûts directs			2,709.00

2. Indirect Costs/Coûts indirects

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

Type	Description	Amount Montant	Totals Total global
Transportation Transport	Type		
RECEIVED			
Food and Lodging Nourriture et hébergement	DEC 01 1992		
Mobilization and Demobilization Mobilisation et démobilisation	MINING LANDS BRANCH		
Sub Total of Indirect Costs Total partiel des coûts indirects			
Amount Allowable (not greater than 20% of Direct Costs) Montant admissible (n'excédant pas 20 % des coûts directs)			
Total Value of Assessment Credit (Total of Direct and Allowable indirect costs)			2,709.00
Valeur totale du crédit d'évaluation (Total des coûts directs et indirects admissibles)			

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

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

Filing Discounts

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

Total Value of Assessment Credit	
	× 0.50

Remises pour dépôt

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

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

Certification Verifying Statement of Costs

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

at as Project Geologist I am authorized
(Recorded Holder, Agent, Position in Company)

make this certification

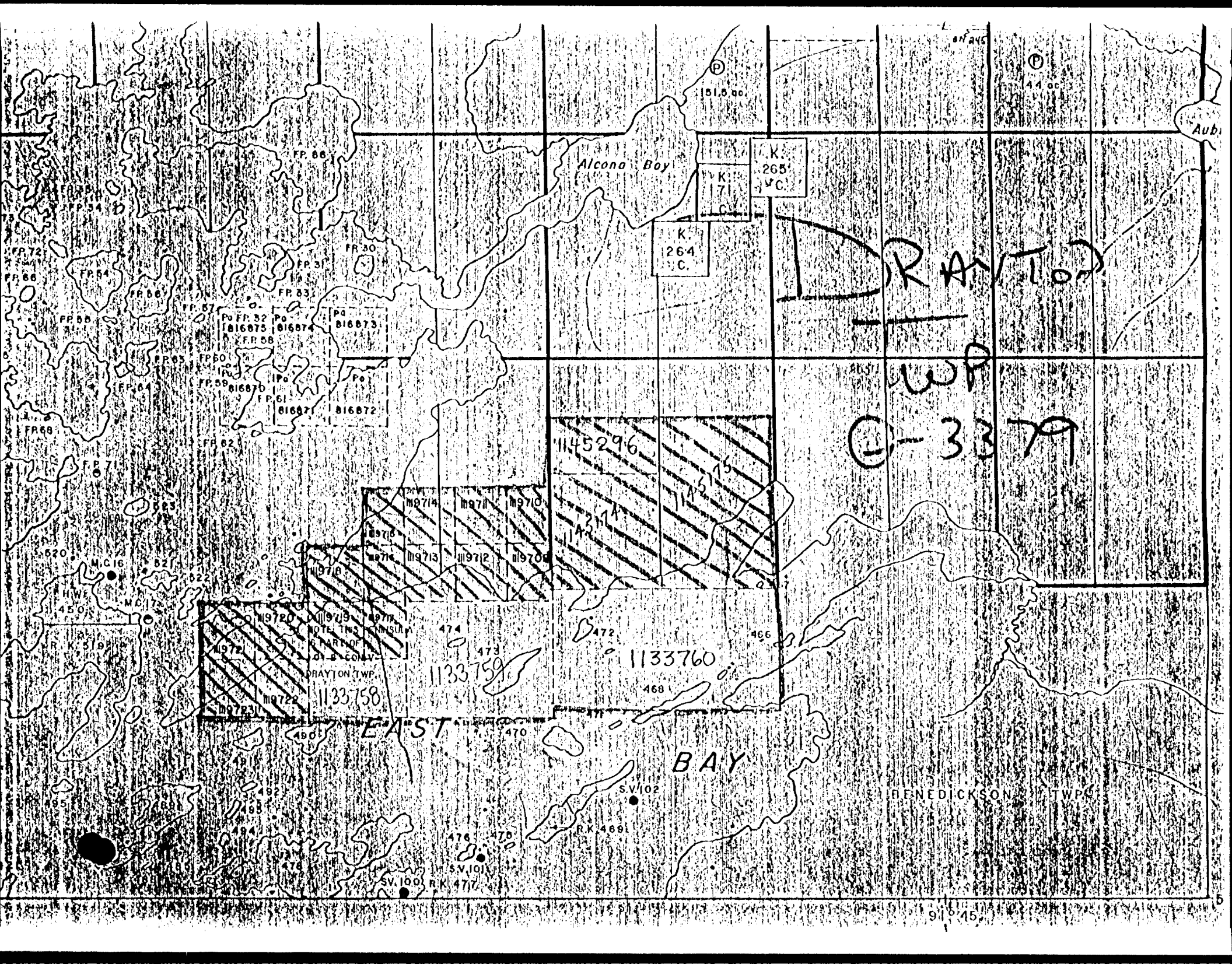
Attestation de l'état des coûts

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

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

à faire cette attestation.

Signature _____ Date Oct 29, 92



AN 245

44 ac

51.5 ac

Alcona Bay

K.
265
C.

K.
264
C.

DRAFT

WP

3379

1145296

1133758

1133760

EAST

BAY

BENEDICKSON TWP

NOTE THIS IS PART OF
DRAYTON TWP.

1133758

SV 100 R.K. 477

R.K. 469

SV 102

SV 101

91° 45'



Ontario

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

Mining Lands Branch
Geoscience Approvals Section
933 Ramsey Lake Road
6th Floor
Sudbury, Ontario
P3E 6B5

Telephone: (705) 670-5853
Fax: (705) 670-5863

Our File: 2.14823
Transaction #: W9230.00049
.00050

December 21, 1992

Mining Recorder
Ministry of Northern Development
and Mines
Court House Building
P.O. Box 3000
Sioux Lookout, Ontario
POV 2T0

Dear Sir/Madam:

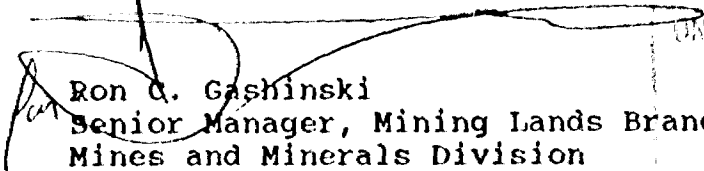
**SUBJECT: APPROVAL OF ASSESSMENT WORK CREDITS ON MINING CLAIMS
PA.1119709 ET AL IN DRAYTON TOWNSHIP.**

The Assessment Work Credits for the Geophysical Surveys and Assays filed under sections 14 and 17 of the Mining Act Regulations have been approved as originally filed.

The approval date is December 18, 1992.

If you have any questions regarding this correspondence, please contact Lucille Jerome at (705) 670-5855.

Yours sincerely,


Ron G. Gashinski
Senior Manager, Mining Lands Branch
Mines and Minerals Division

LJ/jl
Enclosures:

cc: Assessment Files Office
Toronto, Ontario

Resident Geologist
Sioux Lookout, Ontario

LEGEND

HIGHWAY AND ROUTE NO.
OTHER ROADS
TRAILS
SURVEYED LINES
TOWNSHIP BASE LINES ETC.
LOTS MINING CLAIMS PARCELS ETC.
UNSURVEYED LINES
LOT LINES
PARCEL BOUNDARY
MINING CLAIMS ETC.
RIGHT OF WAY
RAILROAD RIGHT OF WAY
NON-RENEWAL STRIP
FLOODING OR FLOODING RIGHTS
SUBDIVISION OR COMPASSIBLE PLAN
RESERVATIONS
ORIGINAL SHORELINE
MARSH OR MUSKIEG
MINES
TRAVERSE MONUMENT

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT

SYMBOL

PATENT SURFACE AND MINING RIGHTS
SURFACE RIGHTS ONLY
MINING RIGHTS ONLY
LEASE SURFACE & MINING RIGHTS
SURFACE RIGHTS ONLY
MINING RIGHTS ONLY
LICENSE OF OCCUPATION
ORDER IN COUNCIL
RESERVATION
CANCELLED
SAND & GRAVEL
NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6 1913 VESTED IN THE PUBLIC BY THE PUBLIC LANDS ACT OF 1913 AND COMPATIBLE WITH THE ACT OF 1913

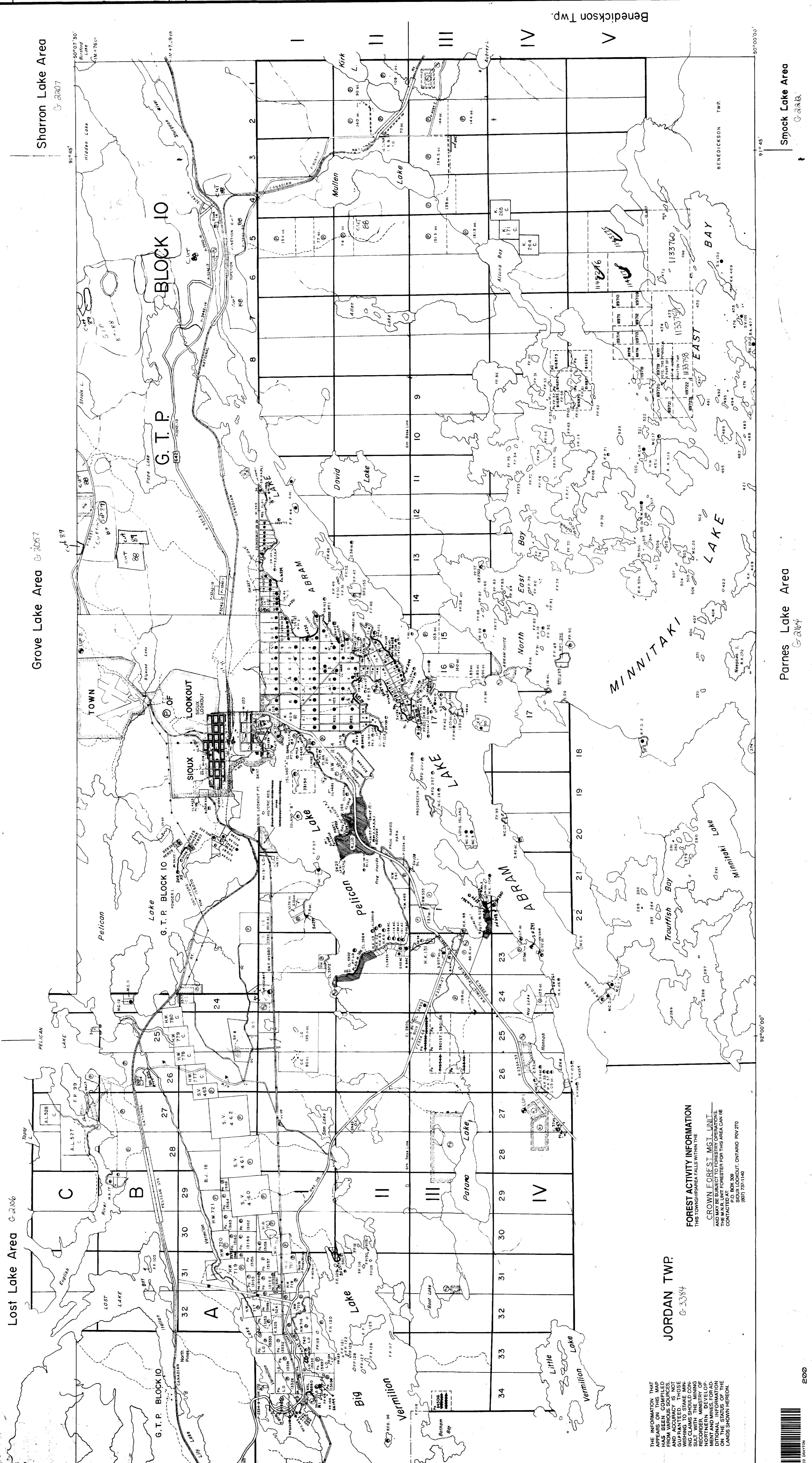
AREAS WITHDRAWN FROM DISPOSITION

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

Scale: 1" = 40 CHAINS

NOTES

1. L.P. WOOD WASTE ETC.
2. L.P. WOOD WASTE ETC.
3. PUBLIC USE IN FORCE OF 4000 FEET RESERVE FOR
4. M.N.R. RESERVE FOR ACCESS TO
5. M.N.R. RESERVE FOR ACCESS TO
6. M.N.R. RESERVE FOR ACCESS TO
7. M.N.R. RESERVE FOR ACCESS TO
8. M.N.R. RESERVE FOR ACCESS TO
9. M.N.R. RESERVE FOR ACCESS TO
10. M.N.R. RESERVE FOR ACCESS TO
11. M.N.R. RESERVE FOR ACCESS TO
12. M.N.R. RESERVE FOR ACCESS TO
13. M.N.R. RESERVE FOR ACCESS TO
14. M.N.R. RESERVE FOR ACCESS TO
15. M.N.R. RESERVE FOR ACCESS TO
16. M.N.R. RESERVE FOR ACCESS TO
17. M.N.R. RESERVE FOR ACCESS TO
18. M.N.R. RESERVE FOR ACCESS TO
19. M.N.R. RESERVE FOR ACCESS TO
20. M.N.R. RESERVE FOR ACCESS TO
21. M.N.R. RESERVE FOR ACCESS TO
22. M.N.R. RESERVE FOR ACCESS TO
23. M.N.R. RESERVE FOR ACCESS TO
24. M.N.R. RESERVE FOR ACCESS TO
25. M.N.R. RESERVE FOR ACCESS TO
26. M.N.R. RESERVE FOR ACCESS TO
27. M.N.R. RESERVE FOR ACCESS TO
28. M.N.R. RESERVE FOR ACCESS TO
29. M.N.R. RESERVE FOR ACCESS TO
30. M.N.R. RESERVE FOR ACCESS TO
31. M.N.R. RESERVE FOR ACCESS TO
32. M.N.R. RESERVE FOR ACCESS TO
33. M.N.R. RESERVE FOR ACCESS TO
34. M.N.R. RESERVE FOR ACCESS TO
35. M.N.R. RESERVE FOR ACCESS TO
36. M.N.R. RESERVE FOR ACCESS TO
37. M.N.R. RESERVE FOR ACCESS TO
38. M.N.R. RESERVE FOR ACCESS TO
39. M.N.R. RESERVE FOR ACCESS TO
40. M.N.R. RESERVE FOR ACCESS TO



FOREST ACTIVITY INFORMATION

THIS TOWNSHIP AREA FALLS WITHIN THE CROWN FOREST MGT. UNIT AND MAY BE SUBJECT TO FORESTRY OPERATIONS. FOR MORE INFORMATION CONTACT THE FOREST OFFICE AT: P.O. BOX 309, JORDAN TWP., ONTARIO, CANADA, M0T 2T0 (807) 357-1140

JORDAN TWP. G-3384

Sharron Lake Area G-2057
Grove Lake Area G-2057
Lost Lake Area G-2106
Smock Lake Area G-2028
Parnes Lake Area G-2028

DRAYTON

M.N.R. ADMINISTRATIVE DISTRICT
SIOUX LOOKOUT
MINING DIVISION
PATRICIA
LAND TITLES / REGISTRY DIVISION
KENORA

Ministry of Natural Resources
Ministry of Northern Development and Mines

February 1987
G-337

MINNITAKI PROJECT

LEGEND

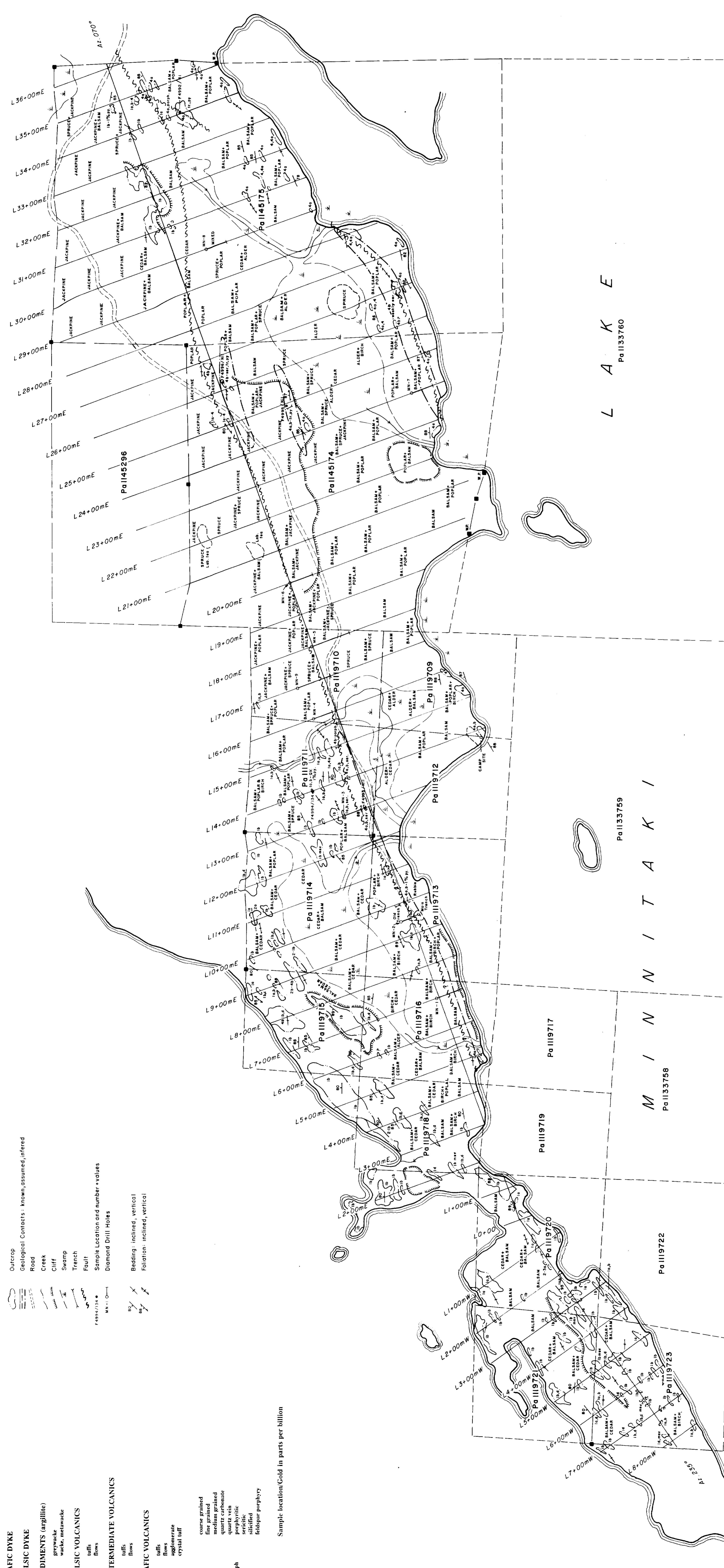
- 9
- 8
- 4
- 3
- 2
- 1

- MAFIC DYKE**
- FELSIC DYKE**
- SEDIMENTS (argillite)**
- 4a greywacke
4b wack, interwacke
- FELSIC VOLCANICS**
- 3a flows
3b flows
- INTERMEDIATE VOLCANICS**
- 2a tuffs
2b flows
- MAFIC VOLCANICS**
- 1a tuffs
1b agglomerate
1c andesite
1d crystal tuff
- gK coarse grained
mg medium grained
q-c quartz carbonate
qv quartz vein
p porphyritic
s silified
f feldspar porphyry

● 4-1992/41 Sample location/Gold in parts per billion

- Outcrop
Geological Contacts: known, assumed, inferred
Road
Creek
Cliff
Trench
Swamp
Fault
Sample Location and number + value
Diamond Drill Holes
- By / F
8g

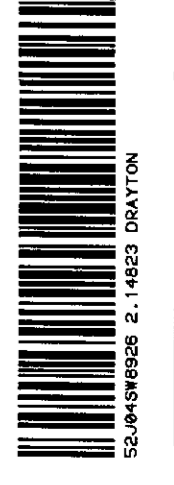
- Bedding: inclined, vertical
Foliation: inclined, vertical



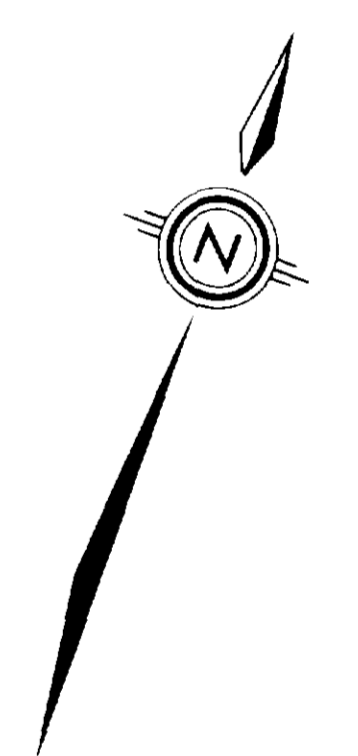
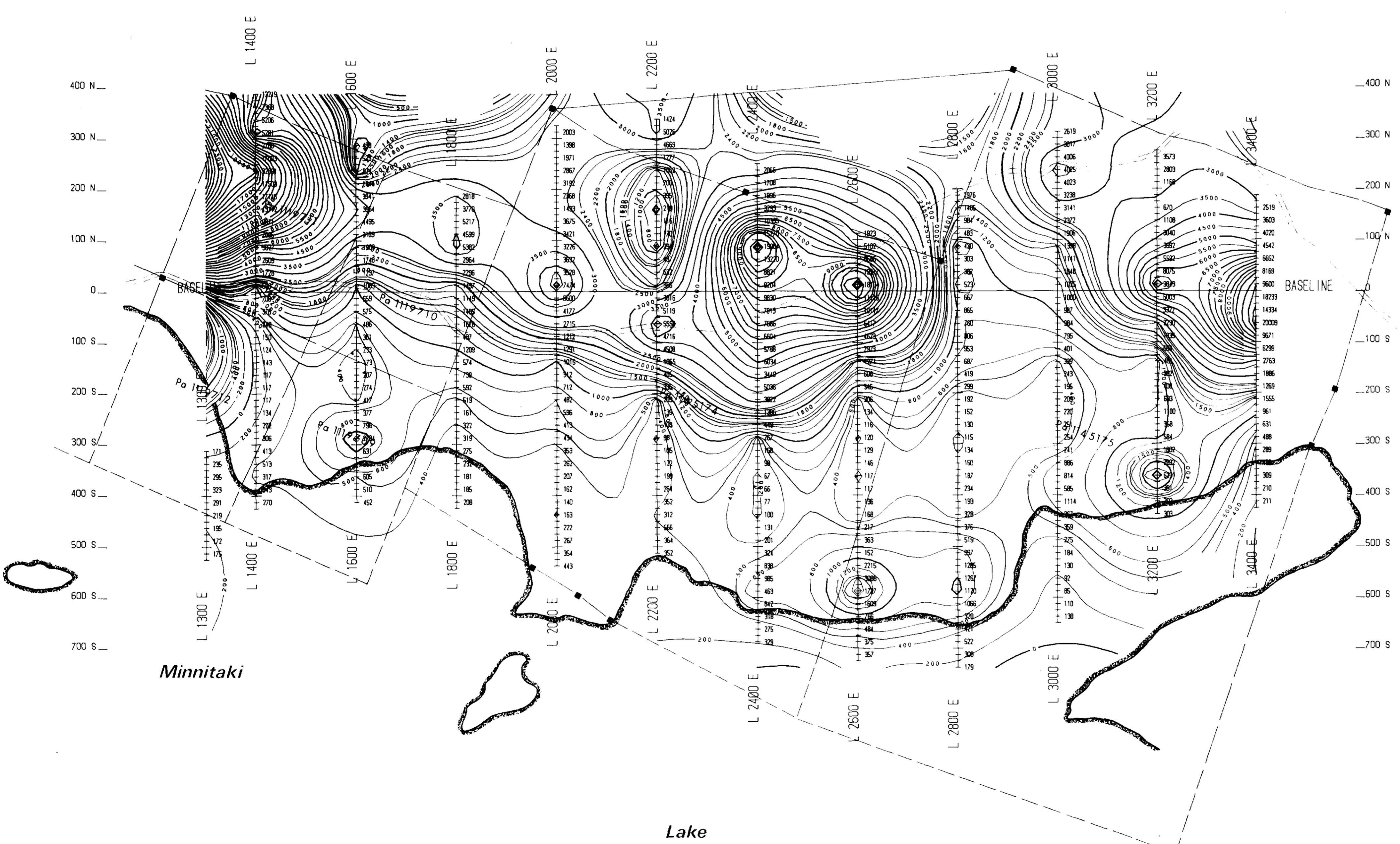
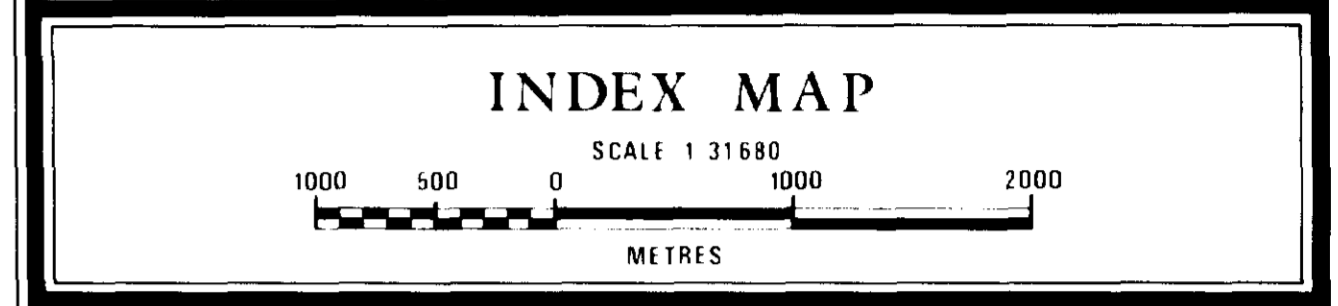
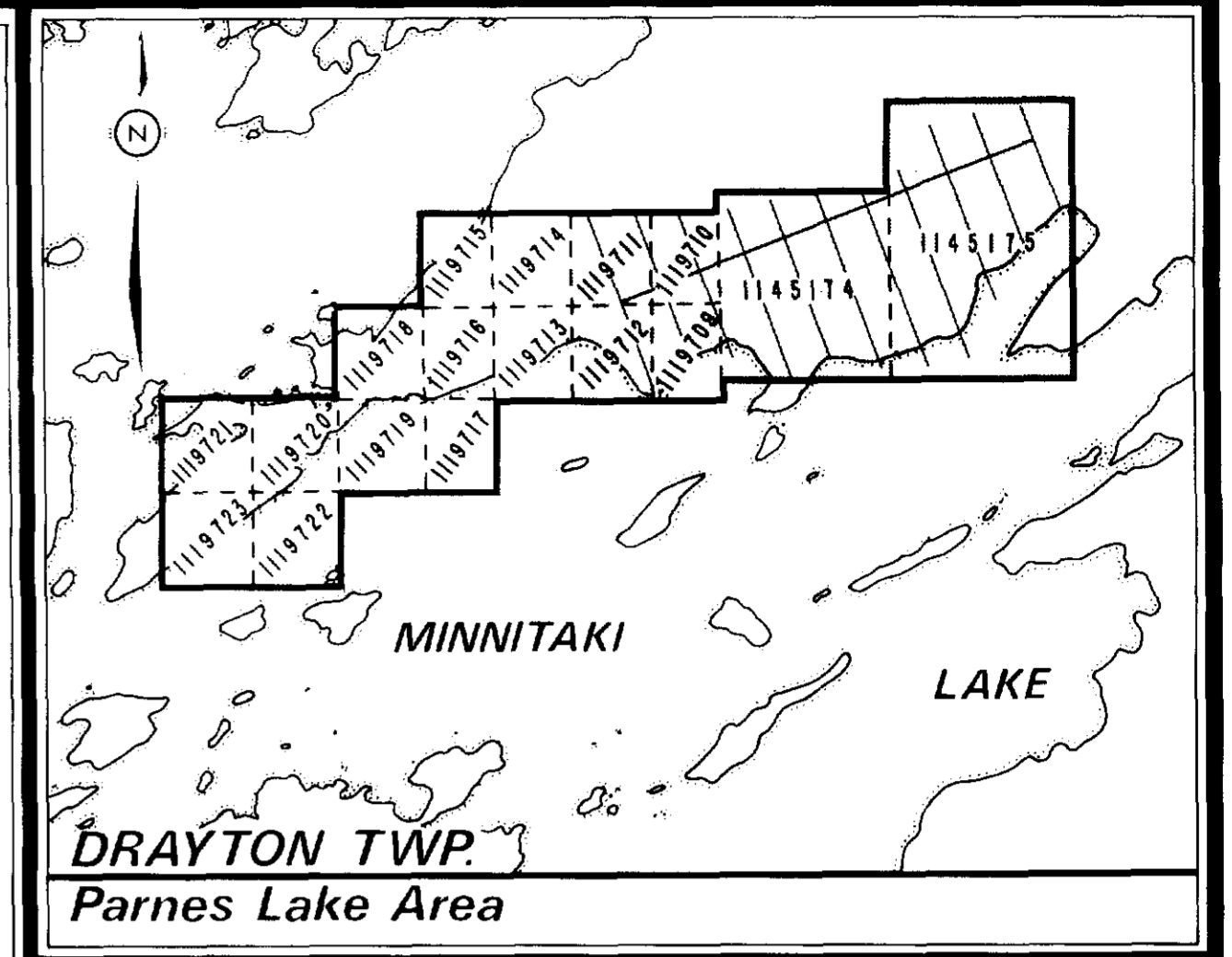
Scale 1 : 5000
0 100 200 300 400 500 metres

2.14823

Teck Exploration Ltd.	
GEOLOGY	
MINNITAKI PROPERTY DRAYTON TWP., ONTARIO	
J. JANZEN	OCT./1991
16070	521/4-92K/1
6706	



DRAYTON TWP.



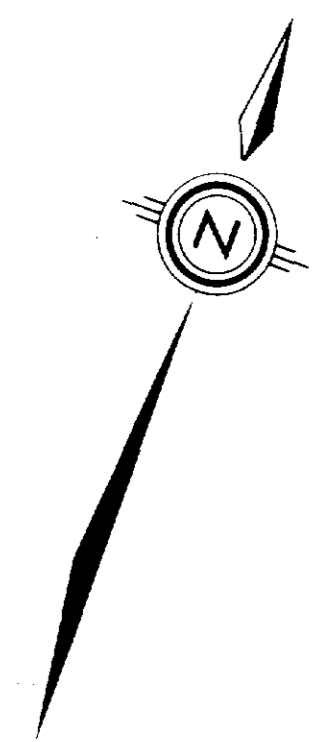
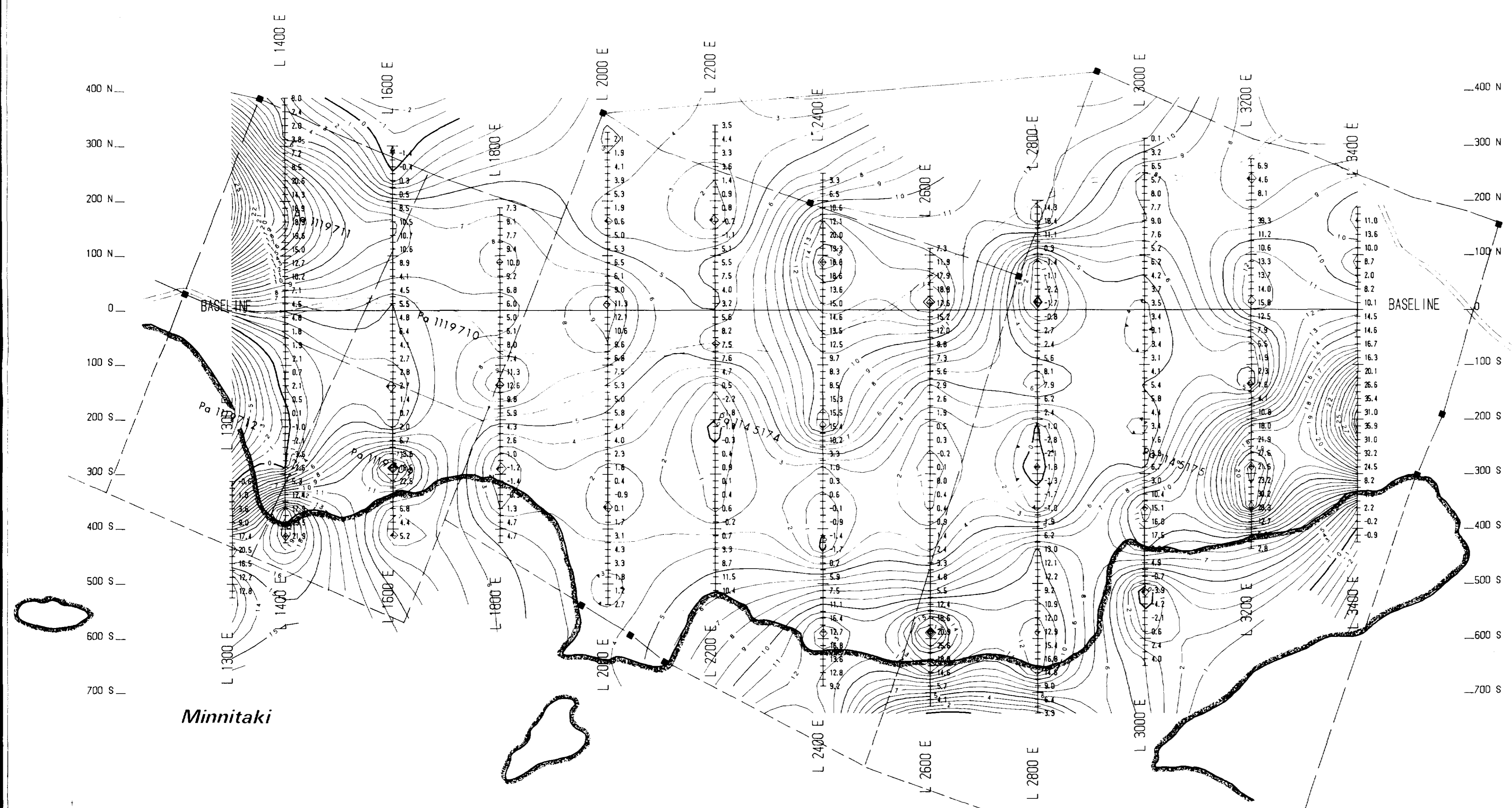
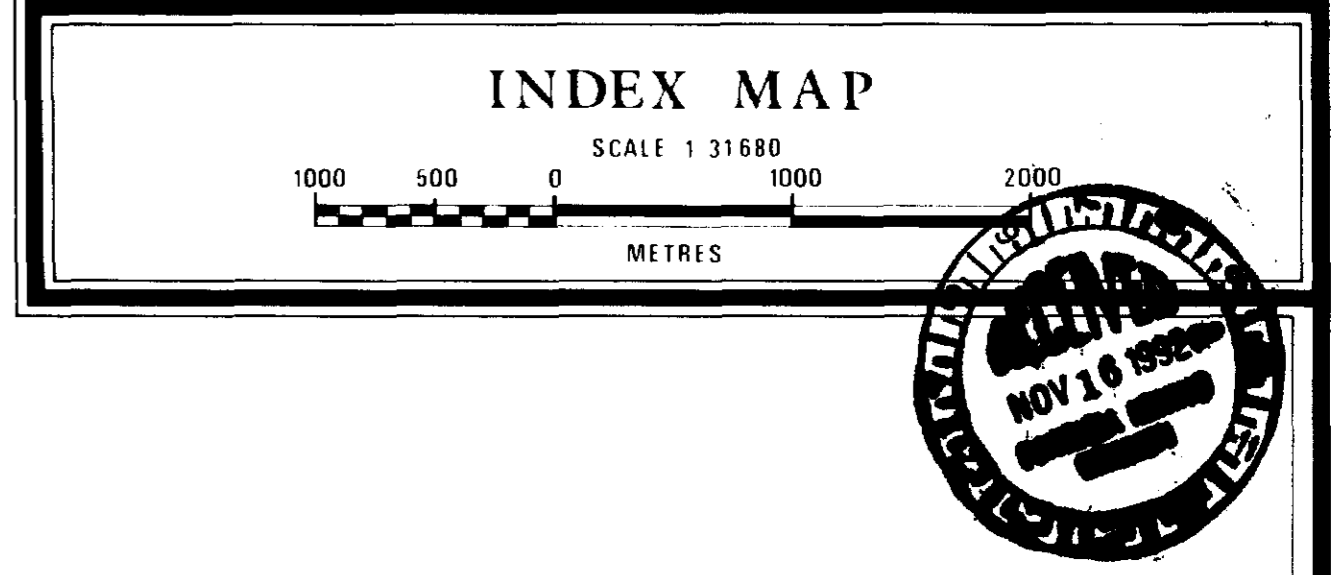
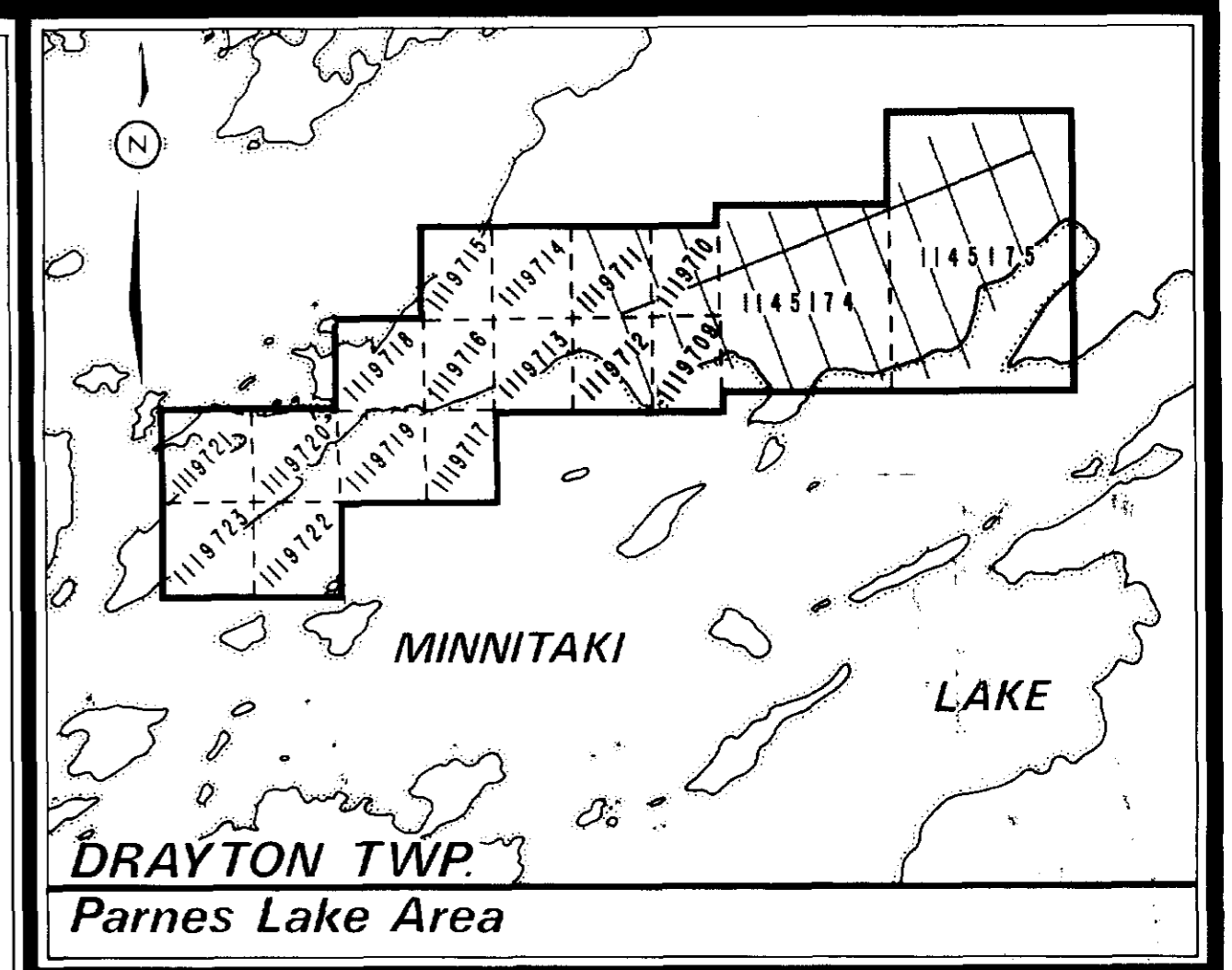
2.14803



220

INDUCED POLARIZATION SURVEY RESISTIVITY N=4 FOR TECK EXPLORATION LTD.	
PROJECT: DRAYTON TWP. MINNITAKI	
Instrument: PHOENIX I.P.T.1 PHOENIX TURBO I.P.V.4	SURVEYED BY: REMY BELANGER DATE: 92_02_27 DRAWN BY: GILLES CHOUINARD SCALE: 1:5000
TWPDRAyton	
REMY BELANGER (GEOPHYSICAL CONTRACTOR)	

DRAYTON TWP

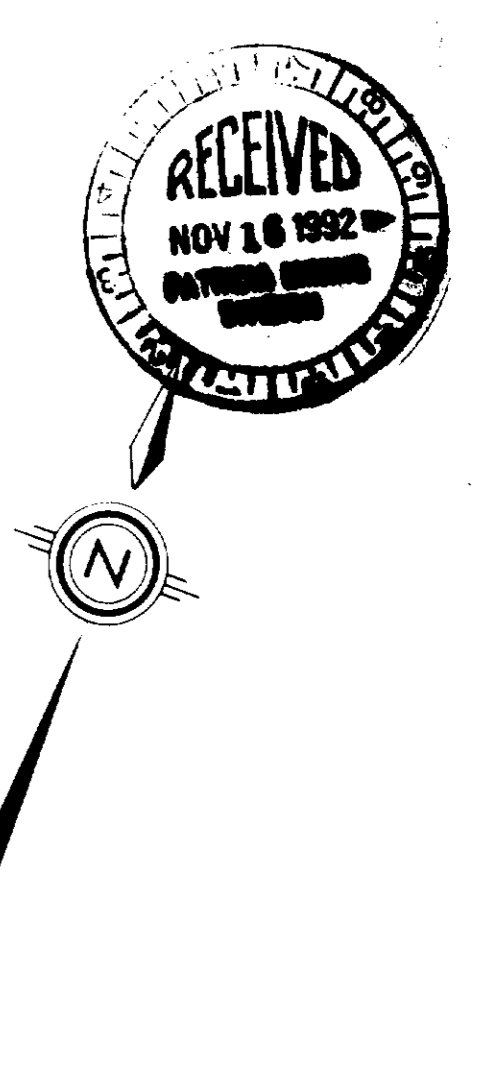
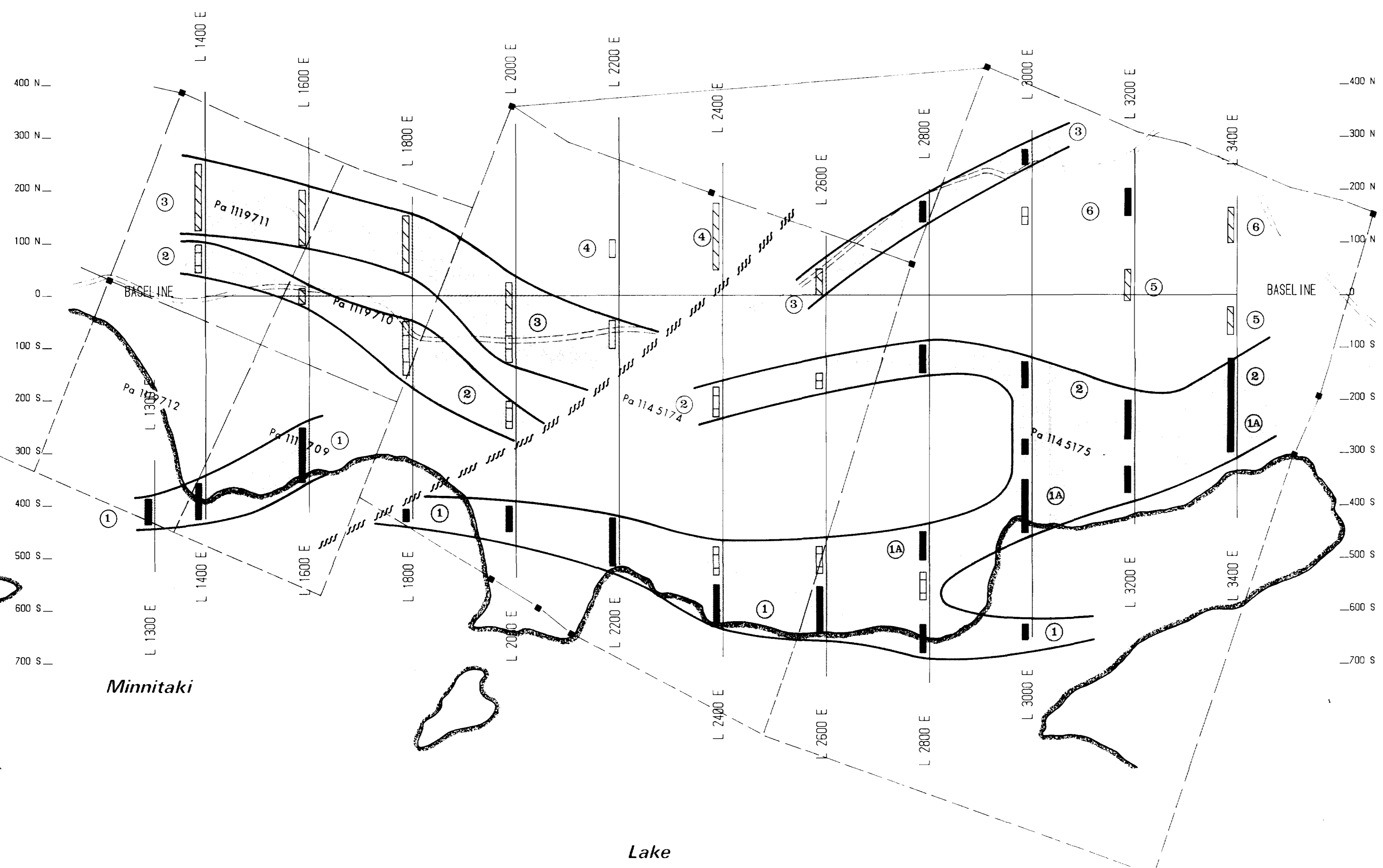
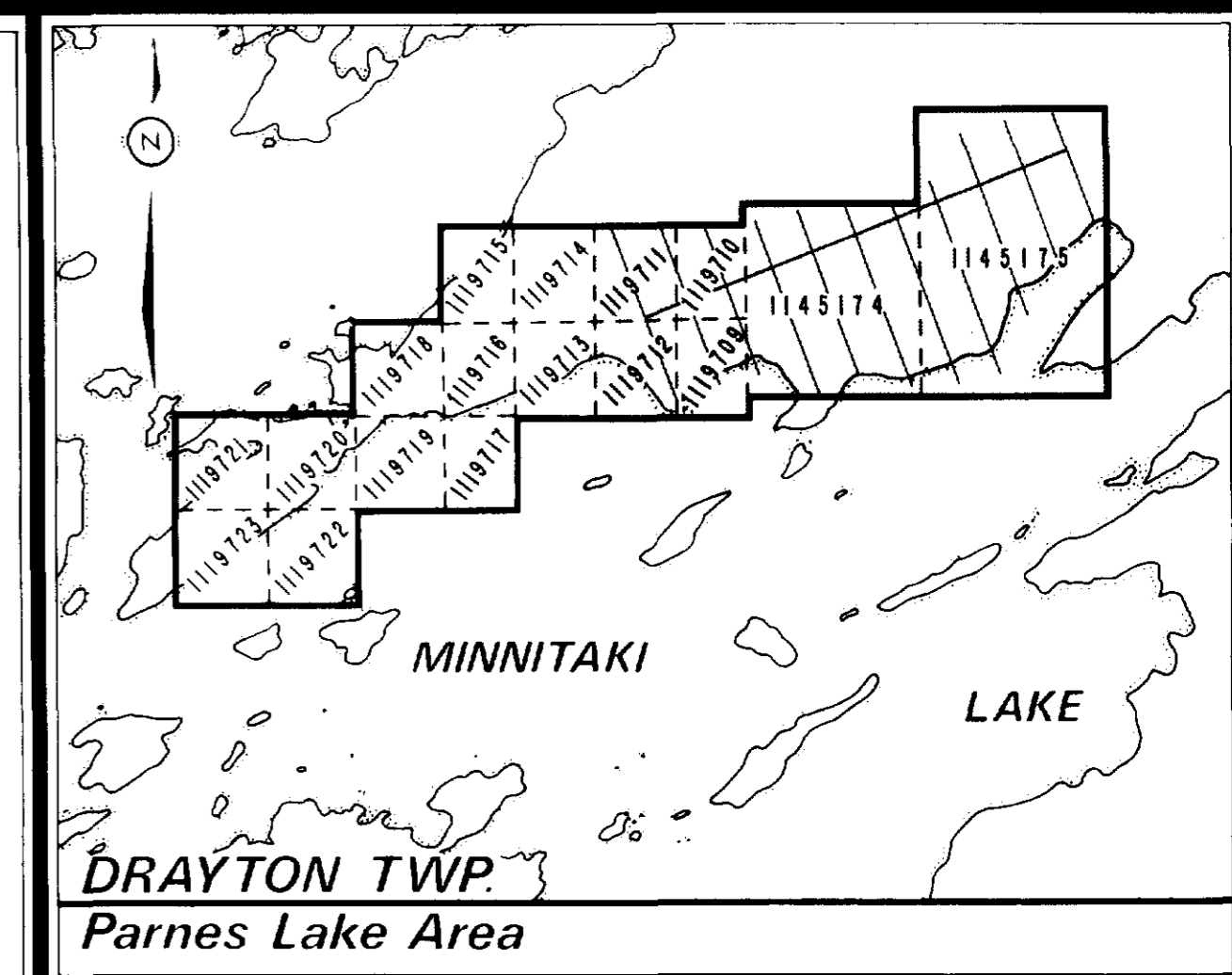


2.14823



INDUCED POLARIZATION SURVEY PHASE (MRAD) N=4 FOR TECK EXPLORATION LTD.	
PROJECT: DRAYTON TWP, MINNITAKI	
Instrument: PHOENIX I P 1 I PHOENIX TURBO I P V 0	SURVEYED BY: REMY BELANGER DATE: 92_02_27 DRAWN BY: GILLES CHOUINARD SCALE: 1:5000
TWPRAYTON REMY BELANGER (GEOPHYSICAL CONTRACTOR)	

DRAYTON TWP.

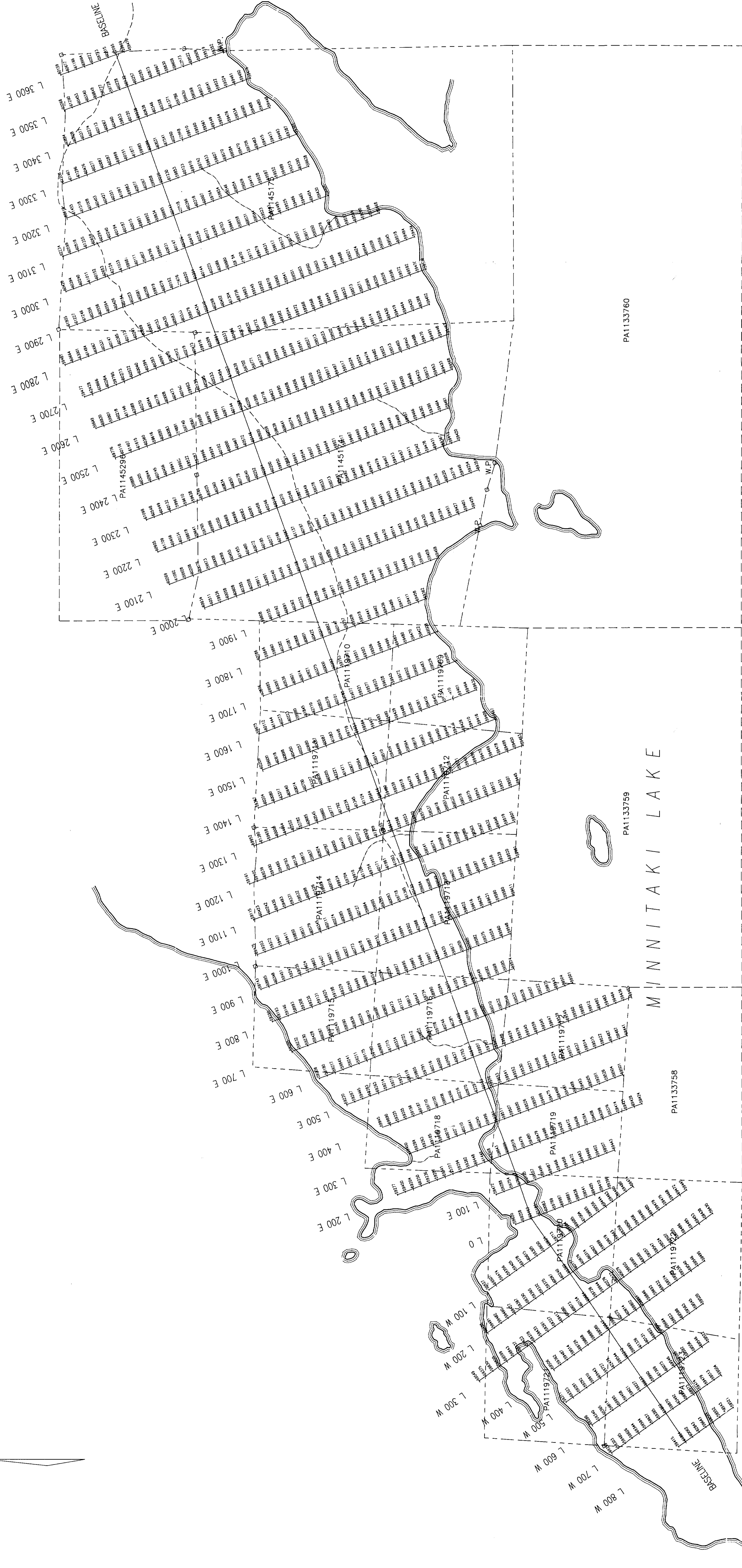
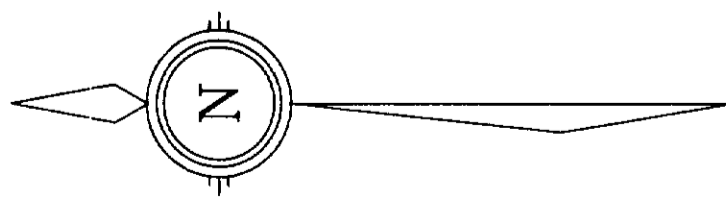


2.14823

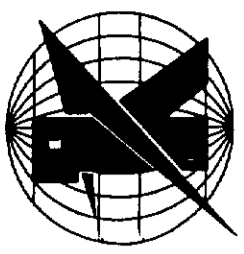
SURFACE PROJECTION OF ANOMALOUS ZONES
 -DEFINITE ---
 -PROBABLE [hatched pattern]
 -POSSIBLE [dotted pattern]

INDUCED POLARIZATION SURVEY ANOMALOUS ZONES FOR TECK EXPLORATION LTD.	
PROJECT: DRAYTON TWP., MINNITAKI	
Instrument: PHOENIX T P 11 PHOENIX TURBO PVA	SURVEYED BY: REMY BELANGER DATE: 92_02_27 DRAWN BY: GILLES CHOQUINARD SCALE: 1:5000
REMY BELANGER (GEOPHYSICAL CONTRACTOR)	



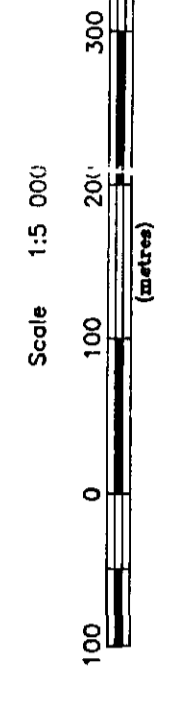


2-14829



TECK EXPLORATION LTD.

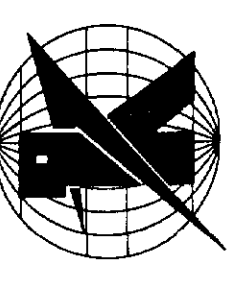
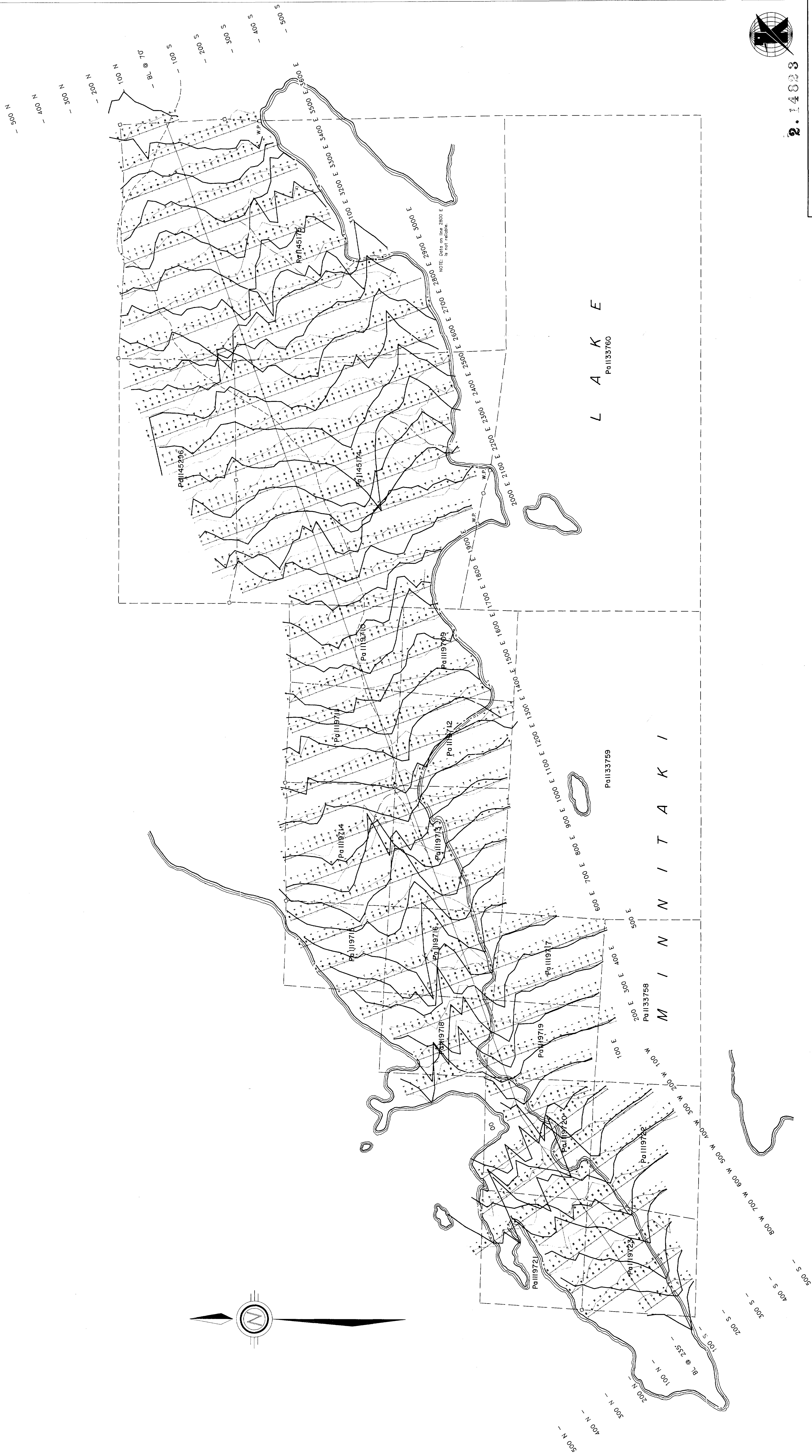
MAGNETIC POSTINGS
MINNITAKI PROPERTY
DRAYTON TP., ONTARIO



INSTRUMENT: SCINTREX MP-2 MAGNETOMETER
OPERATOR: VTYL EXPLORATION SERVICES

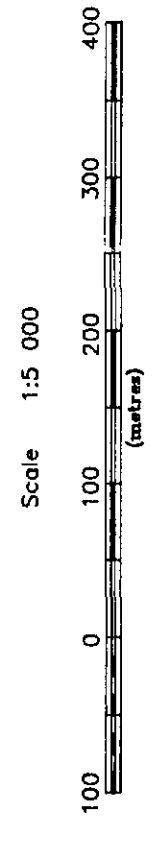
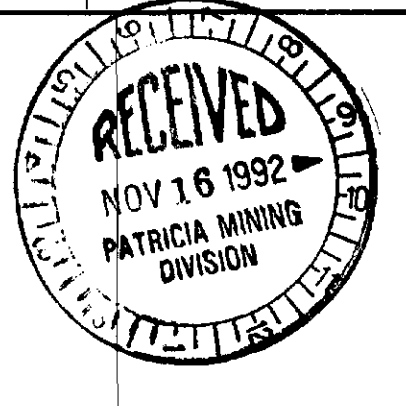
N.T.S. 052J.K | PROJ. 16070 | DATE: OCT.92 | DWG 6856





2. 14883

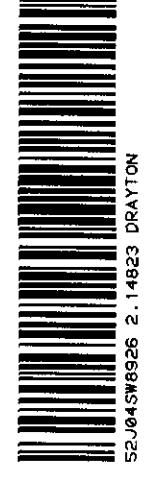
TECK EXPLORATION LTD.
 VLF-EM PROFILES
 MINITAKI PROPERTY
 DRAYTON TP., ONTARIO



Scale 1:5 000
 Profile scale: 1 cm: 20%

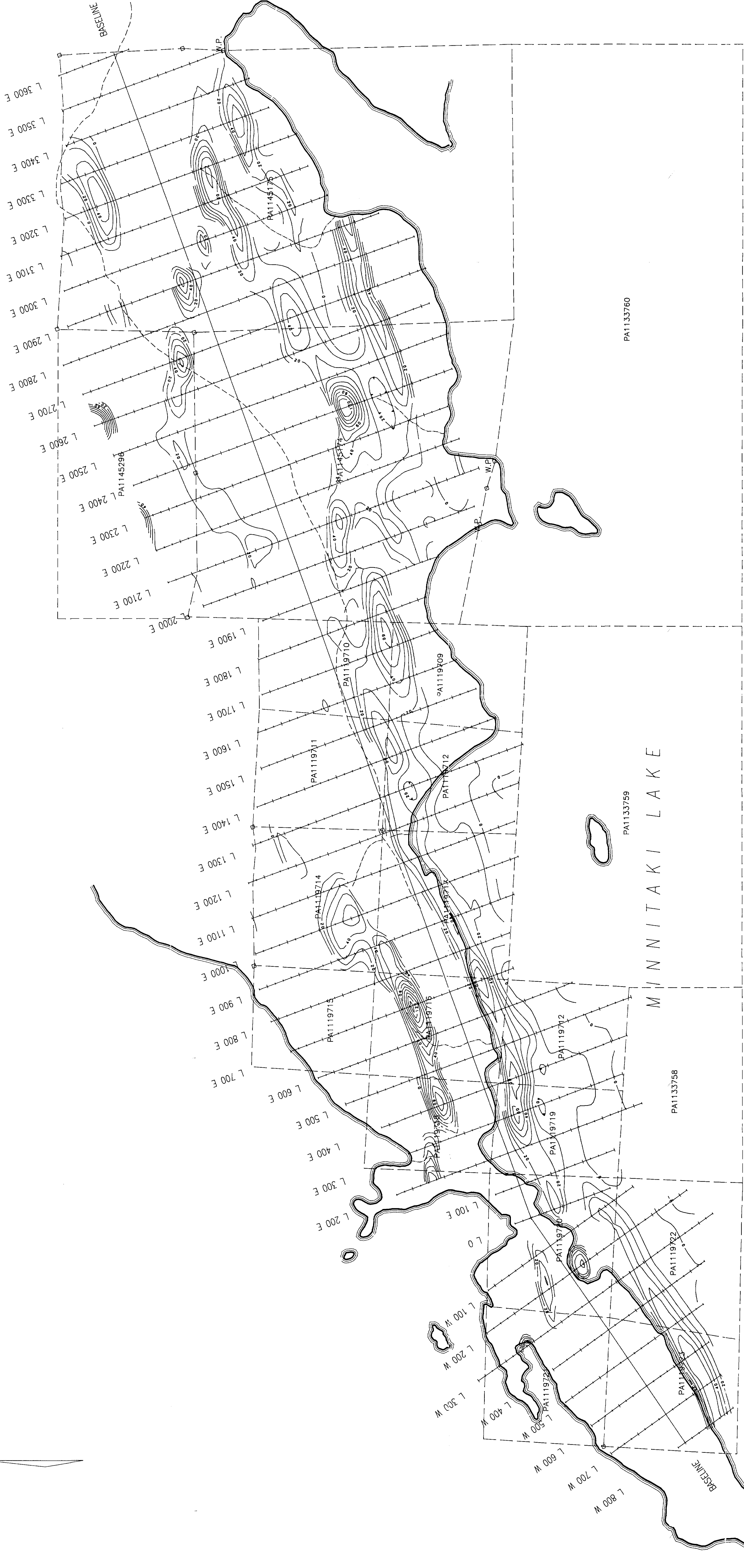
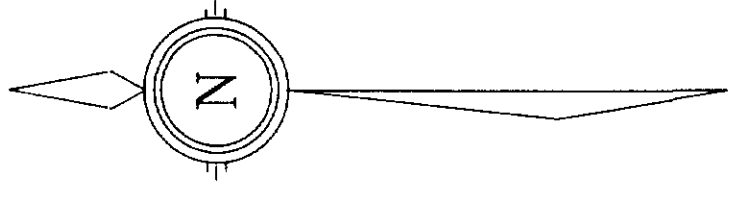
In Phase }
 Out of Phase }

TX. STATION: NLK SEATTLE, WASHINGTON 24.8 KHZ.

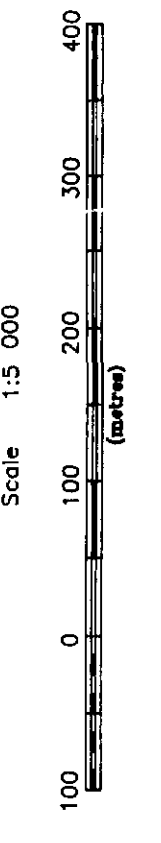


68554

270



TECK EXPLORATION LTD.
 VLF-EM FRASER FILTER
 MINNITAKI PROPERTY
 DRAYTON TP., ONTARIO



INSTRUMENT: GEONICS EM-16 VLF UNIT
 OPERATOR: VYTYL EXPLORATION SERVICES
 TX. STATION: NLK SEATTLE, WASHINGTON 24.8 KHZ.

N.T.S. 052J,K PROJ. 16070 DATE: OCT. 92 DWG. 6853

