

63.3665

Report No. 822T

N.T.S. 31-M-5

Claims S398701, S398702



31M05NE0113 63.3665 LORRAIN

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REPORT

ON THE

1979 EXPLORATION

OF THE

McALLISTER OPTION

COBALT AREA, DISTRICT OF TIMISKAMING

ONTARIO

BY

Teck Explorations Limited
Suite 4900, Toronto Dominion Centre
Toronto, Ontario

February 11, 1980


P.J. Dillon

INTRODUCTION

A two claim property in Lorrain Township was optioned from R. McAllister. After a property examination, 3 diamond drill holes were completed in the area of a silver-bearing calcite vein. Subsequent exploration included trenching mapping and geophysical surveys. The results of these programmes are summarized in this report.

THE PROPERTY

The property consists of 2 unpatented mineral claims; S-398701 and S-398702, locally referred to as the Little Fissure and Big Fissure respectively. These claims were optioned from R. McAllister of Cobalt, Ontario in August 1979 and are in good standing until March 14, 1980. They must be surveyed and brought to lease by March 14, 1985.

LOCATION AND ACCESS

The claims occupy the southwest portion of Lot 3, Concession 11 in Lorrain Township, District of Timiskaming, Ontario, latitude $47^{\circ}24'N$, longitude $79^{\circ}36'W$, N.T.S. Reference 31-M-5 (Fig. 1).



TECK EXPLORATIONS LIMITED
(McAllister Option)

Location Map

Lorrain Twp., Ontario



Feb. 1980

Fig. 1

The property is reached by travelling north on Hwy 11B from Cobalt to North Cobalt then south on Hwy 567 over a distance of 4 miles to a bush road. The bush road is 3.5 miles long and ends on the Big Fissure claim.

TOPOGRAPHY

The property is characterized by an undulating surface reaching a maximum elevation of 940' above sea level. Large outcrop areas are exposed on the generally flat hilltops. The north section of the Big Fissure claim is swampy and is cut by a northwest flowing creek. To the west, a relatively steep cliff marks the edge of a large outcrop exposure.

Poplar and birch are the predominant constituents of the relatively open mature forest.

PREVIOUS WORK

Various government reports written between 1845 and 1949 deal briefly or extensively with the geology of the Cobalt area. Thomson (1960) discusses the geology of the north part of Lorrain Township and describes various properties

in the area;

NW. 1/4 S. 1

This claim in the early days of the camp was known as the St. Denis and also as the Big Fissure. Extensive surface and some underground work was done about the period of 1906-1909.

In 1946 the surface was examined and mapped by Frederick Yellowknife Mines Limited, the owners of a considerable group in the vicinity at that time. In 1951 Clenor Mining Company Limited re-examined it and pumped out one pit 600 feet south of the Big Fissure shaft but no extensive work was done.

There are three shafts on the claim; of these the one sometimes referred to as the Big Fissure, at about 850 feet south and 350 feet east of the northwest claim corner, has the largest dump. It is rumoured to be about 100 feet deep but no authentic information on the extent and position of the underground workings is available to the writer. As indicated by remnants of veins in caved trenches the vein on which the shaft was put down strikes S.80°E.; it appeared to have been traced over a length of 500 feet and was no doubt regarded as the most promising one on the claim.

At 250 feet south and 300 feet west of the Big Fissure shaft, another, possibly 50 feet deep, was put down on a vein striking east. In the open cut west of this other shaft cobalt mineralization may be seen and the late W. Forrest, who had been present when the cut was excavated in 1906, reported that silver nuggets were obtained from a "mud seam."

At about 30 feet south of the open cut a 1½-inch calcite vein with similar strike to the one in the cut and containing cobalt mineralization in very small amount is exposed in a trench.

At about 150 feet west and 50 feet north of the Big Fissure shaft another, possibly 50 feet deep, was put down on a vertical vein (strike N.25°W.) traversing Keewatin tuff; (the area of Keewatin here is regarded as a large inclusion in the Nipissing Diabase). MacVeigh reported that a very small showing of silver was found at the pit bottom in his

MacVeigh, E. L., personal communication.

examination for Clenor Mining Company Limited; on the dump the writer saw only chalcopryite with pyrite mineralization in small amount in the calcite with quartz vein material which is up to 3 inches wide. The walls of the vein show red feldspathic alteration. Gouge and breccia occur along the vein, which has been trenched and pitted to the north and which has been traced into the adjoining claim to the south.

At 300 feet south and 550 feet east of the Big Fissure shaft what the writer interprets to be a microbrecciated quartz vein occupies a fissure striking N.50°W. and 2 to 7 inches wide in the diabase. The microbrecciated vein has the appearance of a sedimentary rock with fragments up to ½ inch. That this quartz is vein quartz is indicated by the nature of the inclusions contained. No metallic minerals were seen in the vein.

SW. 1/4 S. 1

On this claim, sometimes referred to as the "Little Fissure" the south continuation of the vein, striking N.25°W., in the southwest part of the contiguous claim to the north has been explored by pits and trenches. On the "Little Fissure" the vein dips 75°E. Sparse chalcopryite and pyrite was the only metallic mineralization seen in vein material on the dumps.

No detailed information is available on exploration conducted on the property during the 1960's. However, McAllister was able to supply the following:

- (i) The drill hole collared just west of L3+00E, 1+35N was completed to an approximate depth of 200' during the early 1960's (DWG 5416).

- (ii) Trend Exploration and Development drilled 3 or 4 holes on the property in 1964. The location of 2 of these holes has been established in the field; west of L3+00E, 4+00N and east of L1+00E, 4+65N (DWG 5416).

The claims were recorded on March 12, 1974 by R. McAllister of Cobalt. In 1974, seven backhoe trenches were opened in the vicinity of the south claim line of the Big Fissure claim (Appendix I). A rock sample taken from a 2 inch wide cobalt vein exposed in the northernmost trench assayed 23 oz Ag/ton. This trench was widened and lengthened during the 1979 programme, therefore the original dimensions have been obscured. During the period November 6-10, 1974, R. McAllister completed one 28' drill hole on the Big Fissure claim in the area of the vein. The

exact location of this hole has been obliterated by subsequent trenching but it was drilled due west at approximately L2+00W, 0+60N (Appendix I). No mineralization was encountered.

In a further attempt to develop the mineralization exposed in the 1974 trenching, R. McAllister drilled a 103' hole which was collared 5 feet from the 1974 hole (Appendix I). Mineralization was not intersected in this 1977 drilling. Several backhoe trenches were opened on claim S-398701 (Little Fissure) in 1976 and 1977 (Appendix I).

The property was optioned by Teck on August 16, 1979 after a free examination period.

1979 EXPLORATION PROGRAMME

Following a property examination in June 1979, 3 holes totalling 600' were drilled in a northerly direction to test the silver-bearing calcite vein exposed in the trench. Although no significant mineralization was encountered in the drilling, the fact that a new silver-bearing vein had been found in the Cobalt area indicated that more exploration was warranted.

During July and August, 2 backhoe and rock trenches were opened. In the trench centered on the main showing, the mineralized calcite vein was exposed over a length of 6'. Encouraging assays resulted in a decision to systematically examine the property. Access to the property was improved by upgrading the trail, a grid was cut and picketed, geophysical surveys were conducted on the grid and detailed geological mapping was started. Table I summarized the exploration and related activities undertaken in 1979 and the invoices and billing reports covering the work appear in Appendix II.

TABLE I

SUMMARY OF EXPLORATION AND RELATED ACTIVITIES

<u>DATES</u>	<u>ACTIVITY</u>	<u>CO.</u>	<u>PARTICULARS</u>
July 9-July 20	Diamond Drilling	Barron Drilling	3 holes totaling 600'
July 30-Aug. 7	Backhoe Excavating	Laurel Birtch Trucking Ltd.	2 trenches-total of 240' in length 8-10' wide, 5-8 deep
July 30-Aug. 17	Rock Trenching	Sylva Expl. Ltd.	as above
Sept. 11-25	Upgrading Road	Laurel Birtch Trucking Ltd.	3.5 miles
Sept. 17-21	Linecutting	-	5.9 line-miles
Oct.17-27,Nov.5,6	Geophysical Surveys	-	Mag, VLF-EM, EM-15, metal detector
Oct.22-25,Nov.5,6	Geological Mapping	-	Big Fissure claim only.

EXPENDITURES

Table II summarizes the expenditures incurred by the 1979 exploration programme. All back up documentation is included in Appendix II.

TABLE II - SUMMARY OF EXPENDITURES

<p>1) <u>Gridding</u> Linecutting, picketing, chaining and all associated costs.</p> <table border="0"> <tr> <td>7 days @ \$70</td> <td>\$ 490.00</td> </tr> <tr> <td>8.9 miles</td> <td>1780.00</td> </tr> <tr> <td>associated costs</td> <td><u>279.52</u></td> </tr> <tr> <td></td> <td><u>\$2549.52</u></td> </tr> </table>	7 days @ \$70	\$ 490.00	8.9 miles	1780.00	associated costs	<u>279.52</u>		<u>\$2549.52</u>	<p>3) <u>Geological Surveying</u> Map, report and all associated costs</p> <table border="0"> <tr> <td>-geological mapping</td> <td>\$3,706.14</td> </tr> <tr> <td>-supervision</td> <td>2,151.23</td> </tr> <tr> <td>-field & living expenses</td> <td>404.76</td> </tr> <tr> <td>-travel</td> <td>777.77</td> </tr> <tr> <td>-drafting</td> <td><u>991.13</u></td> </tr> <tr> <td></td> <td><u>\$8,801.03*</u></td> </tr> </table>	-geological mapping	\$3,706.14	-supervision	2,151.23	-field & living expenses	404.76	-travel	777.77	-drafting	<u>991.13</u>		<u>\$8,801.03*</u>																		
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<p>2) <u>Geophysical Surveying</u> a) Magnetic map, report and all associated costs.</p> <table border="0"> <tr> <td>6 miles @ \$70</td> <td>\$ 420.00</td> </tr> <tr> <td>associated costs</td> <td><u>168.38</u></td> </tr> <tr> <td></td> <td><u>\$ 588.38</u></td> </tr> </table> <p>b) E.M. map, report and all associated costs.</p> <table border="0"> <tr> <td>6 miles @ \$75</td> <td>\$ 450.00</td> </tr> <tr> <td>associated costs</td> <td><u>37.58</u></td> </tr> <tr> <td></td> <td><u>. 487.58</u></td> </tr> </table> <p>c) Other types, map, report and all associated costs.</p> <table border="0"> <tr> <td>6 miles @ \$75</td> <td>\$ 450.00</td> </tr> <tr> <td>1 day @ \$70</td> <td>70.00</td> </tr> <tr> <td>associated costs</td> <td><u>267.48</u></td> </tr> <tr> <td></td> <td><u>\$ 787.48</u></td> </tr> </table>	6 miles @ \$70	\$ 420.00	associated costs	<u>168.38</u>		<u>\$ 588.38</u>	6 miles @ \$75	\$ 450.00	associated costs	<u>37.58</u>		<u>. 487.58</u>	6 miles @ \$75	\$ 450.00	1 day @ \$70	70.00	associated costs	<u>267.48</u>		<u>\$ 787.48</u>	<p>4) <u>Drilling</u></p> <table border="0"> <tr> <td>600 feet @ \$9.75</td> <td>\$5,850.00</td> </tr> <tr> <td>associated costs</td> <td><u>233.00</u></td> </tr> <tr> <td></td> <td><u>6,083.00</u></td> </tr> </table> <p>5) <u>Stripping</u></p> <table border="0"> <tr> <td>36 hrs @ \$20</td> <td>\$ 720.00</td> </tr> <tr> <td>associated costs</td> <td><u>20.00</u></td> </tr> <tr> <td></td> <td><u>\$ 740.00</u></td> </tr> </table> <p>6) <u>Rock Trenching</u> Plans, report and all associated costs.</p> <table border="0"> <tr> <td></td> <td>\$5,558.38</td> </tr> </table> <p>7) <u>Assaying</u></p> <table border="0"> <tr> <td></td> <td>\$ 449.00</td> </tr> </table> <p>8) <u>Miscellaneous Road Building</u></p> <table border="0"> <tr> <td></td> <td>\$4,856.00</td> </tr> </table>	600 feet @ \$9.75	\$5,850.00	associated costs	<u>233.00</u>		<u>6,083.00</u>	36 hrs @ \$20	\$ 720.00	associated costs	<u>20.00</u>		<u>\$ 740.00</u>		\$5,558.38		\$ 449.00		\$4,856.00
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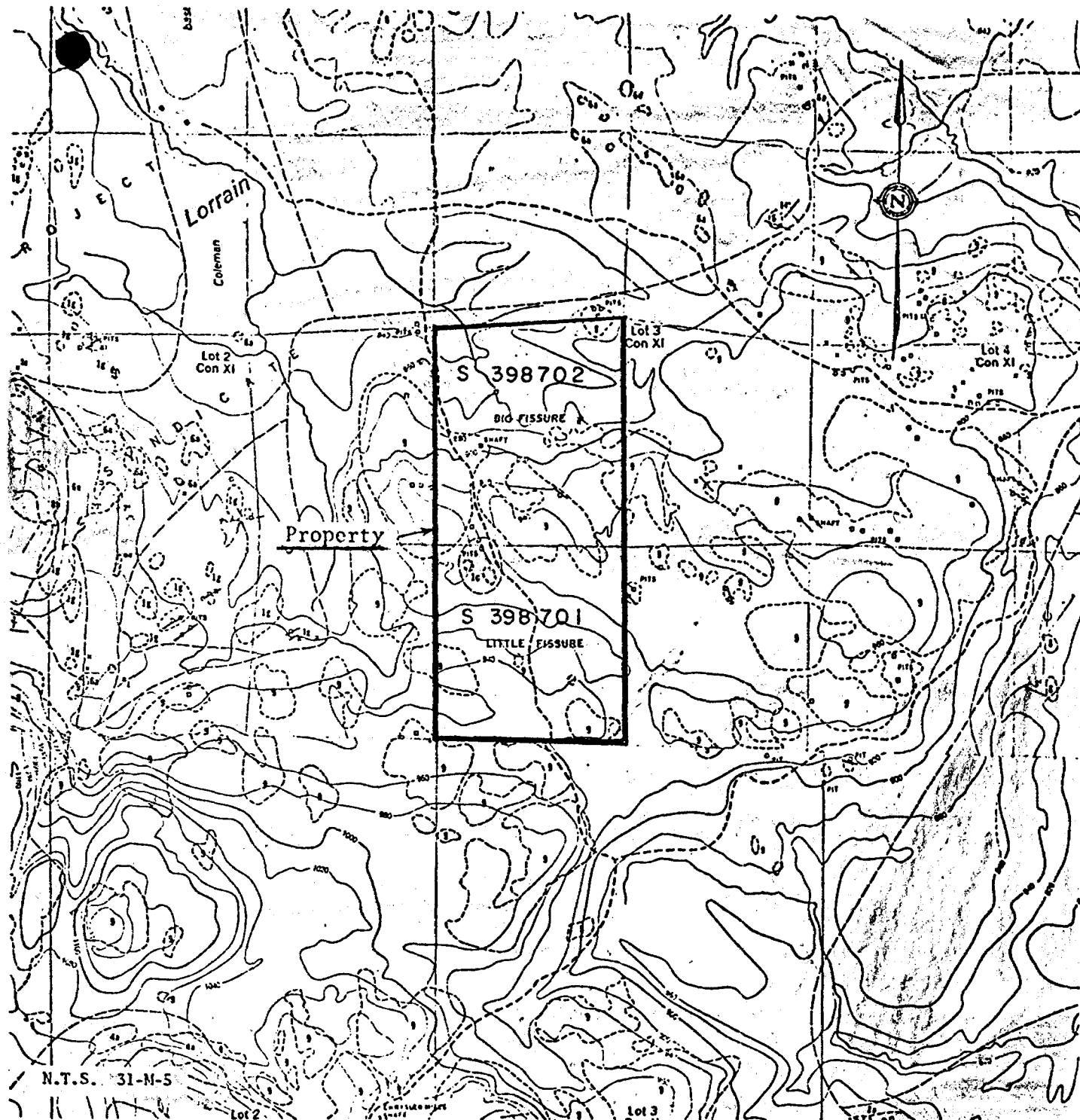
* These totals do not include time spent in February 1980 on report preparation

GEOLOGY

Structurally, the property lies at the south margin of the North Lorrain Diabase Basin, approximately 6,600 feet north-east of the Cross Lake fault. With the exception of a small outlier of Keewatin volcanics which straddles the boundary between the Little and Big Fissure claims, the entire property is underlain by the Nipissing diabase. The diabase dips under the Coleman conglomerate to the north, and under the Lorrain Formation to the east (Fig. 2).

The Keewatin outlier which overlies the diabase consists of mafic tuffs and extends over an area of approximately 300 by 400 feet.

Geological mapping of the two claim property was not completed during the 1979 programme due to the onset of inclement weather. The main purpose of the detailed mapping was to tie in the old trenching, pitting and drilling with the outcrop areas and grid. Mapping of the Big Fissure claim was completed and the findings are summarized on DWG 5416. With the exception of a small area in the southwestern portion, the claim is underlain by massive, fine to coarse grained diabase. No veining was noted but the presence of many long narrow trenches suggests that veins exposed at surface were previously worked and the surface expression of the veins has been removed.



LEGEND

INTRUSIVE CONTACT		ALGOMAN	
	9 Quartz diabase ("Nipissing" sill).		4a Granite (locally known as Lorrain granite).
INTRUSIVE CONTACT			4b Felsite (dikes).
HURONIAN COBALT GROUP LORRAIN FORMATION		UNCONFORMITY PROBABLY	
	8a Arkose.	KEEWATIN	
	8b Quartzite.		1a Basalt and andesite breccia.
COLEMAN FORMATION***			1b Pillow lava.
	6a Conglomerate.		1c Tuff.
	6b Greywacke.		1d Basalt and andesite breccia.
	6c Well-bedded or "shaly" greywacke.		1e Sedimentary rocks.
	6d Arkose.		1f Chert.
	6e Quartzite.		1g Rhyolite.
			1h Rhyolite tuff.
			1j Rhyolite breccia.
			1k Quartz-feldspar porphyry (dike).
			1m Basic intrusive rock probably associated with Keewatin volcanism.

TECK EXPLORATIONS LIMITED
 (McAllister Option)

Claims & Geological Map
 Lorrain Twp., Ontario

1"=1000'

Feb. 1980 Fig. 2

Ref: O.D.M. Geology Map No. 2050
 Cobalt Silver Area Published 1964

In the area of the Keewatin volcanic outlier it is difficult to distinguish between the greenish, fine grained, massive, intermediate-mafic (andesitic ?) volcanics and the fine grained diabase. In fact, until the southern claim is mapped and the area of the volcanics re-examined the contact position is questionable.

STRUCTURE

Four joint patterns are visible in the main trench; $118^{\circ}87^{\circ}\text{N}$, $72^{\circ}68^{\circ}\text{S}$, $113^{\circ}87^{\circ}\text{S}$, $45^{\circ}66^{\circ}\text{S}$. Two five foot wide fracture zones marked by rusty, friable diabase were noted in the north trending trench 80' east of the main trench. In this same trench, a small north-northeast striking fault possibly related to the fracture zones was mapped.

Although the area is not structurally complex on a large scale, the fracturing and faulting patterns probably control the veining.

MINERALIZATION AND VEINING

The orientation of the old trench workings indicates that two sets of calcite veins striking east-west and north-north-west predominate on the property. No mineralization was noted in the old trenches and pits.

The only mineralization found to date on the property was exposed by trenching in 1974 and extended by trenching in 1979. Dr. J.A. McGregor visited the property on August 7, 1979.

At the high-grade trench all the strongly mineralized material had already been removed and piled at the side of the trench (Perhaps 50 lbs.). In the trench there was abundant green nickel stain together with calcite veining and haematite-coated joints visible on muck. A small part of the western end of the high-grade location was exposed by removing muck, but no significant mineralization was in evidence. The vein appears to be striking slightly south of west so that it will pass out of the trench as presently being extended. The crew were instructed to watch for this and to correct if necessary. The dip appears to be vertical at the exposed point. The high-grade rock fragments are bound by clean joint planes. Several such planes with different attitudes can be observed in the trench, but the state was such that one could not say with certainty which joints bound the vein. The mineralization is understood to occur in a pod upto 3 feet long, 3 1/4 inches wide of unknown depth and plunge. It is quite likely that the current blasting has removed the whole pod. The mineralogy is massive complex nickel-cobalt arsenides with abundant free silver and minor argentite.

A second trench is being dug about 95 feet east of the high-grade locality. Some calcite veining is present and the drillers reported some vugs encountered. No mineralization was observed though some of the calcite is pink which may indicate cobalt impregnation. A brief examination showed diabase much of which is very chloritic, soft and medium to coarse grained in the southern half, and harder finer grained material in the northern half of the trench.

Five rock samples were taken from the main trench; the assay results are summarized in Table III.

TABLE III - MAIN TRENCH - SAMPLE RESULTS

<u>SAMPLE NO.</u>	<u>LOCATION & CHARACTER</u>	<u>Oz Ag/ton</u>	<u>%Co</u>	<u>%Ni</u>
12943	bottom of trench massive cobalt in calcite	34.34	10.20	-
12944	bottom of trench massive cobalt in calcite	12.76	4.90	-
12945	muck pile beside vein-cobalt	56.48	5.80	8.80
12946	vein material	1196.00	7.36	7.28
12947	composite wallrock material from the bottom of the trench	2.20	0.02	-

DIAMOND DRILLING

Three holes were completed for a total footage of 600'. The holes were drilled to test for a downdip extension of the mineralized calcite vein exposed in trenching and to determine if a postulated east-west striking fault occurred to the south of the main trench.

Each of the holes collared in Keewatin tuffaceous andesites in part heavily altered to chlorite and epidote. The Nipissing Diabase intersected below the volcanics is generally grey, medium grained and massive.

Two of the three holes were drilled under the main trench (DWG 5416). No significant mineralization or veining was encountered but many small calcite slips, stringers and breccias and fault zones were intersected. The core assays appear in Table IV and the sludge sample analyses are at the end of the drill logs in Appendix III.

The core is currently stored at the Silverfields Mine site in Coleman Township, Ontario.

TABLE IV - CORE SAMPLE ASSAYS

DDH	SAMPLE #	FROM (ft)	TO (ft)	LENGTH (ft)	ASSAYS	
					Ag oz/ton	%Cu
LT #1	49848	66.4	67.4	1.0	T	0.03
	49849	68.4	70.0	1.6	T	0.006
	49850	72.0	73.0	1.0	T	0.03
	49851	74.8	75.4	0.6	T	0.004
	49852	103.	104.0	0.7	T	0.04
LT #2	49853	42.8	43.1	0.3	T	-
	49854	79.1	79.6	0.5	T	0.088
	49855	100.1	101.2	1.1	T	0.05
	49856	102.2	102.3	0.1	T	0.004
	49857	103.6	103.9	0.3	T	0.066
LT #3	49858	76.4	77.1	0.7	T	0.15
	49859	84.0	84.8	0.8	T	0.02
	49860	104.3	104.8	0.5	T	0.006
	49861	109.8	110.1	0.3	T	0.09
	49862	131.9	132.4	0.5	T	0.01
	49863	186.7	187.3	0.6	T	0.01

TRENCHING

Two trenches were opened during 1979. The main trench is 90 feet long striking in a southwest direction and 50 feet long striking in a north-northeast direction. This trench is centered on the 1974 trench in which the mineralized calcite vein was exposed and crosses L2+00E at 1+00N (DWG 5416). It is up to 8 feet deep and is now flooded.

The second trench is 95' long and trends north-south. It is located just east of 3+00E at 1+35N. Fresh unaltered diabase was not exposed. No calcite veins were encountered and no samples were taken.

ANALYSES

The core samples and rock samples taken from the main trench were assayed by Bell White Analytical Laboratories Ltd. in Haileybury, Ontario. The silver content of the samples was determined using the fire assay method. Analysis by the atomic absorption method after solution in hot acid was used to establish the copper and cobalt content of the rocks.

The certificates of analysis are in Appendix IV.

GEOPHYSICAL SURVEYS

Magnetometer, Radem VLF-EM and EM-15 surveys were carried out from the grid. Readings were taken at 50' intervals on all lines except the tie lines. The instruments used include a Crone Radem VLF-EM unit, a Scintrex Fluxgate MF-1 magnetometer, and a Geonics EM -15 unit. For a brief technical description of the instruments used see Appendix V.

The central portion of the property in the vicinity of the showing was tested with a Heathkit GD48 metal detector. Only qualitative data were collected. The instrument indicated two anomalous areas; the showing and L0+50E, 5+60N (DWG 5416).

Dr. Z. Dvorak examined the quantitative geophysical data and made the following observations:

Magnetometer Survey

The results of an MF-1 fluxgate magnetometer survey show that several magnetically active zones are present in the survey area (DWG 5624). Scattered, mostly linear anomalies with amplitudes of up to 900 gammas exist. They are mostly confined to the eastern and southern parts of the survey area. The west-central portion of the area is characterized by a number of anomalies

of relatively small areal extent with peak-to-peak amplitudes of up to 1850 gammas.

VLF-EM Survey

A VLF-EM survey delineated two long WNW-ESE trends along the north and south sides of the survey area, and a minor NW-SE trend in its west-central part (DWG 5622). The two anomalies which occur close to the north and south boundaries of the survey area may reflect structural features, such as contacts, faults or ridges. The northern conductor which coincides with a swamp, has produced a broad VLF anomaly. The VLF-EM responses are probably partly caused by the conductive material of the swamp. The VLF-EM responses in the west-central part of the survey area appear to indicate a poorly conducting slab which may extend outside the survey boundary in a northwestern direction. The west-central anomalous area roughly correlates with the magnetically anomalous zone mentioned above.

EM-15 Survey

The electromagnetic survey was performed using a Geonics EM-15 MKI unit. Its small depth penetration (generally less than 10 feet) makes it suitable for locating and following near-surface conductors.

The data indicates that moderate to thick overburden cover exists over most of the survey area (DWG 5623). A notable exception is the west-central portion of the survey area where several attractive EM anomalies were located.

A double, SW-NE trending anomaly extends from L0+50E, 0+25N to L2+50E, 1+25N. Its double-peak character appears to be confirmed by the existence of a magnetic low which separates two magnetic highs showing a general coincidence with EM peaks. The anomaly has been tested with two to four drill holes.

A narrow, short EM anomaly exists on L0+50E at 2+75N. It correlates with a shaft which makes it suspect for culture.

A double-peak anomaly on L4+50E at 3+25N may reflect a set of short, probably E-W

strike extends from L2+50E, 4+40N to L4+00E, 4+4N. It may reflect a set of narrow conductors.

Other anomalies exist outside the west-central anomalous zone. The most attractive among them is located on line 0+00 at 4+00S.

The lack of correlation between EM-15 and VLF-EM anomalies suggests that the EM-15 anomalous features do not have a great depth and lateral extent. It may be, therefore, advisable not to test these anomalies with drilling, but instead to make use of other techniques such as detailed geologic mapping, trenching, and geochemistry.

CONCLUSIONS

The main trench was successful in further exposing a pod-shaped silver-bearing calcite vein. Geological mapping, although incomplete, failed to locate any additional veins or mineralization. The geophysical surveys delineated several anomalous areas that warrant following-up in the 1980 exploration season.

REFERENCES

Thomson, R., Preliminary Report on the Geology of the North
1962 Part of Lorrain Township, (Concessions VII to XI)
District of Timiskaming, O.D.M. PR 1960-1.

O.D.M. Map 2050, Cobalt Silver Area, Northern Sheet (1:12,000)

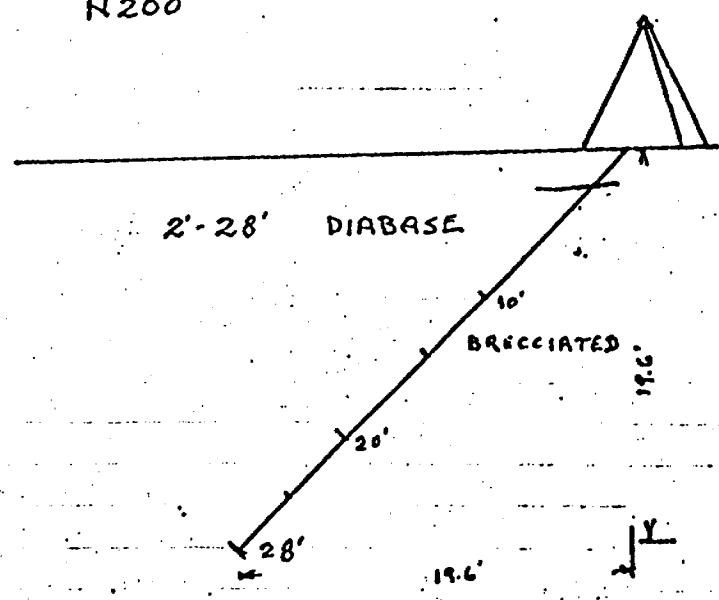
O.D.M. Provisional Map P-61-Part of Lorrain Township, Concession
196 11 and 12, District of Temiskaming (1"=400').

CLAIM 398702 LORRAIN TWP.
D.H. 45-74-1

"A" CORE 1.03"

NOVEMBER 6, 7, 8, 9 & 10, 1974
BOYLES X-RAY DRILL
ALTON MCKNIGHT

E 332
N 200 FROM 3-398702



SCALE 1" = 10'

ASSESSMENT WORK

Rec'd from *Alton McKnight*

Date *Dec 20, 1974*

Douglas E. Burton

DEC 20, 1974.
67-45-74



398702
TRENCH 24

398701
TRENCH 23.5

(Signature)

Jan 15, 1975

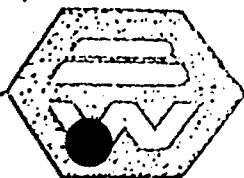
ASSESSMENT WORK

Rec'd from.....

.....

Date.....

Resident's Name.....



BELL-WHITE ANALYTICAL LABORATORIES LTD.

P.O. BOX 187.

HAILEYBURY ONTARIO

TEL: 672-3107

Certificate of Analysis

NO. 16387

DATE: September 13, 1974.

SAMPLE(S) OF: Core(1) Rock(1)

RECEIVED: September 11/74

SAMPLE(S) FROM: Douglas Burton, Esq., Box 293, Cobalt, Ont.

<u>Sample No.</u>	<u>Oz. Gold</u>	<u>Oz. Silver</u>
8406		Trace
8407	Trace	23.35

Trace

Big trace
5.6 g Ag

Sept. 28 1974

Received from *Bob C. McAlister*

four hundred and seventy five $\frac{00}{100}$ *Dollars*

B. White

ASSESSMENT WORK

Rec'd from

Assessed

Date

Resident Analyst

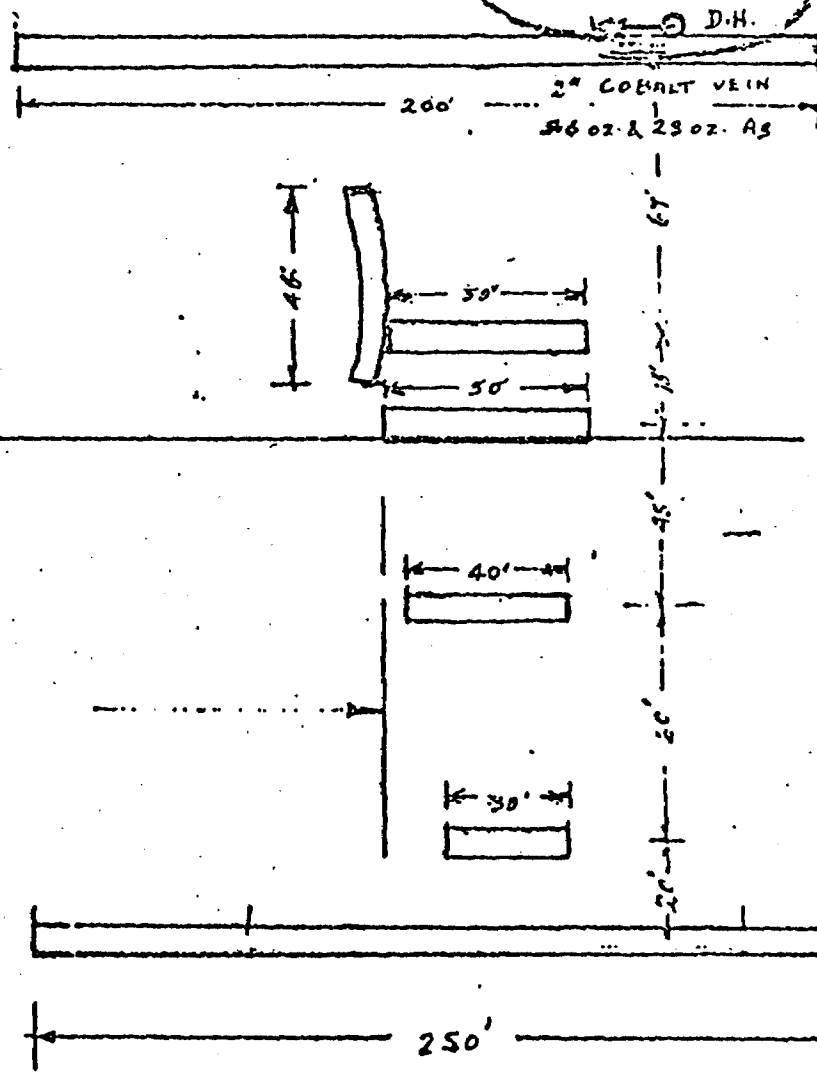
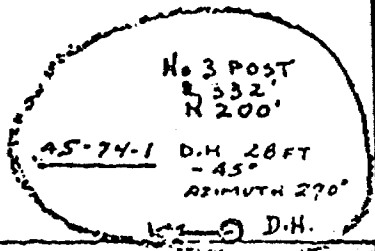
IN ACCORDANCE WITH LONG ESTABLISHED CUSTOM AND USAGE, THESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPENSATE FOR LOSSES AND GAINS INCURRED IN THE FINE ALLOY PROCESS.

Resident Analyst BELL-WHITE ANALYTICAL LABORATORIES LTD.

PER *[Signature]*

BACKHOE TRENCHES 618 FEET
AVER. DEPTH 4 FT.
AVER WIDTH 6 FT

590 CUYDS
\$475.00 (1974)



200'
5'
205'

3-898702

4-398701

SCALE 1" = 50'
RATIO 1:600

BIG & LITTLE FISSURE
LORRAIN TOWNSHIP, ONTARIO
LOTS CONC II W 1/2 OF S 1/2

Douglas, Burton.

NOVEMBER, 1974

67-45-74-1

ASSESSMENT WORK

Part of [unclear]
[unclear]
[unclear]
Resident [unclear]

COMPANY _____

PROPERTY Big Ficcuro

Township Lorraine

Claim No. S 398702

SHEET No. 1
 Started Sept. 28, 1977
 Finished Oct. 29, 1977
 Depth 103

Reference #3 Post - S 398702
 Location 200 feet north,
330 feet east
 Elevation _____

HOLE No. 77 - 1
 Bearing Duo West
 Dip: 40 @ Collar; _____ @ _____

FROM	TO	DESCRIPTION	SAMPLES				ASSAYS						
			NO	FROM	TO	WIDTH							
0.0	2.0	Casing											
2.0	103.0	Mississippian Diabase, fine grained, dark green in color											
		19.9 - 45.2 - coarse grained, mottled green-white in color with a pink cast from well developed orthoclase											
		35.0 - 36.0 - possible fault											
		45.2-61.5 - fine grained											
		61.5-74.0 - mixed coarse and fine grained sections.											
		100.0-101.8 - lost core, possible fault.											
		103.0 END OF HOLE											

ASSESSMENT WORK

Ret'd from _____
 Date: Dec 13 1977

Drilled by R.C. McAllister

Core Size EXT

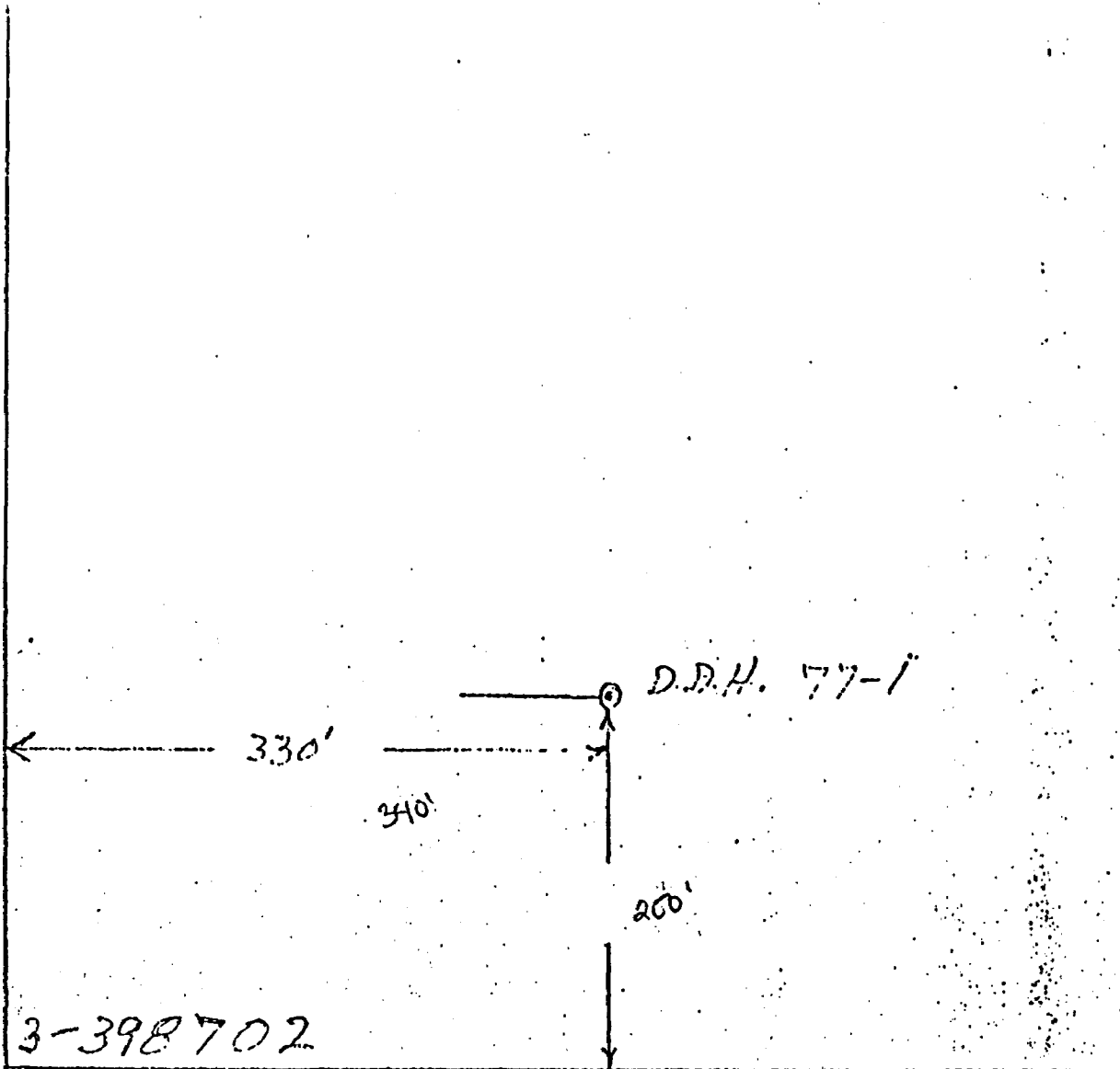
Logged by K.F.O. Flaherty

D.D.H. 77-1

15 Cassie Davis - 1
1.22.92 1.22.92 - 1.22.92 - 1

ASSESSMENT WORK	
Rec'd from	<i>Research</i>
Office	<i>Dept.</i>
Date	<i>Oct. 12/77</i>
	<i>A. Powell</i>
	Geologist

Section
 D.D.H. 77-1
 Claim 6-398702
 Laramie Twp.
 Scale: 1 in = 20 ft.
 Oct. 28/77 HCF



3-398702

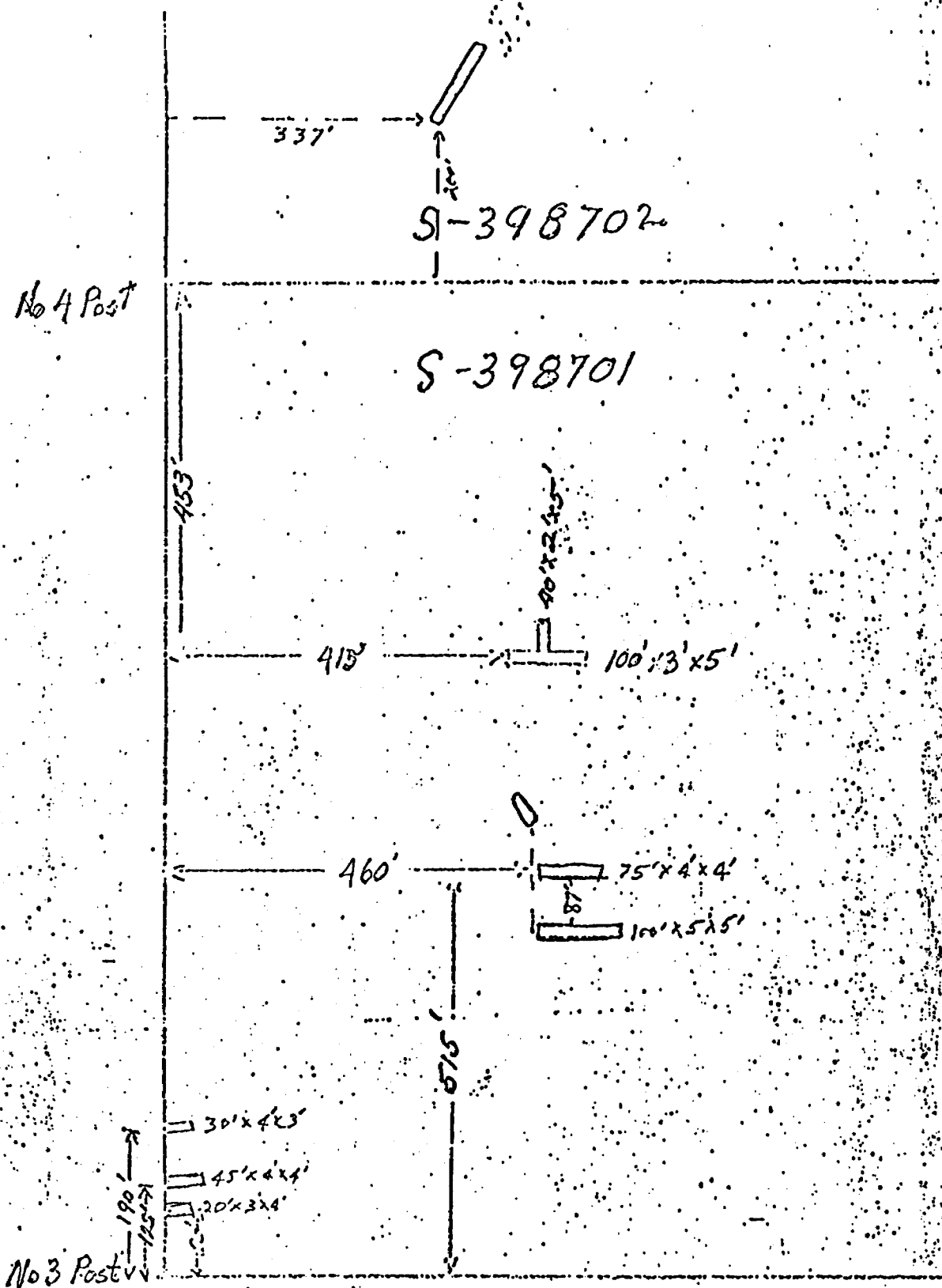
A-398701

ASSESSMENT WORK	
Rec'd from	<i>Leung</i>
	<i>Office, Dept.</i>
Date	<i>Dec 17 1967</i>
	<i>Knell</i>
	Resident Geologist

Sketch Plan
showing

Location D.D.H. 77-1
Claims S-398702
Lorraine T. Co.
Oct 1967

Scale: 1 in. = 100 ft.



ASSESSMENT WORK
 Rec'd from *Ferguson*
D. J. Ferguson
 Date *11/12/77*
 U.S. Geological Survey

Sketch Plan
 showing
 Trenching on
 Claim S-398701
 1977
 Scale; 1 in. = 200 ft
 K.O.F. Oct 1

COMPANY SILVERFIELDS MINING CORP. LTD.PROPERTY McAllister OptionTownship Lorrain TownshipClaim No. S-398702SHEET No. 1
Started July 9, 1979
Finished July 12, 1979
Depth 201Reference #3 Post 398702
Location 35' North
235 East
Elevation 960 deg.HOLE No. LT #1
Bearing North
Dip 45 ° Collar; °

FROM	TO	DESCRIPTION	SAMPLES			ASSAYS				
			NO	FROM	TO	WIDTH				
0	- 16	Casing								
16.0	- 47	Keewatin andesite & tuffaceous, abundant epidote and aplite alteration, abundant red stain.								
47		Diabase: Nipissing Medium gray, medium grained to very coars'd highly altered epidote and sericite large phenos								
28.0	-	1/2 grey calcite chn & med slip			70 core					
30.3		1/2 aplite stringer & slip			60 core					
35.0		1/8 pink calcite			30 core					
38	- 39	series chn slips red stain			30-40 core					
41	- 43	heavy red stain slip			30 core					
47.5		1/2 pink aplite			40 core					
44	- 46	heavy shearing 10-15 core wall rock altered bleached contact area								
48.5	- 56.0	altered shear zone, rusty broken core trend			30 core					
51.7		1/2 calcite chn			30 core					
52.2		1/8 calcite slip			60 core					
53.8		1/16 calcite SLIP lipstick stain			20 core	lipstick stain				
53	- 55	fine grain section								
54.5	- 59.0	calcite zone with some fine grain calcite sections top section 6"								
		cobalt breccia			20 core					
58.0		3 1/2 - 3/8 calcite stringer			70 core					
59.3		2" calcite breccia in contact with red stain F.Z. 1.0'								
63.0		1.0 calcite breccia trend			60 core					
		Diabase walls very coarse with calcite & pink altered			65.0	11 core				

Drilled by BARRON DRILLINGCore Size AQ 1 1/2Logged by H.A. Moore, Geologist

COMPANY SILVERFIELDS MINING CORP. LTD.

PROPERTY _____

Township Lorrain Township

Claim No. _____

SHEET No. 2

Reference _____

HOLE No. IT #1

Started _____

Location _____

Bearing _____

Finished _____

Elevation _____

Dip: _____ e Collar; _____ e

Depth _____

FROM	TO	DESCRIPTION	SAMPLES				ASSAYS				
			NO	FROM	TO	WIDTH	Ag	Cu			
65	- 68	fine grain section						Ag	Cu		
66.7		3" calcite stringer 70 core NVM	49848	66.4	67.4			T	.03		
68.6		1" calcite stringer 40 core	849	68.4	70.0			T	.006		
69.6		3/8 & 1/2 calcite stringer 80 core some zoning									
71	- 73	cobalt zoned calcite	850	72.0	73.0			T	.03		
71.0		2" calcite & slip 10 core NVM									
72.5		3/8 - 1/2 calcite stringer 15-30 core good zoning									
72.7		1/8 calcite stringer 80 core									
75.0		2" pink calcite breccia 45 core stringer, good zoning, associated fine grain section	851	74.8	75.4			T	.004		
75	- 79	fine grain section									
77.8		1/2 grey calcite associate 1/2 pink aplite 40 core tr cpy									
79.8		3/4 pink calcite & chl slip 40 core									
80.5		calcite slips all angles									
81.2		1/2 calcite chl 20 core									
82.8		1/8 calcite pink 5 core									
83.6		3" pink calcite breccia 65 core strong chl									
84.1		1/8 pink calcite aplite 65 core									
88 +		Diabase: more csq abundant, phenos larger, epidote and sericite with heavy pink inflection									
89.5		3/8 calcite shear & chl 30 core									
91.5		2 1/16 calcite slip 15 core									
94.0		1/8 pink calcite & chl 70-90 core									
96.0		chlorite wafer in core									

Drilled by BARRON DRILLING

Core Size _____

Logged by H.A. Moore

COMPANY SILVERFIELDS MINING CORP. LTD.

PROPERTY _____

Township Lorrain Township

Claim No. _____

SHEET No. #3
 Started _____
 Finished _____
 Depth _____

Reference _____
 Location _____
 Elevation _____

HOLE No. LT #1
 Bearing _____
 Dip: _____ e Collar: _____ e

FROM	TO	DESCRIPTION	SAMPLES			ASSAYS				
			NO	FROM	TO	WIDTH				
97		1.0 fine grain section accent 20 core by calcite slips								
98 +		more aplitic inclusion pinkish calcite to 123								
102.6		fresh 1/4 calcite & red stain 45 core								
103.0		fresh 1/16 calcite & red 60 core stain					Ag	Cu		
103.5		1/2 bleached cpy in core	49852	103.3	104.0		T	.04		
103.8		1/8 calcite slip 70 core								
105.0		fresh calcite find 15 core tr py								
107.2		1/2 calcite stringer 80 core NVM								
109.5		upper edge of F.Z.								
110.0		1/2 calcite & chl 5 core								
110.3		4" calcite breccia core 30 core								
111.2 - 112.8		cobalt all angles 30 core								
113.2		weak calcite injection 30 core								
114.2		1/2 fresh calcite 20 core								
119.3		leather red stain 5 core								
119.7		leather red stain 65 core								
120.6		6" epidote & calcite 20 core injection								
123.0		1/2 calcite 25 core								
124.7		broken oxide chl slip 25 core								
124 +		phenos much larger than normal								
126.2		chl slip 80 core								
128.5		mtn leather calcite 50 core								
130.1		1/2 calcite stringer 80 core								
130 +		Diabase: fine grain, uniform, regular								

Drilled by BARRON DRILING

Core Size _____

Logged by H.A. Moore,

COMPANY SILVERFIELDS MINING CORP. LTD.

PROPERTY _____

Township Lorrain Township

Claim No. _____

SHEET No. #4
 Started _____
 Finished _____
 Depth _____

Reference _____
 Location _____
 Elevation _____

HOLE No. LT #1
 Bearing _____
 Dip: _____ @ Collar; _____ @ _____

FROM	TO	DESCRIPTION	SAMPLES			ASSAYS						
			NO	FROM	TO	WIDTH						
135.2		heavy chl shearing	50	core								
139.7		2" calcite breccia	40	core								
140.9		½ pink aplite	40	core								
143.0		1/64 calcite & red stain	15	core								
143.9		½ altered zone & 1/6 cal.	15	core								
144.7		½ calcite & rusty chl slip	15	core								
146.0		fresh calcite chl	11	core								
153.0		½ aplite stringer	60	core associated								
		calcite chl slip	30	core								
153.2		½ fresh calcite	30	core shear								
155.5		series fresh calcite	5	core								
		fractures										
157.4		calcite & red stain shear	20	core								
157	- 160	red stained throughout core										
		calcite	45	core								
160 +		normal but more coarse										
		diabase with occasional reddish section										
163.2		½ qtz aplite stringer	45	core								
		associated calcite breccia										
168.0		1/8 calcite & red stain	20	core								
		slip										
		wallrock red 1.0 feet.										
170.4		½ calcite & associated slip	20	core								
172	- 174	series 1/8 weak calcite	40	core & 11 core								
176.0		calcite chl slip	10	core								
177.5		1/8 pink calcite	5	core								
179.0		heavy chl & red stain	10	core								
180.5		2" calcite breccia	5	core								
181.7		1" ½ calcite breccia	20	core								

Drilled by BARRON DRILLING

Core Size _____

Logged by H.A. Moore

COMPANY SILVERFIELDS MINING CORP. LTD.

PROPERTY _____

Township Lorrain Township

Claim No. _____

SHEET No. #5

Started _____

Finished _____

Depth _____

Reference _____

Location _____

Elevation _____

HOLE No. LT #1

Bearing _____

Dip: _____ @ Collar; _____ @ _____

FROM	TO	DESCRIPTION	SAMPLES				ASSAYS							
			NO	FROM	TO	WIDTH								
188.0		3/8 aplitic stringer			70 core									
188	- 198	heavy chl slips			50 core									
193.5		1/2 calcite in core			40 core									
200		calcite 1/2 shear & 1/2 aplite	45		70									
201.0		End of Hole												
										Ag				
		SLUDGE SAMPLES	49758	0	20	10				.1				
			759	20	30					.1				
			760	30	40					.2				
			761	40	50					T				
			762	50	60					T				
			763	60	70					.1				
			764	70	80					T				
			765	80	90					.1				
			766	90	100					T				
			767	100	110					T				
			768	110	120					T				
			769	120	130					.2				
			770	130	140					T				
			771	140	150					T				
			772	150	160					T				
			773	160	170					T				
			774	170	180					T				
			775	180	190					T				
			776	190	200					.1				

Drilled by BARRON DRILLING

Core Size _____

Logged by H.A. Moore

COMPANY SILVERFIELDS MINING CORP. LTD.PROPERTY McAllister OptionTownship Lorrain TownshipClaim No. S-398702SHEET No. #1
Started July 12, 1979
Finished July 17, 1979
Depth 199Reference #3 Post 398702
Location 35' North
160.0' East
Elevation 965HOLE No. LT #2
Bearing North
Dip: -45 @ Collar; _____ @ _____

FROM	TO	DESCRIPTION	SAMPLES			ASSAYS							
			NO	FROM	TO	WIDTH							
0	- 48	Casing											
8.0	- 20.0	Keewatin: Medium grey massive tuffaceous rusty slips pitted out highly altered chlorite											
20		Diabase: Nipissing medium grey grained massive some fine grain section and abundant phenos with csq diabase											
15.0		rusty oxide fracture	15	core									
23.7		1" calcite stringer & shear	30	core									
24.1		1" calcite stringer & slip	60	core									
25	- 28	fine grain section series	50-60	core									
		weak calcite											
28.6		½ vugged formed F.Z.	30	core									
29.2		½ pink calcite stringer	70	core									
30.2		½ calcite chloride shear	20	core									
31.9		1/32 calcite wafer	50	core									
36	- 45	fine grain section altered	70	core									
		and calcite banding											
40.2		calcite fracture	11	core									
41.0		1/16 pink calcite and altered	60	core									
		bank											
42.0		1/16 pink calcite stringer	30	core									
42.9		½ calcite & quartz	90	core tr shear 49853	42.8	43.1			Ag	Cu			
		stringer	85	core					T	-			
43.8		1/8 vuggy calcite stringer	70	core									
		& leather											
45.0		contact very sharp											
45		Diabase: made csq uniform more aplitic, some epidote											

Drilled by BARRON DRILLINGCore Size AQ 1½Logged by H.A. Moore

COMPANY SILVERFIELDS MINING CORP. LTD.

PROPERTY _____

Township Lorrain Township

Claim No. _____

SHEET No. #2
Started _____
Finished _____
Depth _____Reference _____
Location _____
Elevation _____HOLE No. LT #2
Bearing _____
Dip: _____ @ Collar; _____ @ _____

FROM	TO	DESCRIPTION	SAMPLES				ASSAYS					
			NO	FROM	TO	WIDTH						
48.3		3/8 pink calcite stringer 90 core										
49.0		1/2 pink aplite stringer 20 core										
51	- 53	rusty slip 11 core										
52.5		1/2 vuggy red stained calcite 20 core										
62	- 66	fine grained section calcite cobalt upper contact sharp										
66	- 73	Diabase: more regular medium csq and more greyish series chl slips 30 core										
68	- 70	series 1/2 calcite stringer red 30 core: FZ stained and chl along slips										
72.8		1/2 calcite stringer & red 80 core aplite										
73 +		more epidote and pheon becoming clayey Diabase: medium csq more epidote										
73.0		1/2 pink calcite stringer 70 core										
73	- 74	3 1/8 calcite stringer all 30 core NVM angles to core										
75.7		1/2 pink aplitic calcite stringer 20 core										
78.5		1/16 calcite stringer 20 core							Aq	Cu		
79.3		3/4 associated wallrock alt. diss cpy wall 15 c	49854	79.1	79.6			T		.088		
82.0		1/16 leather calcite 30 core										
85.0		1/2 calcite shear breccia 70 core NVM										
86.2		1/2 calcite 30 core pink altered walls										
88.9		calcite chl slip 30 core										
90.4		3/8 pink calcite slip 70 core										
94	- 99.5	series weak 1/8 calcite 70-90 core										
101.0		1 1/2 calcite & slip 30 core tr NVM	49855	100.1	101.2			T		.05		
102.4		1 1/2 calcite stringer & slip 30 core tr	856	102.2	102.3			T		.004		
103.7		1/2 calcite stringer & cpy 70 core	857	103.6	103.9			T		.066		

Drilled by BARRON DRILLING

Core Size _____

Logged by H. A. Moore

COMPANY SILVERFIELDS MINING CORP. LTD.

PROPERTY _____

Township Lorrain Township

Claim No. _____

SHEET No. #3
Started _____
Finished _____
Depth _____Reference _____
Location _____
Elevation _____HOLE No. LT #2
Bearing _____
Dip: _____ @ Collar; _____ @ _____

FROM	TO	DESCRIPTION	SAMPLES				ASSAYS						
			NO	FROM	TO	WIDTH							
113	- 113.8	fine grained section chilled											
114.5	- 115.4	fine grained section 60 core											
122 +		grain sized to normal 30 core typical chl slips											
126.6		2" calcite & pink chl shear 20 core red stains 20 core											
130.6		3/4 calcite aplite breccia 80 core											
130.6 +		heavy epidote like dikelet & pink inflection some cobalt stringer pinkish											
131.8	- 133.0	several 1/4 - 3/8 pink calcite 30 core											
134.0		calicte chl shear 70 core											
135.9		1/2 - 3/4 pink calcite & 30 core epidote											
140.2		1/2 chl shear 60 core slickenside											
140 +		Diabase: more normal											
145.5		1/2 calicte chl breccia 45 core slickenside											
147.0		heavy chl leather 10 core											
150	- 153	heavy calcite leather shear 30 core zone rehealed pink calcite breccia											
157.3	- 167.6	14" fine grain section 45 core associated calcite & aplite shear											
159.0		3 1" calcite & aplite stringer 65 core NVM											
160.5	- 163.5	50% calcite aplite content 60 core NVM breccia zone											
163.0		1/2 vuggy pink calcite shear 45 core											
166.0		several 1/8 calcite stringer 40 core											
167.5		1" calcite breccia 5 core											
167 +		Diabase: csq											
170.0		1/2 quartz cb aplite 70 core											

Drilled by BARRON DRILLING

Core Size _____

Logged by H. A. Moore

COMPANY SILVERFIELDS MINING CORP. LTD.

PROPERTY _____

Township Lorrain Township

Claim No. _____

SHEET No. #4
Started _____
Finished _____
Depth _____

Reference _____
Location _____
Elevation _____

HOLE No. LT #2
Bearing _____
Dip: _____ @ Collar; _____ @ _____

FROM	TO	DESCRIPTION	SAMPLES			ASSAYS		
			NO	FROM	TO	WIDTH		
176.7		$\frac{1}{4}$ aplite stringer 85 core						
179		several weak calcite stringer 40 core						
188.5		calcite breccia F.Z. breccia 11 core rehealed						
185.0		crystals of calcite with trend 30 core						
188.5		red mud						
191.0	- 193.5	calcite breccia F.Z. 70 core						
193.5		2" calcite breccia 70 core						
193.8		mud slip 70 core						
197.0		$\frac{1}{8}$ pink calcite stringer 11 core						
199.0		End of hole						

Drilled by BARRON DRILLING

Core Size _____

Logged by H. A. Moore

COMPANY SILVERFIELDS MINING CORP. LTD.

PROPERTY _____

Township Lorrain Township

Claim No. _____

SHEET No. #5
 Started _____
 Finished _____
 Depth _____

Reference _____
 Location _____
 Elevation _____

HOLE No. LT #2
 Bearing _____
 Dip: _____ @ Collar; _____ @ _____

FROM	TO	DESCRIPTION	SAMPLES				ASSAYS			
			NO	FROM	TO	WIDTH	Ag			
		SLUDGE SAMPLES	49777	10	20		T			
			778	20	30		.1			
			779	30	40		.1			
			780	40	50		T			
			781	50	60		T			
			782	60	70		T			
			783	70	80		T			
			784	80	90		T			
			785	90	100		T			
			786	100	110		.1			
			787	110	120		T			
			788	120	130		T			
			789	130	140		T			
			790	140	150		T			
			791	150	160		T			
			792	160	170		T			
			793	170	180		T			
			794	180	190		.1			
			819	190	200		T			

Drilled by BARRON DRILLING

Core Size _____

Logged by H. A. Moore

COMPANY SILVERFIELDS MINING CORP. LTD.PROPERTY McAllister OptionTownship Lorrain TownshipClaim No. S-398702

SHEET No. #1
 Started July 17, 1979
 Finished July 20, 1979
 Depth 200 feet

Reference #3 Post 398702
 Location 50' North
285.0' East
 Elevation 945.0 feet

HOLE No. LT #3
 Bearing North
 Dip: -45 deg Collar; e

FROM	TO	DESCRIPTION	SAMPLES				ASSAYS						
			NO	FROM	TO	WIDTH							
0	-	14.0											
14	-	23.0											
17.4													
22	-	23.0											
23.0	-	200											
27.7													
30.0													
31.4													
33	-	42											
36.0													
38.0													
41.5													
43	-	53											
44.7													
46.4													
47	-	49											
50.2													
50.7													
58.7													
59.7													
64	-	65											
65													

Drilled by BARRON DRILLINGCore Size AQ 1/2Logged by H.A. Moore

COMPANY SILVERFIELDS MINING CORP. LTD.

PROPERTY _____

Township Lorrain Township

Claim No. _____

SHEET No. #2

Reference _____

HOLE No. LT #3

Started _____

Location _____

Bearing _____

Finished _____

Elevation _____

Dip: _____ @ Collar; _____ @ _____

Depth _____

FROM	TO	DESCRIPTION	SAMPLES			ASSAYS		
			NO	FROM	TO	WIDTH		
73.0		2 3/8 calcite stringer						
73.8		1/16 calcite & chl shear						
75.6		3/8 calcite stringer					Ag	Cu
77.0		1/2 calcite stringer	49858	76.4	77.1		T	.15
78.6		1/2 calcite stringer						
79.3		3/8 pink calcite						
80.0		1/32 wafer & slip						
81.0		3/8 pink calcite						
84.2		1" pink calcite stringer	49859	84.0	84.8		T	.02
88.2		1/2 calcite						
92.6		1" calcite breccia						
93 +		pink inflection in core -117						
93.0		3/8 mud F. Z.						
94.5 -	96.0	series pink calcite						
100.6		1/2 pink calcite						
104.3		1/2 fresh rehealed						
104.7		1/2 pink calcite stringer	49860	104.3	104.8		T	.006
107.2		heavy rusty slip						
110.0		1" calcite breccia	861	109.8	110.1		T	.09
111.0		series 1/4 - 3/4 - 1/16 calcite in core all angles						
112.0		2" calcite breccia						
113.0		2" calcite breccia						
114.1		1" calcite breccia						
115.1		1 1/2 calcite breccia						
117 +		more regular diabase						
130.0		2" pink calcite breccia	862	131.9	132.4		T	.01
132.1		1" calcite shear						
134.0		1.0 cobalt injection pink						

Drilled by BARRON DRILLINGCore Size AQLogged by H.A. Moore

COMPANY SILVERFIELDS MINING CORP. LTD.

PROPERTY _____

Township Lorrain Township

Claim No. _____

SHEET No. #3
 Started _____
 Finished _____
 Depth _____

Reference _____
 Location _____
 Elevation _____

HOLE No. LT #3
 Bearing _____
 Dip: _____ @ Collar; _____ @ _____

FROM	TO	DESCRIPTION	SAMPLES				ASSAYS					
			NO	FROM	TO	WIDTH						
137.3		4" calcite breccia-shear	30	core								
138.0		½ - 3/8 calcite stringer	30	core tr cpy								
139.3		½ calcite stringer	85	core								
140 -	140.5	three ½ calcite stringer	50	core								
142.4		1½ calcite shear	10	core NVM								
143.2		1" calcite breccia	40	core wallrock altered								
145.7		½ pink calcite stringer	20	core								
147.0		½ pink calcite	20	core								
152 -	153	series 3 ½ calcite stringer	40	core NVM								
160.0		½ pink calcite breccia	20	core								
163.0 -	170.0	50% calcite breccia F.Z.	10	core								
168 +		very large phenos of epidote & feldspar										
171.1		½ calcite & rusty shear	10	core								
176.1		½ pink calcite	20	core					Ag	Cu		
182.2		½ pink calcite stringer	15	core								
187.0		2" calcite breccia	20	core tr cpy	49863	186.7	187.3		T	.01		
188		fine grained diabase										
189.0		½ pink calcite & quartz	15	core								
196.7		2 ½ calcite stringer & wallrock altered	50	core								
200		End of hole										

Drilled by BARRON DRILLING

Core Size _____

Logged by H. A. Moore

COMPANY SILVERFIELDS MINING CORP. LTD.

PROPERTY _____

Township Lorrain Township

Claim No. _____

SHEET No. #4

Reference _____

HOLE No. IT #3

Started _____

Location _____

Bearing _____

Finished _____

Elevation _____

Dip: _____ @ Collar; _____ @ _____

Depth _____

FROM	TO	DESCRIPTION	SAMPLES			ASSAYS				
			NO	FROM	TO	WIDTH				
		SLUDGE SAMPLES	49801	20	30		T			
			802	30	40		T			
			803	40	50		T			
			804	50	60		T			
			805	60	70		T			
			806	70	80		T			
			807	80	90		T			
			808	90	100		T			
			809	100	110		T			
			810	110	120		T			
			811	120	130		T			
			812	130	140		T			
			813	140	150		T			
			814	150	160		T			
			815	160	170		T			
			816	170	180		T			
			817	180	190		T			
			818	190	200		T			

Drilled by _____

Core Size _____

Logged by _____



BELL - WHITE ANALYTICAL LABORATORIES LTD.

P.O. BOX 187.

HAILEYBURY, ONTARIO

TEL: 672-3107

Certificate of Analysis

NO. 11790

DATE: July 17, 1979.

SAMPLE(S) OF: Sludge(41)

RECEIVED: July 16/79.

SAMPLE(S) FROM: Mr. H. Moore, Teck Corporation Ltd., Silverfields Div.

<u>Sample No.</u>	<u>Oz. Silver</u>	<u>Sample No.</u>	<u>Oz. Silver</u>
49734	0.9	49755	0.1
5	0.7	6	Trace
6	0.1	7	0.1
7	0.1	8	0.1
8	Trace	9	0.1
9	0.1	49760	0.2
49740	0.1	1	Trace
1	0.1	2	Trace
2	0.1	3	0.1
3	0.1	4	Trace
4	0.1	5	0.1
5	0.1	6	Trace
6	Trace	7	Trace
7	0.1	8	Trace
8	0.2	9	0.2
9	0.1	49770	Trace
49750	0.1	1	Trace
1	0.7	2	Trace
2	0.5	3	Trace
3	Trace	4	Trace
4	0.1		

IN ACCORDANCE WITH LONG-ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND SILVER VALUES REPORTED ON THESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPENSATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ASSAY PROCESS.

BELL-WHITE ANALYTICAL LABORATORIES LTD.

PER



Certificate of Analysis

NO. 12110

DATE: July 20, 1979.

SAMPLE(S) OF: Sludge(20)

RECEIVED: July 20/79.

SAMPLE(S) FROM: Mr. H. Moore, Teck Corporation Ltd., Silverfields Div.

<u>Sample No.</u>	<u>Oz. Silver</u>
49775	Trace
6	0.1
7	Trace
8	0.1
9	0.1
49780	Trace
1	Trace
2	Trace
3	Trace
4	Trace
5	Trace
6	0.1
7	Trace
8	Trace
9	Trace
49790	Trace
1	Trace
2	Trace
3	Trace
4	0.1

IN ACCORDANCE WITH LONG-ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND SILVER VALUES REPORTED ON THESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPENSATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ASSAY PROCESS.

BELL-WHITE ANALYTICAL LABORATORIES LTD.

PER 



BELL - WHITE ANALYTICAL LABORATORIES LTD.

P.O. BOX 187.

HAILEYBURY, ONTARIO

TEL: 672-3107

Certificate of Analysis

NO. 12424

DATE: July 26, 1979.

SAMPLE(S) OF: Sludge(42)

RECEIVED: July 25/79.

SAMPLE(S) FROM: Mr. H. Moore, Teck Corporation Ltd., Silverfields Div.

<u>Sample No.</u>	<u>Oz. Silver</u>	<u>Sample No.</u>	<u>Oz. Silver</u>
49801	Trace	49822	0.2
2	Trace	3	0.1
3	Trace	4	0.1
4	Trace	5	0.1
5	Trace	6	Trace
6	Trace	7	Trace
7	Trace	8	Trace
8	Trace	9	Trace
9	Trace	49830	Trace
49810	Trace	1	0.1
1	Trace	2	Trace
2	Trace	3	Trace
3	Trace	4	0.1
4	Trace	5	0.1
5	Trace	6	0.1
6	Trace	7	0.1
7	Trace	8	0.1
8	Trace	9	Trace
9	Trace	49840	Trace
49820	0.2	1	0.5
1	0.1	2	1.7

IN ACCORDANCE WITH LONG-ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND SILVER VALUES REPORTED ON THESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPENSATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ASSAY PROCESS.

BELL-WHITE ANALYTICAL LABORATORIES LTD.

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BELL - WHITE ANALYTICAL LABORATORIES LTD.

P.O. BOX 187.

HAILEYBURY, ONTARIO

TEL: 672-3107

Certificate of Analysis

NO. 13295

DATE: August 8, 1979.

SAMPLE(S) OF: Rock(3)

RECEIVED: August 7/79.

SAMPLE(S) FROM: Mr. H. Moore, Teck Corporation Ltd., Silverfields Div.

<u>Sample No.</u>	<u>Oz. Silver</u>	<u>% Cobalt</u>	<u>% Nickel</u>
12943	34.34	10.2	
4	12.76	4.90	
5	56.48	5.80	8.8

IN ACCORDANCE WITH LONG-ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND SILVER VALUES REPORTED ON THESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPENSATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ASSAY PROCESS.

BELL-WHITE ANALYTICAL LABORATORIES LTD.

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BELL - WHITE ANALYTICAL LABORATORIES LTD.

P.O. BOX 187.

HAILEYBURY, ONTARIO

TEL: 672-3107

Certificate of Analysis

NO. 13710

DATE: August 17, 1979.

SAMPLE(S) OF: Rock(2)

RECEIVED: August 17/79.

SAMPLE(S) FROM: Mr. H. Moore, Teck Corporation Ltd., Silverfields Div.

<u>Sample No.</u>	<u>Oz. Silver</u>	<u>% Cobalt</u>	<u>% Nickel</u>
12946	1196.0	7.36	7.28
12947	2.20	0.020	

IN ACCORDANCE WITH LONG-ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND SILVER VALUES REPORTED ON THESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPENSATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ASSAY PROCESS.

BELL-WHITE ANALYTICAL LABORATORIES LTD.

PER 



BELL - WHITE ANALYTICAL LABORATORIES LTD.

P.O. BOX 187.

HAILEYBURY, ONTARIO

TEL: 672-3107

Certificate of Analysis

NO. 12982

DATE: July 31, 1979.

SAMPLE(S) OF: Core(15)

RECEIVED: July 30/79.

SAMPLE(S) FROM: Mr. H. Moore, Teck Corporation Ltd., Silverfields Div.

<u>Sample No.</u>	<u>Oz. Silver</u>	<u>% Copper</u>
49843	2.1	
4	0.1	
5	Trace	
6	Trace	
7	Trace	
8	Trace	0.028
9	Trace	0.006
49850	Trace	0.026
1	Trace	0.004
2	Trace	0.040
3	Trace	
4	Trace	0.088
5	Trace	0.048
6	Trace	0.004
7	Trace	0.066

IN ACCORDANCE WITH LONG-ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND SILVER VALUES REPORTED ON THESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPENSATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ASSAY PROCESS.

BELL-WHITE ANALYTICAL LABORATORIES LTD.

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BELL - WHITE ANALYTICAL LABORATORIES LTD.

P.O. BOX 187.

HAILEYBURY, ONTARIO

TEL: 672-3107

Certificate of Analysis

NO. 13066

DATE: August 2, 1979.

SAMPLE(S) OF: Core(6)

RECEIVED: August 2/79.

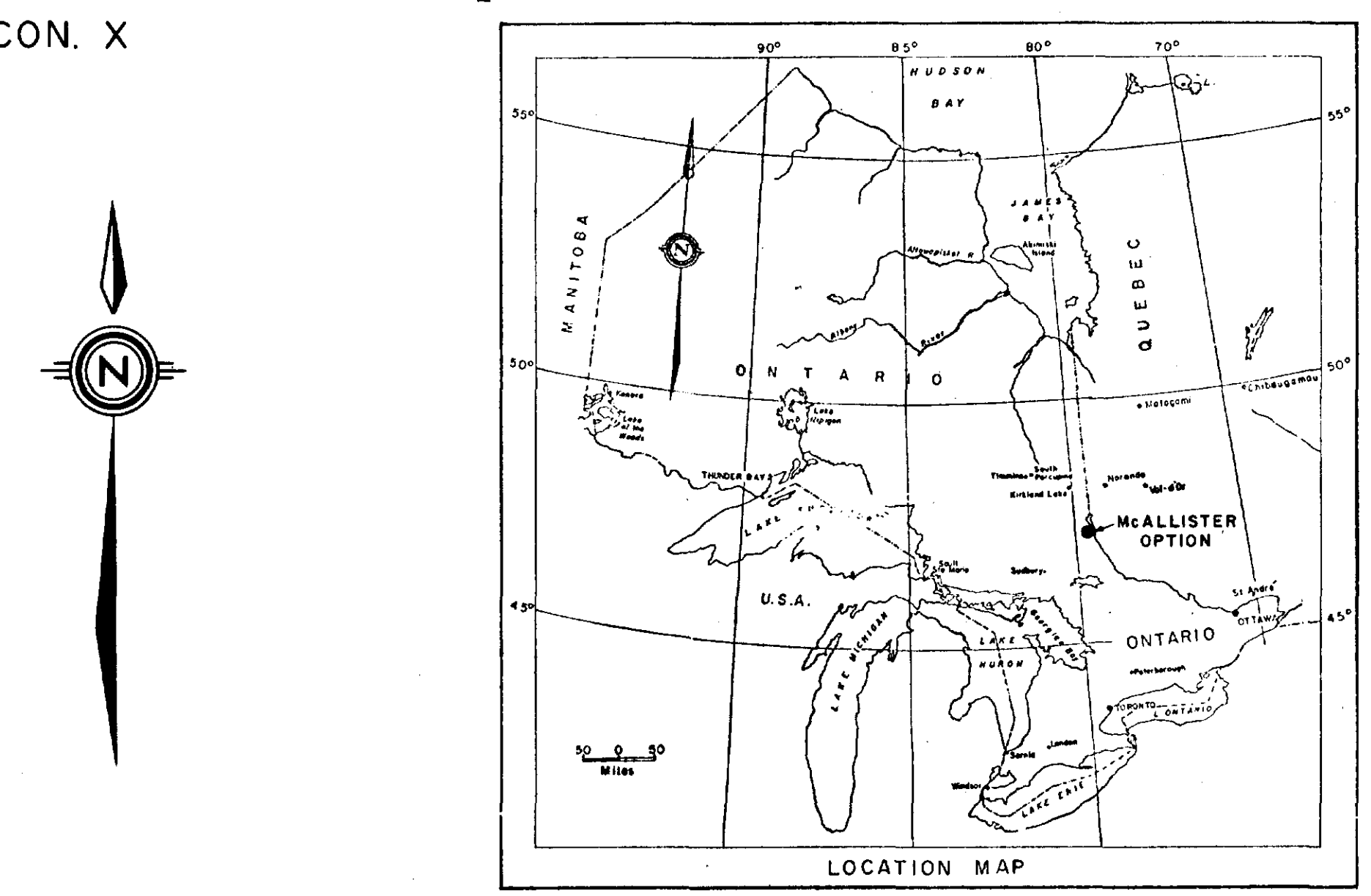
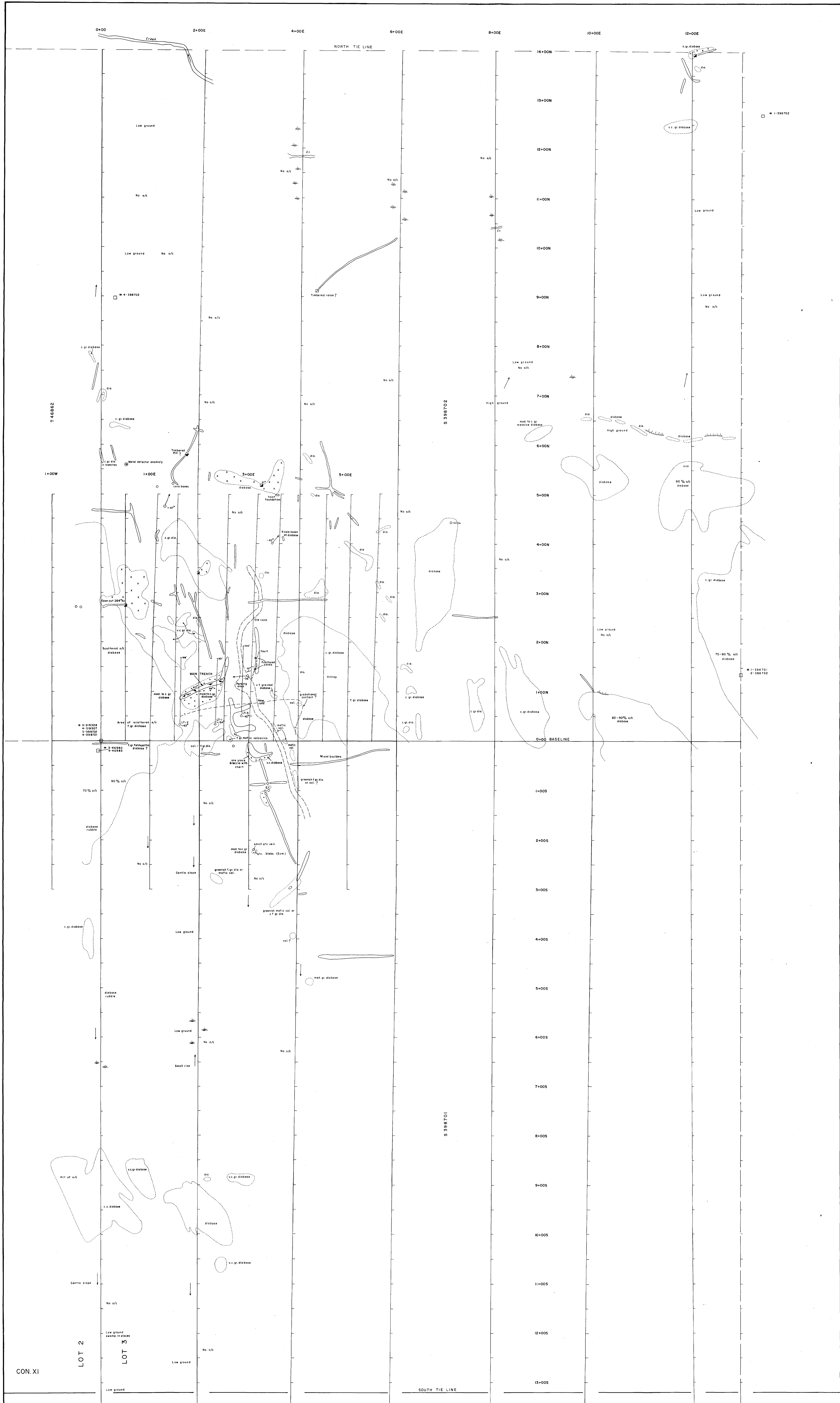
SAMPLE(S) FROM: Mr. H. Moore, Teck Corporation Ltd., Silverfields Div.

<u>Sample No.</u>	<u>Oz. Silver</u>	<u>% Copper</u>
49858	Trace	0.15
9	Trace	0.016
49860	Trace	0.006
1	Trace	0.088
2	Trace	0.014
3	Trace	0.010

IN ACCORDANCE WITH LONG-ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND SILVER VALUES REPORTED ON THESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPENSATE FOR LOSSES AND GAINS INHERENT IN THE FINE ASSAY PROCESS.

BELL-WHITE ANALYTICAL LABORATORIES LTD.

PER



LEGEND

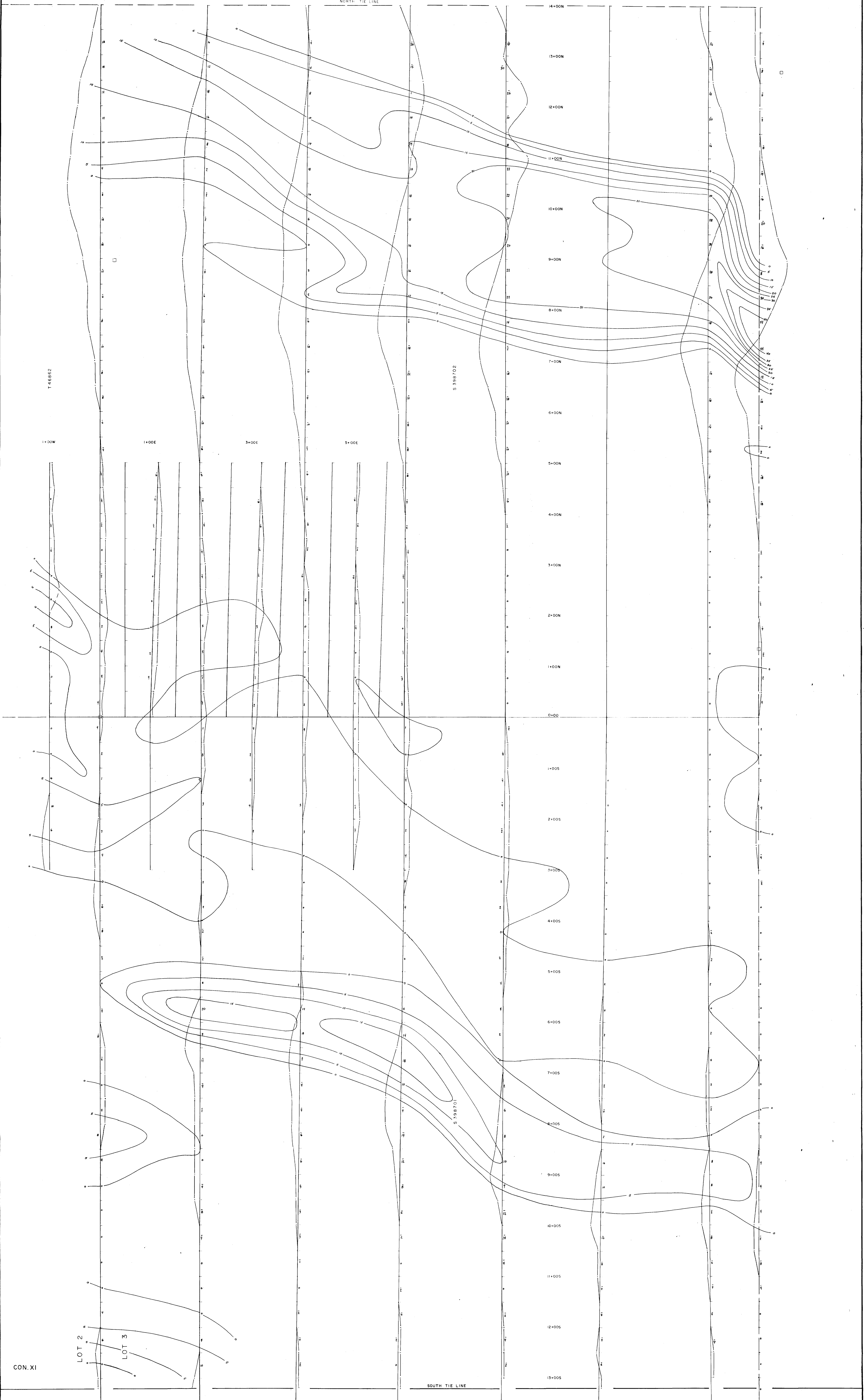
GEOLOGY		SYMBOLS		ABBREVIATIONS	
□	Diabase	○	Outcrop/Outcrop Area	dia.	diabase
■	Volcanics	○	Shaft/Pit	vol.	volcanics
○		—	Trench	f.	fine
○		○	Dump/Muck pile	med.	medium
○		○	Diamond Drill hole	c.	coarse
○		○	Bedding/Schistosity	v.	very
○		○	Claim post (located)	gr.	grained
○		○	Ridge or cliff	a/c	outcrop
○		○	Slope of terrain	qz.	quartz
○		○	Swamp	pgm.	pegmatite
○		○	Joints	Az	Azimuth
○		○		Cr.	Creek

GEOLOGY
OF THE
McALLISTER OPTION
LORRAIN TOWNSHIP
PROVINCE OF ONTARIO
FOR
TECK CORPORATION LTD.
BY
TECK EXPLORATIONS LIMITED

50 0 50 100 feet

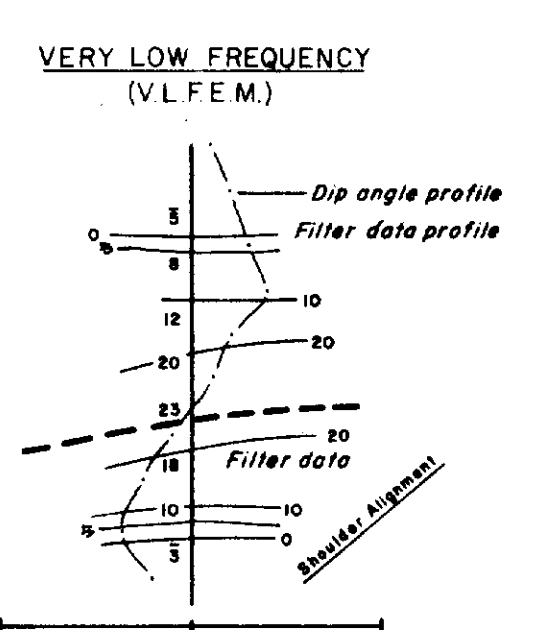
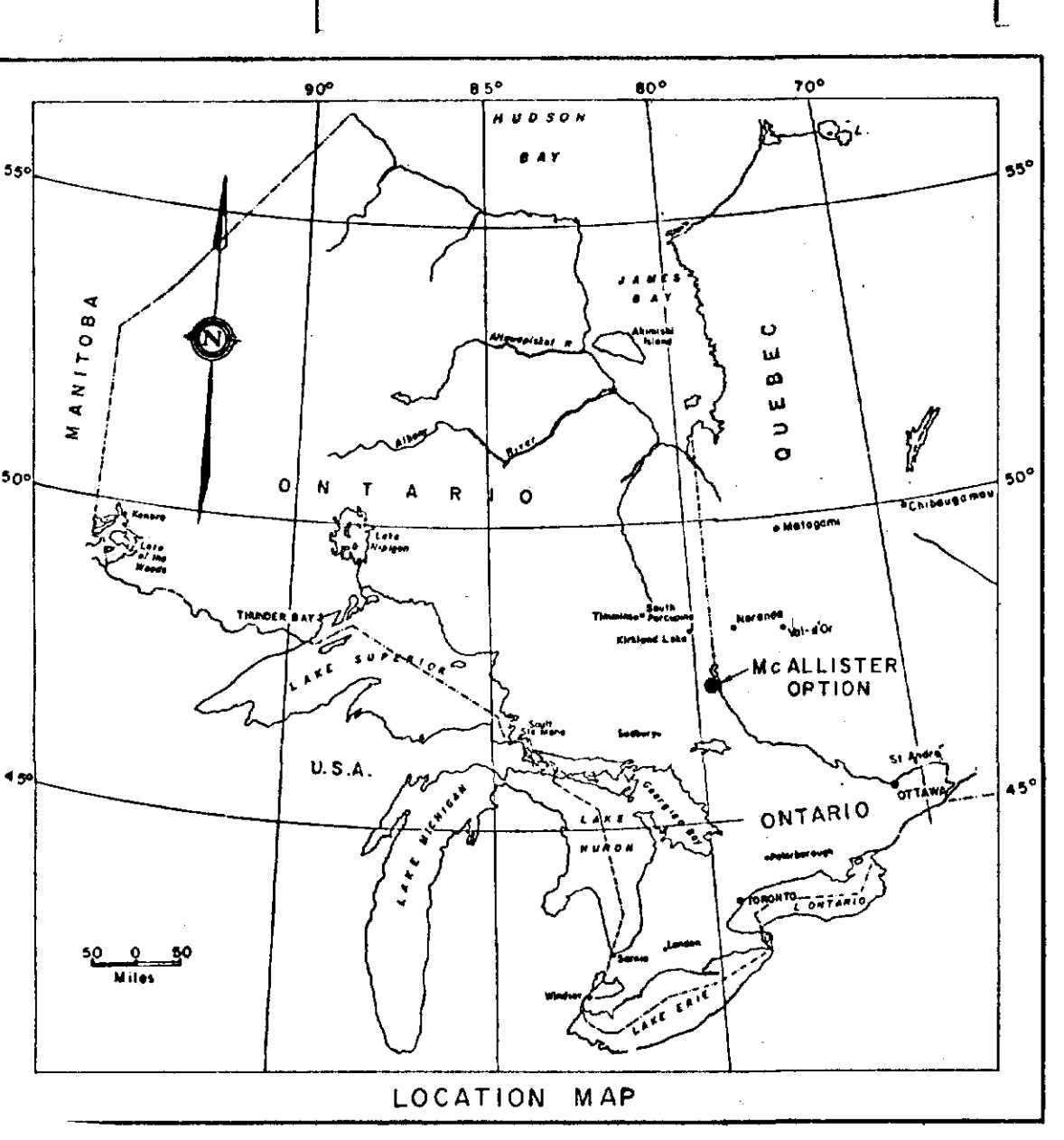
0+00 2+00E 4+00E 6+00E 8+00E 10+00E 12+00E

NORTH TIE LINE



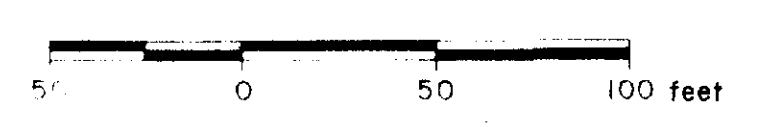
CON. XI

CON. X



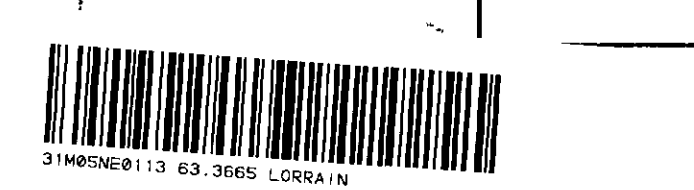
INSTRUMENT : CRONE RADEM V.L.F. Unit
 OPERATOR : F. BLAKE
 Tx - Station : SEATTLE, WASHINGTON

ELECTROMAGNETIC SURVEY
 OF THE
McALLISTER OPTION
 LORRAIN TOWNSHIP
 PROVINCE OF ONTARIO
 FOR
TECK CORPORATION LTD.
 BY
 TECK EXPLORATIONS LIMITED



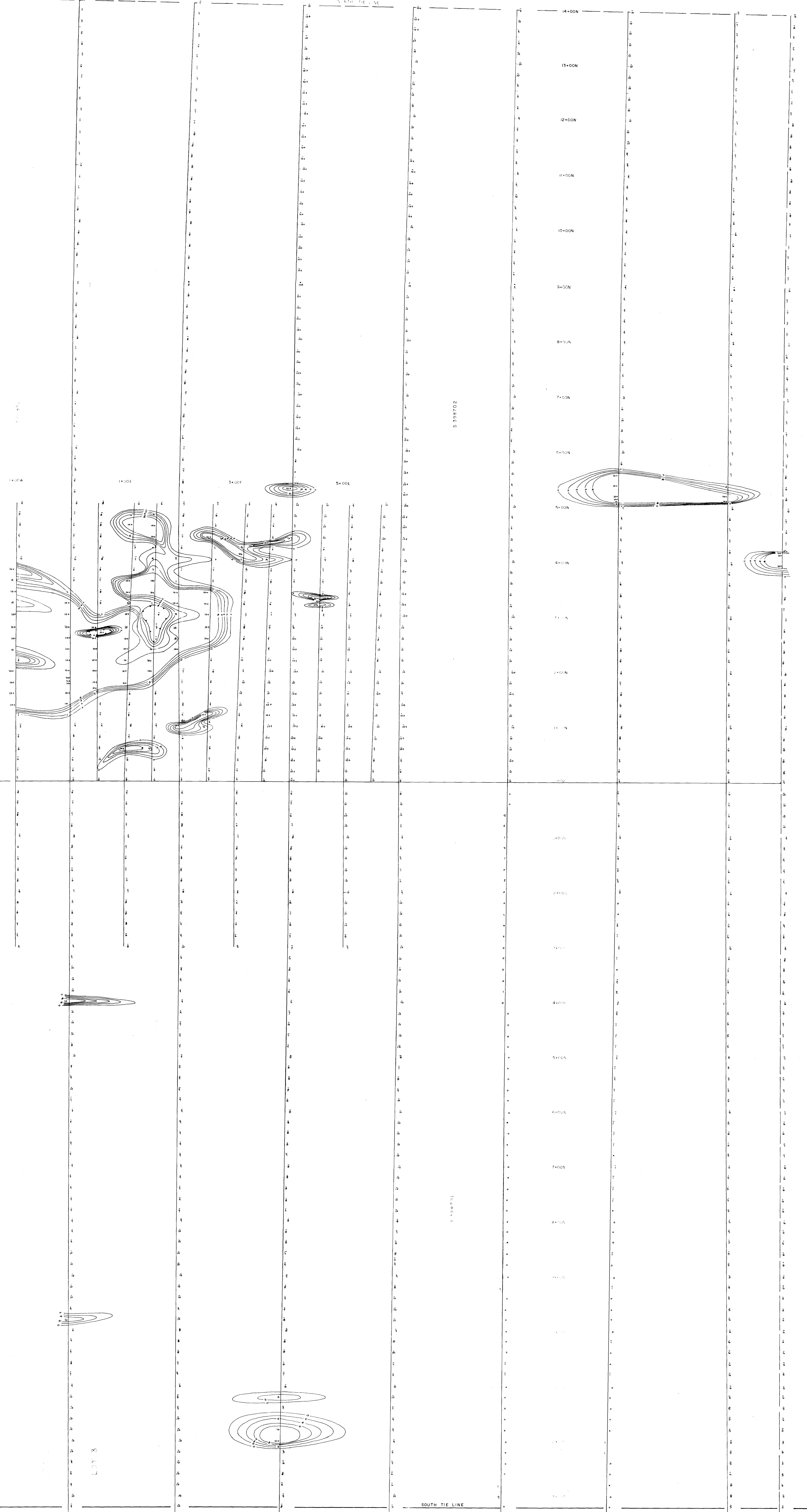
Revised : 1979-12-19

5622

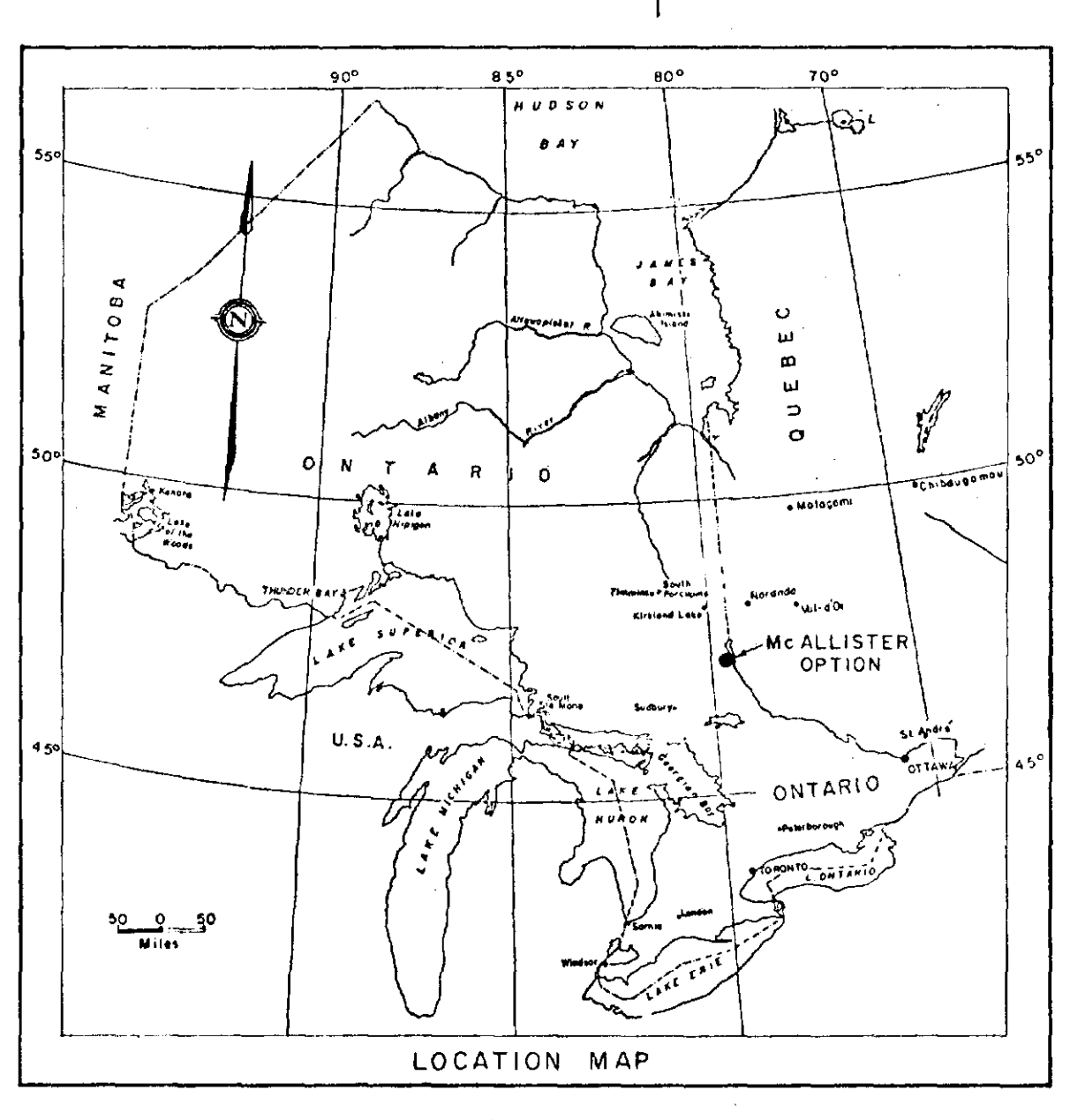


0+00 2+00 4+00 6+00 8+00 10+00 12+00

NORTH TIE LINE



CON. XI

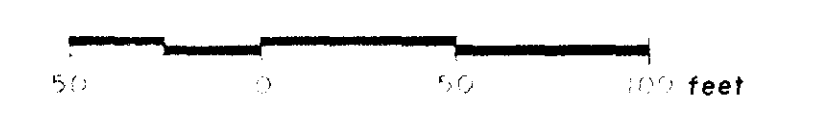


CONDUCTIVE TARGET READINGS (POSITIVE)
 MAGNETIC TARGET READINGS (NEGATIVE)

Contour Interval: 0, 2, 4, 6, 8
 10% of R_{10} - off scale readings (greater than 10)

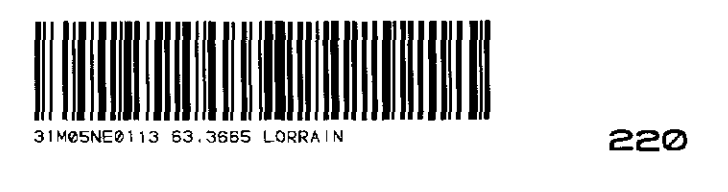
INSTRUMENT: GEONICS EM-15 MK I
 OPERATOR: F. BLAKE
 FREQUENCY: 15 kHz.

ELECTROMAGNETIC SURVEY
 OF THE
McALLISTER OPTION
 LORRAIN TOWNSHIP
 PROVINCE OF ONTARIO
 OF
TECK CORPORATION LTD.
 TECK EXPLORATIONS LIMITED



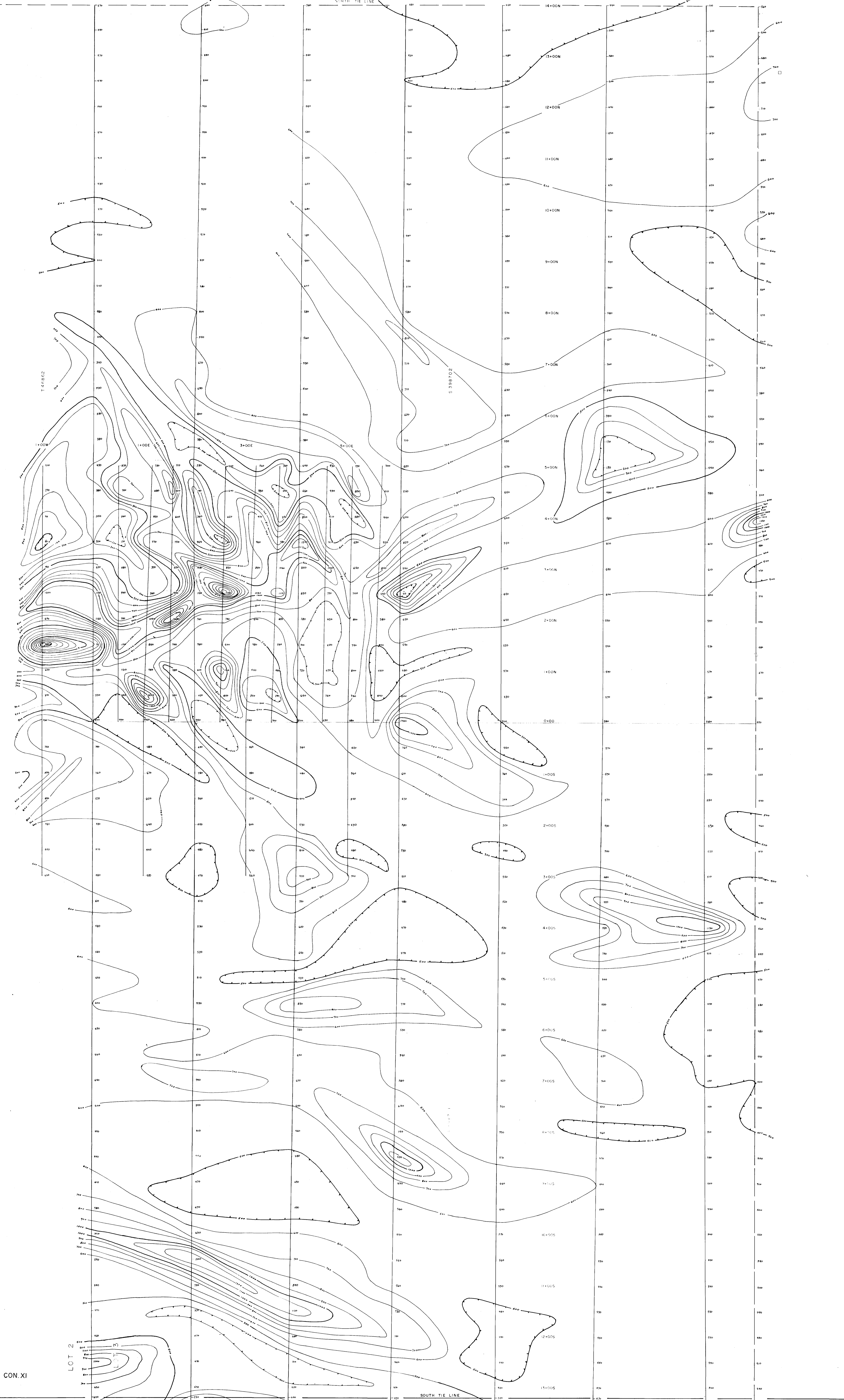
Revised: 1979-12-18

5623



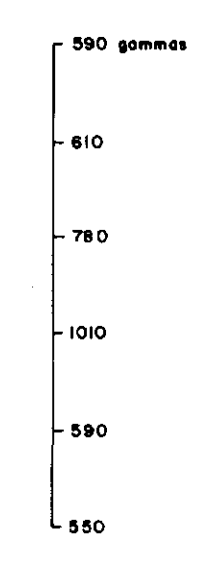
0+00 2+00 4+00 6+00 8+00 10+00 12+00

NORTH TIE LINE



CON. XI

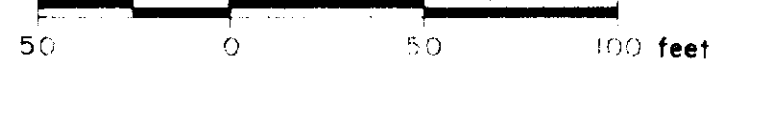
SOUTH TIE LINE



Contour Interval - 100 gmmms
 Depression Contour

INSTRUMENT - FLUXGATE MF-I MAGNETOMETER
 OPERATOR - F. BLAKE

MAGNETOMETER SURVEY
 OF THE
McALLISTER OPTION
 LORRAIN TOWNSHIP
 PROVINCE OF ONTARIO
 FOR
TECK CORPORATION LTD.
 BY
 TECK EXPLORATIONS LIMITED



Revised: 1979-12-19

5624

